

the conceptual history of attention deficit hyperactivity disorder: idiocy, imbecility, encephalitis and the child deviant, 1877–1929

Adam Rafalovich

*Southern Oregon University, Ashland, Oregon,
USA*

This article examines the medical discourse that formed the foundations of what mental health professionals today call Attention Deficit Hyperactivity Disorder (ADHD). The article examines literature from two medical discussions: 1) the discussion of “imbecility” and “idiocy” in the late 19th and early 20th centuries in Western Europe and in the United States; and 2) the diagnosis of *encephalitis lethargica* in children during the 1920s. The diagnosis of *encephalitis lethargica* was heavily influenced by the previous discussion of imbecility and occupied a seminal place in the history of medicalizing child behavior. It served as a specific disease category for kids who demonstrated unconventional behavior in a variety of social contexts. It will be argued that the discussion of *encephalitis lethargica* began a research modality in psychiatry which sought to find neurological bases for childhood deviance, typified by the contemporary discussion of ADHD.

Attention Deficit Hyperactivity Disorder (ADHD) has known a variety of names during the 20th century. Some of these include

Received 10 February 2000; accepted 14 June 2000.

Address correspondence to Adam Rafalovich, Sociology Department, Southern Oregon University, 1250 Siskiyou Blvd., Ashland, OR 97520. E-mail: Rafalova@sou.edu.

Encephalitis Lethargica (sequelae thereof), Minimal Brain Damage, Minimal Cerebral Palsy, Mild Retardation, Minimal Brain Dysfunction, Hyperkinesis, Atypical Ego Development, Attention Deficit Disorder (ADD), and Attention Deficit Hyperactivity Disorder (ADHD). (For discussions of past and current ADHD nomenclature see Armstrong 1995, Barkley 1990; Dumont 1976; Kessler 1980; Rank 1954; Wender 1971.) These categories of disease all address similar collections of symptoms that specifically describe childhood deviance. These symptoms have included, but are certainly not limited to poor performance in school, extreme extroversion, outbursts of violent behavior, inability to “stay on task,” thievery, disturbances in sleep patterns, morality inconsistent with age, and forgetfulness.

The history of compiling these symptoms into formal diagnoses represents an increasing drive to medicalize unconventional childhood behavior. The violation of certain institutional frameworks—the school, the family, the economy, and so on—are invariably implied in such diagnoses. Though the moralistic symptoms of thievery and violence no longer have utility for the contemporary diagnosis of ADHD¹, the current symptomatology of the disorder retains many of the themes that were present when ADHD was being diagnosed in the early part of the 20th century. According to the American Psychiatric Association’s (APA) *Diagnostic and Statistical Manual*, fourth edition (APA, 1994) some of today’s ADHD symptoms include having difficulty organizing tasks, being easily distracted by outside stimuli, fidgeting with hands or squirming in one’s seat, excessive talking, failing to finish schoolwork, and feelings of restlessness (see DSM-IV [APA 1994]: 78–85 for a complete listing of the symptoms and requirements for diagnosing ADHD).

ADHD is an acronym embedded in popular culture, yet its conceptual history is little discussed both in the popular realm and in academia. Brief histories of ADHD have been provided by ADHD researchers (Barkley 1990, 1991, 1997; Kessler 1980) and also by their opposition (Breggin 1998, Conrad 1976; Shrag and Divoky 1975; Walker 1998). Shrag and Divoky (1975) and Peter Breggin (1998) for example, treat the history of ADHD as one of

¹ The particular symptoms of violent behavior are not commonly associated with ADHD, but reserved for the diagnosis of disorders thought to be manifested in the adolescent and young adult populations. These disorders are Conduct Disorder (APA 1994:85–90) and Oppositional Defiant Disorder (APA 1994:91–94). For a study of these disorders’ comorbidity with ADHD, see Mathys, Cuperus, and Van Engeland (1999).

“child control.” Conversely, historical accounts by Kessler (1980) and Barkley (1990, 1991, 1997), discuss the history of ADHD as one characterizing the progress of modern clinical practice, slowly honing its nomenclature to greater levels of scientific validity and practical effectiveness. There are two qualities that tend to unify historical accounts of ADHD. First, they are disturbingly ideological; each account appearing to serve the agenda of the authors’ perspective on the legitimacy (or lack thereof) of ADHD as a disease category. Second, each of these accounts is markedly brief. These histories are written as introductions to the aforementioned authors’ books, serving as a background for their readership rather than as a significant topic of inquiry.

ADHD has had a limited discussion in sociology, virtually ignored both as a topic of discourse and as a diagnosis with very real consequences. Previous discussions of ADHD have invoked sociological accounts of mental deviance, especially those models which denote processes of labeling and of medicalization. Influenced by the work of Goffman, Lemert, Becker, and the like, we, as sociologists and social critics need merely “insert” the mental disorder of ADHD into an established niche of the sociology of deviance lexicon. A study of hyperactivity, like the study of other mental disorders becomes a forum for an empirical account of previous sociological positions. Peter Conrad’s (1975, 1976) studies of hyperkinesis stand as strong examples of this type of research.

In *Identifying Hyperactive Children* (1976), a book claimed to be the “first empirical analysis of the process of medicalization” (Conrad 1976:5), Conrad examines the process by which medical professionals problematize childhood deviance. Conrad’s position rests upon an interest in the growing sphere of medical practice and its encroachment upon social life.

What is significant, however, is the expansion of the sphere where medicine now functions as an agent of social control. In the wake of a general humanitarian trend, the success and prestige of modern medicine, the increasing acceptance of deterministic social and medical concepts, the technological growth of the twentieth century and the diminution of religion as a viable institution of control, more and more deviant behavior has come into the province of medicine (Conrad 1976:4–5).

Conrad's work claims that the discovery of hyperactivity, or hyperkinesis can be attributed to the interplay between three social factors: "(1) the pharmaceutical revolution, (2) trends in the medical profession, and (3) government action" (Conrad 1976:12). Conrad's pharmaceutical revolution analysis points the finger at the company responsible for the synthesis and marketing of Ritalin, CibaGeneva, which in the 1960s, addressed a large-scale advertising campaign to the medical and educational sectors alike. His examination of medical trends², though slightly unclear, generally refers to the increased interpretation of behavioral problems as biochemical or organic in origin. The government action side of Conrad's analysis directs attention towards government agencies, in this case the US Public Health Service, who were responsible for formally labeling hyperkinesis as "minimal brain dysfunction." By discussing the role of this government agency, Conrad is describing the power of a public institution to contribute to medicalization through decreeing a unified diagnosis.

This three-fold description of the agents that contributed to the discovery of the hyperkinesis phenomenon shows hyperkinesis as a specific project of a somewhat concerted effort on behalf of these agents. From Conrad's perspective, the three social factors represent a great asymmetry in power between lay actors and formal organizations. ADHD, then, can be seen as a product of expert control, in which lay actors have been removed from the debate. This system of experts use language that is obscure and inaccessible to lay actors. Conrad states: "By defining a problem as medical it is removed from the public realm where there can be discussion by ordinary people and put on a plane where only medical people can discuss it" (Conrad 1975:18).

In defining a problem as medical rather than "ordinary" in Conrad's terms, there is a profound separation between those who articulate hyperkinesis as a problem and their lay audience. It is not surprising that Conrad (1976) gives credence to Howard S. Becker's discussion of moral entrepreneurs—agents that further the medical cause by bringing attention to a problem.

² In *Identifying Hyperactive Children*, Conrad asserts little about the specifics of trends in medical practice and even less about how they relate to the diagnosis of hyperactivity. For example, there is no empirical evidence presented by the author to establish that medical practices had in fact gone through some significant changes that would make the diagnosis of hyperactivity more prevalent.

There were, however, also agents outside the medical profession itself that were significant in “promoting” hyperkinesis as a disorder that was within the medical framework. These agents might be conceptualized in Howard S. Becker’s terms “moral entrepreneurs,” those who crusade for creation and enforcement of the rules whose violation constitutes deviance. In this case the moral entrepreneurs were the pharmaceutical companies and the Association for Children with Learning Disabilities (Conrad 1976:15).

Through describing a combination of the formal nomenclature of modern medicine and the passionate voice of moral entrepreneurs, Conrad sets the stage for an analysis of hyperactivity that invokes the canons of deviance theory.

With his perspective firmly rooted in the established sociology of deviance lexicon, Conrad then begins his specific empirical study of hyperactivity. This is done through qualitative analyses of interviews with parents of children being treated at a Hyperactivity-Learning Disabilities Clinic (HA-LD) in a north-eastern city. Throughout this interview process, using a grounded theory approach, Conrad describes the interactions between various social agents and how they ultimately label a child as being hyperactive. These primary agents are schools, parents, and to a lesser extent, physicians.

Conrad’s account of hyperactivity is a seminal study of medicalization. However, it neglects a historical treatment of the concepts that led to the “discovery” of hyperactivity. In focusing upon the actions of a few agents (e.g. the US Public Health Service, and the advertising campaigns of pharmaceutical companies) Conrad’s analysis emphasizes the conscious role of the agents associated with the “creation” of hyperactivity. The discourses that propel these agencies, that is, the concepts and sets of statements that serve as their rationale remain unexamined. We are left to analyze hyperactivity as a construction of these agents’ specific interests.

METHOD

The present study wishes to add another dimension to Conrad’s work by introducing a historical element into the analysis of ADHD. Of particular concern are the conceptual antecedents that have given rise to the present discussion of the disorder. This study operates under the assumption that medical discourse of the

past has been as integral in shaping the way childhood behavior is medicalized today as are the agents of medicalization Conrad articulates. The data for this article are British and North American medical literature in the form of journal articles and books, between 1877–1929. A significant amount of this literature has been excerpted and placed in the text of this article. Much of these data were chosen based upon their citation in contemporary clinical literature about ADHD. It is intriguing that so many researchers in the ADHD field cite the studies in this article, yet a qualitative sociological analysis of them has not been pursued. This analysis draws attention to influential medical concepts that this medical literature propelled during this time period. The three major concepts which will be examined are: 1) idiocy; 2) imbecility; and 3) *encephalitis lethargica*.

The most common starting point of ADHD history is a series of lectures given by George Frederic Still in 1902. Both skeptics of ADHD (Armstrong 1995; Breggin 1998; Shrag and Divoky 1975) and advocates of ADHD's validity (Barkley 1990, 1991, 1997; Goldstein and Goldstein 1990) trace the lineage of the disorder to these lectures. Though this article addresses the work of Still, I choose not to begin a conceptual history of ADHD. It is more germane to study medical concepts that were en vogue at the time of Still's research: idiocy, and, more significant for Still, imbecility. Imbecility was part of the medical nomenclature that enabled medical science to begin inquiries into the mental health of persons who were not drastically maldeveloped or mentally handicapped. People could become suspected of being imbeciles from a failure to meet the demands of conventional institutions. Still's work was an interesting permutation of the imbecility discourse because he wished to apply the term to the unconventional behavior of children.

This article will analyze the work of Still as a composite of the medical discourses surrounding imbecility and morality in the late 19th and early 20th century. After reviewing a sample of medical literature devoted to idiocy and imbecility I demonstrate how Still's work was significant with its particular medical focus upon child deviance. I argue that Still was the first to link the notion of imbecility to the morality of children, even though he failed to provide an official diagnosis for this childhood behavior.

The latter half of this article is devoted to an examination of the literature describing *encephalitis lethargica* or "sleepy sickness" in children during the 1920s. According to leading ADHD

researchers (Barkley 1990, 1997; Goldstein and Goldstein 1990; Kessler 1980; Stewart, 1970) the medical discussion of this disease is crucial in understanding how ADHD would later crystallize in neuropsychological nomenclature. The psychological sequelae of *encephalitis lethargica* were supposed to be the root of a litany of childhood behavioral problems including many of those associated with ADHD today: inability to function in school, hyperactivity, impulsivity, and so forth. Hence, the nomenclature that addressed the residual effects of *encephalitis lethargica* realized much of Still's suspicions in 1902. What Still had suspected as an organic manifestation or lesion in the immoral child, those who studied *encephalitis lethargica* medicalized into what was perceived to be a clinical reality of that time period. The discussion of *encephalitis lethargica* provided a specific diagnosis of the symptoms for which imbecility had limited utility. Imbecility became quickly antiquated in medical discourse partially because organic causes of the condition could not be found. *Encephalitis lethargica*, it will be shown, specifically implicated organic processes in child deviance; it was, in the eyes of the medical community, a disease which could explain antisocial children.

Idiocy and Imbecility

Today both idiocy and imbecility are so popularized that their clinical meanings have all but been forgotten. Interestingly, those who wrote about idiocy and imbecility in the medical literature of the 1870s also struggled to keep its meaning within the confines of medical nomenclature (see Ireland 1877). The idiot was a type of person who needed to be clarified and understood as a medical phenomenon, not jeered and mocked as a social misfit. Nor was idiot to be a catch-all typology for someone deemed socially inept. Imbecility was articulated in a partial effort to provide clarity to the diagnosis of idiocy, and eventually owned its own place in mental health nosology. William Ireland (1877) provided a distinction between the two terms.

Idiocy is mental deficiency or extreme stupidity, depending upon malnutrition or disease of the nervous centres, occurring before birth or before the evolution of the mental faculties in childhood.

The word imbecility is generally used to denote a less decided degree of mental incapacity. Thus, when a man distinguishes between an idiot and an imbecile, he means

that the mental capacity of the former is inferior to that of the latter (Ireland 1877:1).

Imbecility denotes a condition much less severe than that of idiocy but the extent of the difference between the two terms is unclear. The idiot is presented as someone who has an organic disorder of some kind, the onset of which occurs at the earliest phases of life. The imbecile is presented as someone with a lesser degree of the same symptoms as the idiot. The imbecile can certainly demonstrate mental deficiency or stupidity, yet not as much as the idiot. What is missing in Ireland's rudimentary analysis is a conceptual standard by which a more calculated distinction can be made between the idiot and the imbecile.

British physician Charles Mercier (1890) expanded on the distinction between these two mental affectations. Lumping both idiocy and imbecility into the category of "congenital mental deficiency" or *dementia naturalis* (Mercier 1890:286), Mercier provided a more sophisticated discussion of the distinction between the two diagnoses. His analysis rested upon the presuppositions of mental development.

The first thing the child learns is to avoid physical danger—to keep from falling into the water, running against obstacles, burning and cutting itself, and all forms of physical injury. . . . when the activities answering to this class of circumstances has been thoroughly acquired, then, and not till then, begins the acquisition of those activities by which the livelihood is to be earned. Then begins the formal process of education, which is the first step in fitting the individual to get his living. When this has been done, when sufficient time has been spent daily in the acquisition of these activities, then what remains over can be devoted to recreation and other purposes (Mercier 1890:289–290).

Mercier claimed that the development of certain faculties throughout the early part of life will enable the individual to function at increasingly higher levels. The lowest level of functioning is denoted by the individual's ability to display minimal self-preservation, thereby avoiding physical injury. The higher levels of functioning included receiving an education and finding adequate employment.

Mercier claimed that the idiot is a type of individual who demonstrated poor development at the most basic level of human existence. Idiots were a danger to themselves because of a total lack of awareness of their surroundings, whereas imbeciles represented a slightly higher, though still inadequate level of development.

In idiocy the deficiency is still greater. The imbecile fails to adapt himself to his vital environment, he fails to complete the second step in his intellectual development; but he surmounts completely the first step, that which enables him to adapt himself to his *physical* environment (Mercier 1890:290).

Imbeciles could avoid dangerous moving objects, but could not be adequately educated to make a living. They personified a failure to meet the demands of social and institutional expectations.

As its own category of mental defect, imbecility became widely known in the medical community as a specific phenomenon not to be confused with the more obvious and impairing condition of idiocy. The definition of imbecility became decreed by the Royal College of Physicians in England (arguably the most esteemed collection of physicians in Europe during that time) in 1912. From the Royal College's official definition an imbecile "is incapable from mental defect, existing from birth or from an early age, (a) of competing on equal terms with his normal fellows, or (b) of managing himself or his affairs with ordinary prudence" (Goddard 1915:12).

The maladroit behaviors described in the discussion of imbecility were eventually linked to an individual's inability to display moral restraint and lawful behavior. In what became known as "moral imbecility"³ medical practitioners conceptualized the acquisition of morality as a problem of human biological development.

We now and then read of a "moral imbecility," a variety of the unhappy invention styled "moral insanity," originally intended to signify a total want of moral feelings as proved by reckless and shameless conduct without any intellectual impairment. . . . The title "moral imbeciles," however, is so

³ Charles Mercier (1917) has stated that it was he who coined the term "moral imbecility." The date of the inception of the term could not be found in my research. Due to no findings of another person to stake claim to the origin of the term, perhaps the placement of "moral imbecility" into the vicissitudes of medical discourse should be awarded to the late doctor.

far correct that there are certain children who show from the beginning a proneness to evil, a callous selfishness, and a want of sympathy with other people, which is the most striking part of this disorder (Ireland 1900:287).

This passage represents much of the literature that addressed moral imbecility around the turn of the century. Such writing presented a new direction of study for medical science. The inability to demonstrate moral behavior, in that it was placed under the rubric of imbecility, became a medical problem. Ireland (1900) described a case of moral imbecility—a boy housed in a hospital dormitory.

The first symptom of insanity was his smashing of panes of glass in the passage and other places where he would not be readily noticed. When asked why he did so he said that he liked to see the glass fly. This went on for about six months. One day he took out of his pocket a knife which he had got hold of and deliberately made an incision in a boy's hand (Ireland 1900:288).

The imbecile represents one more piece in the historical tapestry of discourse which has objectified the nature of the criminal, the uneducated, or the undisciplined. In *Discipline and Punish* (1977) Foucault discusses such processes of objectification as constructing the “modern soul.” This modern soul represents the perceived essence of those who engaged in deviant behavior—an essence believed to be understandable and manipulable only through the administration of scientific techniques. Foucault's work in *Discipline* is mainly credited with analyzing modern science's examination and objectification of the criminal (*homo criminalis*, in Foucault's words), but this process of seeking the essence of the deviant through scientific study encompasses virtually anyone who has persistent troubles with conventional institutions. Within the discourse of imbecility during the later 19th and early 20th centuries there was particular attention given to children. An examination of medicine's focus upon the moral savoir faire of children is crucial in drawing a bridge between this early discourse and the gradual unfolding of the discourse that has surrounded ADHD. The ADHD child, much like *homo criminalis*, represents an object of study who could not fit into the institutional frameworks of everyday life, and needed, in one way or another, to be molded to meet the demands of these institutions.

Moral imbecility evolved as a concept both medically and legally. It was formally inducted into the British Mental Deficiency Act of 1913 constituting a class of “Persons who from an early age display some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect” (Tredgold 1917:43). The continued failure of reformatory intentions of punishment, or the threat thereof, led many medical practitioners to believe that the moral imbecile represented a case of incorrigibility in the face of the disciplinary mechanisms of that time period. There was an increasing pressure on the medical establishment to conceptualize and reconceptualize moral imbecility in an effort to apply more effective techniques of reform.

Part of the later conceptualization of the moral imbecile involved the discussion of this type of imbecile having, in many cases, normal or even superior intelligence. The moral imbecile, physicians argued, was a more complex creature than physicians had initially postulated. Physician Alfred Tredgold (1917) in an article on moral imbecility stated: “Many undoubted moral imbeciles are so cunning, so plausible, and so seemingly intelligent, that mental defect, as normally understood, would appear to be, and in truth, is, quite out of the question” (43). Charles Mercier (1917) in an article covering the same topic two months later stated: “I would go farther than Dr. Tredgold, and say that some moral imbeciles are not only seemingly intelligent, but really intelligent. I have met more than one who have engaged me in a battle of wits, in which I did not win every round” (303). This discussion on behalf of medical practitioners is ironic given the conceptual history of imbecility. The imbecile was generally defined as someone who functioned at a lower level than his or her peers, perhaps just a step or two above the idiot. The concept of the *moral* imbecile was able to abandon these human development presuppositions because it represented a flawed condition in which other human faculties—those of intelligence and physical skill—could be regarded as normal.

Examining the Work of George F. Still

The work of George F. Still (1902), argued by both the pro and con contingents of the ADHD debate to be the first medical account of ADHD, needs to be understood within the context of the aforementioned discourse of imbecility and idiocy. Still’s discussion of moral control in children as a medical problem rides

the crest of the discussion of moral imbecility by his peers and no doubt reflects their influence. Because of this, Still's work should not be regarded as a point of origin in the discourse on ADHD children. It might be better understood as a product of the dominant medical literature of its time. In addition, ADHD researcher Russell Barkley (1990) presents Still's research into immoral children as more meticulous than it was. Still's work, I believe, represents a plea to the medical community rather than a critical medical discovery.⁴

Still's plea began in a series of lectures given before the Royal College of Physicians of London in March 1902, in which he proposed a new topic of medical examination:

Mr. President and gentlemen, the particular psychical conditions with which I propose to deal in these lectures are those which are concerned with an abnormal defect of moral control in children. . . . For some years past I have been collecting observations with a view to investigating the occurrence of defective moral control as a morbid condition in children, a subject I cannot but think calls urgently for scientific investigation (Still 1902:1008).

In this address, Still tentatively hypothesized the relationship between self-control and the biological propensity for understanding the moral demands of one's environment. He states: "Moral control can only exist where there is a cognitive relation to environment" (Still 1902:1008). Individual morality was a developmental phenomenon, Still argued, that stemmed from organic functions of the brain. He contended that at a certain age there were biological standards for moral conduct, and to have less moral control than others in a particular age category constituted the basis for suspecting a pathological condition.⁵

⁴ Barkley's misrepresentation of Still's work distorts the experimental and conceptual history that has given us the legacy of ADHD. During the time period of Still's writing there was no hypothesizing about neurological structures and moral acquisition, and no large-scale studies performed to ascertain the nature of this "ailment" (most of Still's limited number of subjects were part of an institutionalized population subjected to countless socially-influenced variables, all of which were unaddressed).

⁵ A standard of self-control as set by a particular age category is still a consistent diagnostic tool in the assessment of ADHD as well as other childhood mental disorders. See the APA's DSM IV criteria for diagnosing ADHD as an example.

Still eliminated mental retardation as a variable affecting this immoral condition. His discussion separates “the idiot” from those with more particular moral difficulties.

The driveling idiot who recognizes no one, does not distinguish his food, and is little more than a mere automat on stands in little or no cognitive relation to his surroundings and *a fortiori* lacks that higher form of reasoning comparison which we call moral consciousness. Here, therefore, the absence of moral control is complete. Such cases are of interest chiefly as exemplifying one cause of failure of development of moral control; they have otherwise little bearing on the question before us and need not detain us further (Still 1902:1009).

The child with inadequate control of his or her moral faculties, it was argued, should not be confused with the intellectually inferior. This line of reasoning resonates with the literature that separated the morally inferior from the intellectually inferior. Like Mercier (1917) and Tredgold (1917) would later do, Still pled with the medical community to not misunderstand immoral children as being less intelligent than children who demonstrated moral prowess. The immorality Still wished to address was presented as significantly too advanced for visibly deranged or mentally incapacitated children. Immorality in the normal child, at least the child who defied categories like “retarded,” was argued to be symptomatic of some larger medical issue. Some of these symptoms included: “(1) passionateness, (2) spitefulness-cruelty; (3) jealousy; (4) lawlessness; (5) dishonesty; [and] (6) wanton mischievousness-destructiveness;” (Still 1902:1009).⁶

For Still, these behaviors represented some degree of personal agency on behalf of those children who displayed them. These were not children who, due to being too stupid to understand the moral codes of society, acted out against those codes. These children perhaps had a clear understanding of the contents of the law, and willfully chose to disregard it. Nameless to modern medicine, these children were too intelligent to be categorized under the established nomenclature of idiocy, and too young to be

⁶ In his discussion of Still’s work, Russell Barkley (1990) makes the comment that “Most of these children were impaired in attention and were quite overactive” (Barkley 1990:4). This is not documented in Still’s address.

understood as “criminal minds.” For Still, as with those researchers who would follow in his footsteps, these were the “other children” who needed to be more specifically understood through medical examination. Still raises the question of whether or not these children represented an entirely new form of idiocy or imbecility:

Lastly, the question must be raised whether we can associate defect of moral control with any particular type or types of idiocy or imbecility—a question of considerable importance, for if it were possible to do so we might hope by a study of these types to find some anatomical basis for this abnormality of function (Still 1902:1012).

Still’s lecture was given during a time when there were other discussions about the biological characteristics of immorality, and more specifically, criminal behavior. Lombroso, and his infamous *L’Uomo Delinquente* (1876/1907) was an unquestionable influence in the medical discussions of morality in Europe during this time period.⁷ Through examining the morphology of the criminal’s skull, as well as other parts of the anatomy, Lombroso provided the scholarly community with a tangible form of the criminal. Still’s discussion, though a product of Lombroso’s influence, differed significantly from Lombroso. Even though Still commented about the physicality of these children in an effort to make a distinction between them and those in the “normal” population, Still’s analysis proposed a different focus of scientific study—a neurological one. There was an implicit assumption in his idea of the cognitive component of morality that the cause of these immoral behaviors lay hidden inside the mind of the child. The cause of this immorality was not as blatant as the slobbering idiot or the adult with criminal indentations on his head, rather, the cause was unknown and hidden. To understand the cognitive origins of moral pathology would imply a more methodical examination. Though he suspected a specific type of imbecility, Still offered no conclusions about the cause of these moral failings; his tone is one that seemed to recognize the long, hard road ahead for modern medicine. As theoretically simplistic as it was, Still’s work reflected

⁷ Barkley (1990), in his commentary on Still’s address, also discusses the influence of the work of people like Lombroso “We must not forget, however, that in this Victorian era, medical scientists were frankly obsessed with head size and physical stigmata as reflecting defective intellect or morals...” (Barkley 1990:4).

a passion within medicine, beginning a process of inquiry and debate, which today, has yet to be resolved.

Still's work is significant for the examination of the early discourse surrounding ADHD, and represents a break from the more general medical discussions of morality, because he proposed children as objects of study. Though ADHD is being increasingly diagnosed in adults, it remains a disorder perceived primarily to afflict the young, at times in their lives when commitments to institutions of socialization are so crucial. Up to the point of Still's address, the elaboration of diagnostic categories—especially those like moral imbecility—were not understood in a direct relationship to children. Stemming from the discourse of idiocy and imbecility, Still provided the groundwork for a category of mental illness that is, in practicality, specific to child deviance.

Encephalitis Lethargica as Explanation of Childhood Deviance

Leading ADHD researchers contend that the discussion of *encephalitis lethargica* in the 1920s was crucial in describing specific childhood symptoms that would later be attributable to ADHD. Also known as “sleepy sickness,” this disease reached epidemic proportions towards the close of World War I. It was unknown to medicine at its outbreak, but quickly became a centerpiece of medical attention.⁸ *Encephalitis lethargica* was an often fatal illness characterized by tremendous sluggishness, hallucinations, and fever, sometimes bringing with it periods of remission—something doctors viewed as a hopeful sign. These remissions were often short-lived and a full relapse of the illness was a common occurrence. Abrahamson (1920b) described his experience: “The early optimism I enjoyed quickly perished, and I learned to dread this disease, so often fatal, not infrequently inflicting permanent damage on those who survived it, and sometimes bringing in its train progressive functional deterioration” (Abrahamson 1920b:428).

What became as significant as the symptoms of the disease itself were its residual effects. This is what Stryker (1925) called the “behavior residuals” of encephalitis (see also Paterson and Spence [1921] and Hohman [1922]). It was a disease thought to irreversibly damage many who suffered it, leaving people with extensive physical and mental impairments. These physical and psychological sequelae came in so many forms that it was common

⁸ For a brief history of this disease see Abrahamson (1920a:17).

for neurologists to refer to them as a syndrome. In a brief history of minimal brain dysfunction (the diagnosis most in use before those of ADD and ADHD), Jane Kessler (1980) commented that *encephalitis lethargica* had as many as 27 different symptoms, including “sleep reversals, emotional instability, irritability, obstinacy, lying, thieving, impaired memory and attention, personal untidiness, tics, depression, poor motor control, and general hyperactivity” (Kessler 1980:18). *Encephalitis lethargica* was hardly an elegant category of disease.

Franklin G. Ebaugh (1923) described the sequelae of encephalitis as they were demonstrated through behavior patterns contrasting with those prior to the encephalitis affliction. The sequelae ranged anywhere from alterations in sleeping and eating patterns, to marked oppositional behavior. To Ebaugh, these and other sequelae described a “total change in the patient’s character and disposition” (Ebaugh 1923:90) of what were at one time completely normal children—children who were well-adjusted, happily involved with conventions like school, family life, friendships, and so forth. After the onslaught of the formidable illness of encephalitis these children exhibited behaviors which not only fell outside the parameters of appropriate behavior within these contexts, but also, at times, went directly against them. Ebaugh described some of his patients’ reactions to school.

In three of our patients marked hysterical phenomena were observed. One child developed spells of the functional variety, usually to escape from a difficult situation. The spells consisted of prolonged periods of rapid respirations, the child thus feigning illness in order to stay out of school (Ebaugh 1923:91).

In a later discussion of the sequelae of encephalitis, Roger Kennedy (1924) formulated similar descriptions, citing numerous case studies, each organized according to a particular category of sequelae. Within the sequelae described as “Change in Personality and Behavior” (Kennedy 1924:169), he commented on the state of a 10-year-old:

A boy aged 10 years was brought to the clinic May 9, 1922, because of nervousness. In March, 1920, he had influenza followed by an acute attack of encephalitis which lasted eight days. . . . He improved gradually and returned to school, but

had to be taken out because he asked so many questions and removed books from other desks to his own (Kennedy 1924:170).

Kennedy's is one of the first accounts that attempted to create a case for these sequelae, especially the ones associated with defiance and oppositional behavior, to be understood as a syndrome. He argued that the defiant behaviors and other symptoms in the postencephalitic child are representative of a *physiological* mechanism. This position remains the dominant perspective of today's neurochemically-oriented ADHD researchers. Kennedy states: "This case illustrates the main features to be considered in dealing with children who are suffering from this syndrome. In the first place the absolutely different personality which they display is well exemplified. They are apparently acting in response to a most urgent stimulus, which they are powerless to resist" (Kennedy 1924:170). The postencephalitic child was not responsible for his or her actions. These children, the medical literature argued, were merely acting according to a neurological principle, the specifics of which remained a mystery.

Similar to Still's initial discussion of child immorality as a medical problem, Kennedy also wished to exclude those who were retarded or had some kind of obvious mental defect.

Second, and perhaps of most importance, is the consideration of mental status. As has been indicated, there is no evidence to show that a considerable proportion of such patients are mentally retarded or deficient. . . . they are moral rather than mental imbeciles. Some of them appear dull and drowsy, but in their antics and behavior they display a cunning that is not commensurate with greatly impaired mental faculties (Kennedy 1924:171).

The idea that a child could be "dull and drowsy" speaks not to an issue of intelligence, but to the dominant understanding of *encephalitis lethargica*. Again, this disorder was thought to be characterized by an untimely sluggishness in the child. This sluggishness apparently disappeared when the child responded to the neurological stimulus in his or her brain and acted improperly. This was a different kind of mental impairment, distinct from retardation, where the afflicted child was described as cunning and calculating. This account differs little from the description of

the moral imbecile whom Mercier and others in the late 19th and early 20th centuries considered to be both a defective imbecile, and at the same time, owning a reasonable (sometimes high) intelligence.

Kennedy's perspective, depicting the immoral behavior of the postencephalitic child as the result of neurological processes, was expanded by Edward Strecker (1929). Strecker made distinctions between two types of behavior exhibited by the postencephalitic child: 1) "motor" behaviors and 2) "studied" types of conduct (Strecker 1929:137–138). Motor types of behavior referred to actions that were unintentional, outside the control of the child. Studied behaviors were those that resulted from a conscious effort.

An example of some misconduct of the motor type is as follows: A boy, aged 10, who had acute encephalitis at the age of 7, is described as being overactive, constantly in motion, roaming about the streets at night, wandering about the house at night, whistling and singing; once he dashed up to an infant sister's crib and swung the baby about by the heels; . . . In the severe studied type one witnesses such deviations as stealing, forgery, deliberate lying to gain an end, moral lapses and running away, carefully planned and with a definite objective (Strecker 1929:137–138).

Strecker painted two very distinct pictures of this type of child. On one hand, such children were apparently driven by impulses that fell outside of conscious thought or reason. On the other hand, these children demonstrated a certain malice in the things they did; a neurological defect or lesion provided a source of gratification for defying conventional behavior.

The Coincidence of Encephalitis and ADHD

The moral imbecile child portrayed by the medical discourse of the late 19th century was eclipsed by the much more elaborate analysis describing the postencephalitic child. The diagnosis of *encephalitis lethargica* provided a physiological explanation for unconventional, antiinstitutional child behavior. The discourse on *encephalitis lethargica* has been documented by Barkley, Kessler, Stewart, and others as a place in the history of the gradual sophistication of medical practice, ultimately leading to the teasing out of the more correct diagnosis of ADHD. Barkley, for example, claims that children with ADHD in the 1920s were mixed in

with the population of those suffering from encephalitic trauma. Due to the rudimentary knowledge of neurology during that time period, *encephalitis lethargica*, Barkley argues, served as a catch-all diagnosis. Researchers such as Barkley tell us we had to start somewhere, and look how far we have come.

The progressive interpretation of past medical practice by Barkley and others ignores some valuable points of analysis. Such perspectives assume that ADHD, though unnamed and strange at the time, was a real condition that had existed a long while. Only recently, researchers argue, has it become adequately understood. Through the meeting of the neurological interest in childhood morality with the object of the postencephalitic child, it is argued that we began a journey that is both humane and just. But the nexus of neurology and the postencephalitic child is presented much too coincidentally, as if it were good fortune that the encephalitic and ADHD populations were mixed.

The problems of that coincidence are ignored by a vested interest in the legitimacy of child psychology. Factors other than the progressive mind of science need to be addressed in interpreting the discourse on *encephalitis lethargica*. Variables that influenced the environment of the children under study and that certainly affected behavior need to be addressed. In my thorough examination of this literature, a great majority of the children under study were institutionalized before the time of being studied. The reasons for this institutionalization, no doubt, were varied and pose major hurdles to adequate interpretation of the conditions of this population. Goffman's (1961) idea of the looping effect described how psychiatrists interpreted an individual's resistance to the environment of the institution as symptomatic of mental disorder. Obviously, this process negatively affects the degree of validity in institutionally-oriented diagnoses. Diagnosing the postencephalitic child has not been shown to be exempted from this process. Researchers who were formulating the nomenclature on *encephalitis lethargica* never asked about the social variables which might have strongly affected childhood behavior. Today's dominant ADHD research strays little from this mentality. Such research repeatedly argues that the roots of childhood deviance can best be understood through an analysis of the child's brain (see Baving et al. 1999; Fisher 1996; Fuster 1997; Mataro 1997) rather than his or her social environment.

The discussion of *encephalitis lethargica* was significant, not simply because it drew suspicion to the causal connection between

behavior and neurological impulse, but because it medicalized unconventional behavior specific to children. Many of these symptoms would later be claimed by neurologists and placed under the rubric of ADHD. From the point in mental health history where encephalitis took center stage as a cause of childhood immorality, up to the current era of ADHD, child neuropsychology has rested upon a belief that persistently deviant childhood behaviors represented psychological pathology.

CONCLUSION: THE POSSIBILITY OF ADHD

To understand the current discourse surrounding the diagnosis of ADHD it is crucial to examine some of the concepts which have led to its inception, thereby "historicizing" the phenomenon. These concepts should be examined in a more critical light than as a mere background to an unrelated argument concerning the validity of ADHD. The ideas themselves and their clinical and social implications beg a greater scrutiny. The amorphous diagnoses of idiocy and imbecility and the more crystallized *encephalitis lethargica* are units of analysis that reveal the possibility for today's rendition of ADHD. Such a level of analysis, which historicizes concepts, provides a critical dimension into contemporary understandings of mental illness (see Hacking [1995] and Young [1995] as examples of historical critiques of mental illnesses).

An analysis of ADHD at the conceptual-historical level realizes some of the aims of the sociology of mental illness. Alan Blum (1970) summarizes this aim.

In this respect, we do not intend to raise the question of what factors cause mental illness in the sense of independent variables or antecedent conditions such as urbanism, industrialization, and so forth. We are not interested in explaining mental illness in this way, but rather in merely describing how it is possible.

In stating that we have to answer the question, "What is mental illness?" by describing how such a conception is possible, we are saying that a sociological phenomenon is defined in terms of its production. That is, it is defined in terms of the methods and procedures which members employ to make the phenomenon describable (Blum 1970:32).

Today's predominantly neurochemical understanding of ADHD is possible for a variety of reasons. Some of these reasons are common to the sociology of mental illness: cultural scripts, institutional contexts, political influences of psychiatry, processes of popular legitimation, and so on (see Goffman [1961] and Scheff [1984] for well-known texts employing such analyses). Conrad's (1976) study of hyperactivity exemplifies an analysis of these variables so pervasively articulated in sociological discussions of mental health. A thorough examination of past discourses that have contributed to the contemporary discussion of ADHD would provide a useful addition to such pertinent studies.

It is inadequate to say that the increasing diagnoses of ADHD and consequent increase in the prescriptions for Ritalin, Cylert, and Adderall in school-age children are a result of pharmaceutical corporations, an out-of-control mental health apparatus, or a pill popping sensibility. ADHD, comprised by the plethora of medical discourses that have objectified it are a product, not only of the current era, but also of the discourses that continue to strategize for its ownership. The medical discussion of *encephalitis lethargica*, for example, demonstrated neurology's interest in medicalizing the morality of the young. The current position of psychiatry towards ADHD exemplifies this century-old medicalizing modality.

REFERENCES

- Abrahamson, I. 1920a. "The Epidemic of Lethargic Encephalitis." *New York Medical Record*. Dec 11th.
- Abrahamson, I. 1920b. "The Chronicity of Lethargic Encephalitis." *Archives of Neurology and Psychiatry* 4:428–432.
- American Psychiatric Association. 1994. *Diagnostic and Statistical Manual*, fourth edition. Washington DC: Author.
- Armstrong, T. 1995. *The Myth of the ADD Child*. New York: Plume.
- Barkley, R. A. 1990. *Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment*. New York: Guilford Press.
- Barkley, R. A. 1991. *Attention Deficit Hyperactivity Disorder: A Clinical Workbook*. New York: Guilford Press.
- Barkley, R. A. 1997. *ADHD and the Nature of Self-Control*. London: Guilford Press.
- Baving, L., M. Laucht, and M. H. Schmidt. 1999. "Atypical Frontal Brain Activation in ADHD: Preschool and Elementary School Boys and Girls." *Journal of the American Academy of Child and Adolescent Psychiatry* 38:1363–1377.

- Blum, A. F. 1970. "The Sociology of Mental Illness." Pp. 31–60 in *Deviance and Respectability: The Social Construction of Moral Meanings*, edited by J. Douglas. New York: Basic Books.
- Breggin, P. 1998. *Talking Back to Ritalin*. Monroe, ME: Common Courage Press.
- Conrad, P. 1975. "The Discovery of Hyperkinesis: Notes on the Medicalization of Deviant Behavior." *Social Problems* 23:12–21.
- Conrad, P. 1976. *Identifying Hyperactive Children: The Medicalization of Deviant Behavior*. Lexington, MA: Lexington Books.
- Dumont, M. 1976. "Focusing on Television." letter to the editor. *American Journal of Psychiatry* 133:457.
- Ebaugh, F. G. 1923. "Neuropsychiatric Sequelae of Acute Epidemic Encephalitis in Children." *American Journal of Diseases of Children* 25:89–97.
- Fisher, B. C. 1996. *Attention Deficit Disorder Misdiagnosis: Approaching ADD from a Brain-Behavior/Neuropsychological Perspective for Assessment and Treatment*. New York: CRC Press.
- Foucault, M. 1977. *Discipline and Punish: the Birth of the Prison*. New York: Pantheon.
- Fuster, J. M. 1997. *The Prefrontal Cortex: Anatomy, Physiology, and Neuropsychology of the Frontal Lobe*. New York: Raven.
- Goddard, H. H. 1915. *The Criminal Imbecile*. New York: MacMillan.
- Goffman, E. 1961. *Asylums: Notes on the Social Situation Mental Patients and Other Inmates*. New York: Anchor.
- Goldstein, S. and M. Goldstein. 1990. *Managing Attention Disorders in Children: A Guide for Practitioners*. New York: Wiley-Interscience.
- Hacking, I. 1995. *Rewriting the Soul*. Princeton: Princeton University Press.
- Hohman, L. B. 1922. "Postencephalitic Behavior Disorders in Children." *Johns Hopkins Hospital Bulletin* 33:372–375.
- Ireland, W. W. 1877. *On Idiocy and Imbecility*. London: J & A Churchill.
- Ireland, W. W. 1900. *The Mental Affections of Idiocy, Imbecility and Insanity*. Philadelphia: P. Blakiston's.
- Kennedy, R. L. J. 1924. "The Prognosis of Sequelae of Epidemic Encephalitis in Children." *American Journal of Diseases of Children* 28:158–172.
- Kessler, J. W. 1980. "History of Minimal Brain Dysfunctions," Pp. 18–42 in *Handbook of Minimal Brain Dysfunction: A Critical View*, edited by H. Rie and E. Rie. New York: Wiley-Interscience.
- Lombroso, C. [1876] 1907. *L'Uomo Delinquente*. Bocca: Turin.
- Mataro, M. 1997. "Magnetic Resonance Imaging Measurement of the Caudate Nucleus in Adolescents with Attention-Deficit Hyperactivity Disorder and its Relationship with Neuropsychological and Behavioral Measures." *Archives of Neurology* 54:963–968.
- Mathys, W., J. M. Cuperus, and H. van Engeland. 1999. "Deficient Social Problem-Solving in Boys with ODD/CD, with ADHD and with Both

- Disorders." *Journal of the American Academy of Child and Adolescent Psychiatry* 38:311–325.
- Mercier, C. A. 1890. *Sanity and Insanity*. London: Scott.
- Mercier, C. A. 1917. "Moral Imbecility." *Practitioner* October:301–308.
- Paterson, D. and J. C. Spence. 1921. "The After-Effects of Epidemic Encephalitis in Children." *The Lancet* September 3rd:491–493.
- Rank, B. 1954. "Intensive Study and Treatment of Preschool Children who Show Marked Personality Deviations or "Atypical Development" and their Parents. Paper presented to the *International Institute of Child Psychiatry*. August 1954: Toronto.
- Scheff, T. 1984. *Being Mentally Ill: a Sociological Theory* (3rd edition). New York: Aldine De Gruyter.
- Schrag, P. and D. Divoky. 1975. *The Myth of the Hyperactive Child and Other Means of Child Control*. New York: Pantheon.
- Stewart, M. A. 1970. "Hyperactive Children." *Scientific American* 222:94–98.
- Still, G. F. 1902. "Some Abnormal Psychological Conditions in Children." *The Lancet* April 12 (1008–1012), 19 (1079–1082), and 26 (1163–1167).
- Strecker, E. A. 1929. "Behavior Problems in Encephalitis." *Archives of Neurology and Psychiatry* 21:137–144.
- Stryker, S. B. 1925. "Encephalitis Lethargica: The Behavior Residuals." *The Training School Bulletin* 22:152–157.
- Tredgold, A. F. 1917. "Moral Imbecility." *Practitioner* July:43–56.
- Walker, S. 1998. *The Hyperactivity Hoax*. New York: St. Martin's Press.
- Wender, P. 1971. *Minimal Brain Dysfunction in Children*. New York: Wiley-Interscience.
- Young, A. 1995. *The Harmony of Illusions: Inventing Post-Traumatic Stress Disorder*. Princeton, NJ: Princeton University Press.