

## Bad Boys, Good Mothers, and the “Miracle” of Ritalin

*Irina Singh*

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*Centre for Family Research, Faculty of Social and Political Sciences, University of Cambridge*

### **Argument**

Contemporary debates around Attention Deficit/Hyperactivity Disorder (ADHD) and the most common form of drug treatment, Ritalin, are rarely placed in the context of the social-scientific history of diagnosis and drug treatment. This is possibly due to the fact that brain talk and brain imagery have replaced earlier theories about children’s psychopathology that had mainly focused on the toxic effects of the mother. These theories and their psychoanalytic roots are considered somewhat embarrassing and certainly unscientific in a contemporary light, and modern biological psychiatry has worked hard to demonstrate that physiological and genetic factors underpin this contested disorder. Such theories have tended to make the history of ADHD and Ritalin seem irrelevant to scientific progress and understanding of disorder, as well as to public understanding and acceptance of disorder and drug treatment. Examining this history, however, clarifies the relation between social, cultural, and scientific values in constructing a need for medical intervention within the domestic realm. When Ritalin came on the United States market in 1955, neither psychiatric diagnosis of children’s behaviors, nor drug treatments for children’s behavior were commonplace. Mothers especially were located in the center of active political, moral, and scientific debates over boys’ normative behaviors. These debates helped codify an intimate association between a problem boy and his problematic mother in relation to ADHD diagnosis and Ritalin treatment. The story I tell here suggests that this association may have supported mothers’ acceptance of medical intervention and drug treatment for their boys’ troublesome, but arguably not pathological, behaviors. In the concluding sections I argue that the lack of attention to these social-scientific roots means that we miss seeing their potential relevance to the contemporary predicament of rising ADHD diagnoses and Ritalin use.

### **Introduction**

In 1996 *Newsweek* magazine called Attention Deficit/Hyperactivity Disorder (ADHD) America’s “No. 1. childhood psychiatric disorder” (Hancock 1996, 51). In 1998 a National Institutes of Health Consensus Conference statement admitted in its final remarks, “After years of clinical research and experience with ADHD, our knowledge about the cause or causes of ADHD remains speculative” (National Institutes of Health 1998). Despite the mysterious etiology and consequent

controversy over ADHD, however, diagnoses continue to rise.<sup>1</sup> Based on 1994 U.S. Census figures, 6 per cent of boys and 1.5 per cent of girls in the United States population have been diagnosed with ADHD (Swanson et al. 1993). As alarming as these numbers may seem, at least one prominent researcher of ADHD believes the true proportion of ADHD in the U.S. children's population to be nearer 10 per cent.<sup>2</sup>

Hand in glove with the ADHD controversy is controversy over Ritalin, the most common form of treatment for the disorder. Ritalin is the market name for the stimulant drug methylphenidate, originally manufactured by Ciba (now Novartis). ADHD and Ritalin cannot truly be disaggregated in contemporary debates. U.S. consumption of Ritalin has risen sharply, from 70 defined daily doses (DDD) in 1990 to approximately 425 DDD in 1999. To put these numbers in some perspective: In 1999 the U.S. accounted for 85 per cent of worldwide medical use of Ritalin (United Nations Report 1999).<sup>3</sup>

In contemporary debates ADHD and Ritalin enjoy almost iconic status; they are a focal point of modern anxieties about children, parents, families, schools, cities, civilization, and genetic futures. Popular media articles capitalize on the novelty of the "Ritalin riddle, a brain teaser for the 90's," questioning whether "our culture has gone so high-baud haywire" that it is willing to tranquilize children into submission (Hancock 1996, 51). Psychologists writing for a popular audience have called ADHD a symptom of a "rapid-fire culture" rather than brain-based disorder (DeGrandpre 1999), and have connected ADHD diagnosis with a cultural intolerance of boys, whose high energy levels and aggressiveness can make them difficult for teachers and parents to handle. By this argument Ritalin is used to "medicate boyhood" (Pollack 1998; Kindlon and Thompson 1999).<sup>4</sup>

Environmental explanations for ADHD diagnosis and Ritalin use are positioned on one side of a sharply polarized debate about the true causes of symptomatic behaviors and the legitimacy of diagnosis and treatment. On the other pole, the biological

<sup>1</sup> According to DSM-IV, ADHD is a childhood psychiatric disorder characterized by three core behavioral problems: impulsiveness, inattention, and hyperactivity. The intensity and pervasiveness of these common childhood behaviors are key components in the translation of behaviors into symptoms; symptoms must be present in two or more locations and they must have been present to a disruptive degree for six months or longer. There is no diagnostic test for ADHD, and evaluations for the disorder vary widely, from 15-minute sessions with a pediatrician to multi-disciplinary neuropsychological evaluations.

<sup>2</sup> Joseph Biederman is one of America's foremost experts on ADHD, and he is the Chief of Harvard Medical School Child Psychopharmacology Clinic (see Biederman 1996, 26).

<sup>3</sup> I am using Ritalin representatively here, as there are other stimulants on the market for ADHD. While in the past Dexedrine was another popular stimulant, the relatively new drug Adderall appears to be making gains in the market. In 1998 Adderall was the second most commonly prescribed treatment for ADHD by U.S. pediatricians. However the difference in number of prescriptions is still large: In the year ending August 1998 pediatricians wrote 4.6 million prescriptions, valued at \$165 million, for generic methylphenidate (Ritalin); and 742,000 prescriptions, worth \$24 million, for Shire Richwood's Adderall (<http://www.quintiles.com>).

<sup>4</sup> It is difficult to discern whether these writers believe that such "boy behaviors" are innate or culturally derived, or a combination of both. There is increasing discussion of biological and genetic bases to young children's gendered behaviors within American developmental psychology (see for example Maccoby 1998).

perspective on ADHD posits dopamine processing dysfunction as the key to understanding the disorder and views stimulant drugs as the most effective treatment. While the media continues to stoke the nature-nurture debate, the reality is that the medical-scientific perspective on ADHD is now widely accepted in the U.S.<sup>5</sup> Theories of a genetic basis to ADHD are rapidly gaining currency: Recently Russell Barkley, a psychiatrist and a prominent proponent of the genetic account, has suggested that we view ADHD as a template for understanding that human inhibition and self control are "traits [which are] largely, though not solely, genetically determined" (Barkley 1997, 318).

Public and scientific agitation over ADHD and Ritalin has a distinctly contemporary flavor, caught up in the familiar language of neurotransmitters, genes, stress, and competition. And so it may come as a surprise that as far back as 1971 the U.S. Department of Health, Education and Welfare estimated that 3 per cent of school age children suffered from an antecedent of ADHD called "hyperkinesis" (HEW 1971). Indeed, diagnosis and treatment of ADHD have been inspiring medical and public debate for almost a century. Ritalin too has a history, now almost half a century old and riddled with controversy. Over 30 years ago the *Washington Post* created a media sensation with a report that 5–10 per cent of children in Omaha school districts were being prescribed Ritalin or other behavior modifying medication (Maynard 1970). National outrage over the "Omaha Incident" prompted a federal inquiry entitled, "Federal Involvement in the Use of Behavior Modification Drugs on Grammar School Children in the Right to Privacy Inquiry" (U.S. Congressional Report 1970).

Despite the rich scientific and social history of ADHD and Ritalin there are few historically based accounts in the literature. Peter Conrad's influential accounts of medicalization have queried the relationship between the creation of a "hyperkinesis" diagnosis and the availability of a "social control mechanism" in the form of psychotropic drug treatment (Conrad 1975; idem 1992). Shrag and Divoky (1975) include chapters on the "invention" of the hyperactivity diagnosis and Ritalin, which present important details about governmental and pharmaceutical company practices during the 1960s and 70s. However this history is rather biased due to the authors' strong anti-psychiatry position. Other literature on ADHD in the anti-psychiatry tradition has tended to pursue a contemporary critique without delving further into the historical context of diagnosis and drug treatment (i.e., Grinspoon and Singer 1973). Recent popular books on ADHD sketch a history of ADHD in their introductory chapters (i.e., Barkley 1997; Hallowell and Ratey 1994; Diller 1998). To a great extent these authors tend to repeat a version of the history of ADHD without sufficient critical inquiry or analysis, collapsing a complicated century of changing

<sup>5</sup> In comments to me on a research proposal, a prominent pediatrician and author wrote that "the ideology of ADHD behavior as a brain disorder is so strongly entrenched in the U.S., that any study that might deny or delay the use of medication in the above age 6 years age group might be seen as medically unethical."

diagnostic labels, symptoms, and etiology into a coherent story of disorder.<sup>6</sup> One problem with such accounts is that they veil the productive processes by which this disorder and its drug treatment achieved meaning, status, and power. The story of how ADHD and Ritalin came into being and how they became meaningful as solutions to the problematics of children's behavior is still unfolding.

In this paper I hope to further the process of re-contextualizing ADHD and Ritalin by excavating some of the historical and cultural surroundings that have nurtured both this diagnosis and its drug treatment in America. On a general level I want to understand something of how the diagnosis and drug came into being, and into parents' consciousness. More specifically I seek to understand and describe the social-scientific context that supported parents' turn to medication to improve their children's behavior. I hope to make the point that as long as we understand ADHD to be a de-contextualized problem of an individual brain we miss seeing the social-scientific commitments that have been borne along in the ADHD diagnosis and in Ritalin treatment. One such commitment I focus on in this paper involves the intimate association between a problem boy and his problematic mother. I suggest that this association has encouraged scientific interventions in childrearing generally, and more specifically, it has supported, and may continue to support, mothers' turn to ADHD diagnosis and Ritalin treatment for their children's behavior and performance.

### Science on the Domestic Front

Ritalin came on the U.S. market in 1955, a time when pediatric psychotropic treatments were not commonplace. How did it come to pass that a little more than a decade later rates of Ritalin use would inspire a congressional inquiry? However many pieces there are to that puzzle, at its center sits a family, and a boy (usually) whose behavior is seen as problematic. Parents' perceptions of these behaviors as a *medical* problem that requires a medical solution is not a given. Therefore, in order to understand the appearance and success of a medical diagnosis and intervention into children's problem behaviors, we need to understand something of how the science of abnormal child behavior entered into and persuaded the domestic realm of its authority and efficacy.

<sup>6</sup> One widely cited claim in this history of ADHD is that the British physician George Still (1902) was the first to describe ADHD-like behaviors in children. In a series of lectures published in the *Lancet*, Still described children who lacked "inhibitory volition" and had deficits in attention and concentration. A closer look at Still's descriptions of this group of 23 children reveals that attentional issues are secondary to his concern with "moral control." Still lists these children's major qualities as "(1) passionateness; (2) spitefulness-cruelty; (3) jealousy; (4) lawlessness; (5) dishonesty; (6) wanton mischievousness-destructiveness; (7) shamelessness-immodesty; (8) sexual immorality; and (9) viciousness" (1902a). Most of these qualities are not considered primary symptoms of ADHD (for further argument along these lines, see Palmer and Finger 2001).

Important domestic sources for scientific information on childrearing and child behavior from the 1940s through the 1960s included popular books and magazine articles. It is difficult to discover how parents acted in response to received advice and information about child development; however the substance and nature of the material itself can illustrate the particular kinds of scientific knowledge and beliefs that penetrated the domestic realm (Mechling 1975). In popular women’s and parenting magazines during this period hundreds of articles provided advice and information to women on the broad topic of child behavior. Regular contributions by prominent figures such as the pediatrician Dr. Spock<sup>7</sup> indicate that magazines were seen as an important and valid forum for the dissemination of expert advice and information.

This paper is based in part on a systematic qualitative review of more than 200 articles on child rearing and child behavior found in two women’s magazines and one weekly newspaper advice column between 1945 and 1965.<sup>8</sup> These articles provide a glimpse of macro-level social movements and ideological shifts that affected the family, schools, and mental-health professions, as well as providing insight into advice and concerns regarding micro-level details of children’s behavior. Articles on younger children’s behavior are specifically relevant to this paper, and cover topics including obedience, discipline, parental authority, disturbances or deficits, and treatments.<sup>9</sup>

Magazines can be seen as part of the social machinery that drives the dissemination of scientific products and ideas into families and homes. In the 1940s and 1950s, a burgeoning industry of experts in mental health began descending on families, penetrating the domestic sphere via popular publications, and communities via the schools and community health clinics.<sup>10</sup> In all media resources I consulted, writers clearly targeted mothers as the primary, or even sole, interested party in the area of the child’s upbringing. More surprisingly, almost all early childhood articles focused on boys, and almost all articles were about boys’ behavioral development, and particularly aggressive behaviors such as “fighting,” “talking-back,” “toughness,” and “sports.” In contrast, most articles about girls were aimed at teenage girls and often assumed that the girl herself was the audience, having picked up her mother’s magazine. Articles emphasized etiquette, grooming, and dating. Boys in early

<sup>7</sup> Dr. Benjamin Spock wrote the enormously popular book, *Baby and Childcare*, first published in 1946, now in its 7<sup>th</sup> edition and still a bestseller.

<sup>8</sup> Much of this research was performed at Harvard’s Schlesinger Library, which houses complete sets of numerous women’s magazines in its archives. I reviewed two popular monthly magazines, *Woman’s Day* and *Parents*, and the weekly parenting advice column in the *New York Times Magazine*, between 1945 and 1965. I limited my review to three sources because articles in women’s and parenting magazines tended to replicate each other. These selections represent my attempt to achieve a balanced view on issues from three publications with differing styles and, to some extent, differing readership. While I could not hope for a diverse readership based on race or class, I do feel that my selections represent a balance of views and opinions.

<sup>9</sup> I have occasionally included relevant articles from one or two other women’s magazines and weekly journals such as *Time* and *Newsweek*, but these magazines were not reviewed systematically.

<sup>10</sup> There are a number of books that detail aspects of this deluge of experts and its impact on women, including Ehrenreich and English 1978; Grant 1998; and Margolis 1984.

childhood were viewed as still heavily dependent on their mothers, and articles on boys' development were addressed to mothers. In this sense, experts writing in these magazines were clearly defining boys' behaviors as the significant topic of research and discussion in the area of early childhood development. They were also reinforcing a focus on an interrelated group of subjects: mothers, sons, and problem behaviors.<sup>11</sup>

In the 1940s this relationship between mothers and sons was framed by a philosophy known as "permissive childrearing." The permissive era was itself a reaction to the strict behaviorist approach propounded by developmentalists such as John Watson (1928) whose book *Psychological Care of Infant and Child* urged the "scientific upbringing of the young" and discouraged mothers as a "potential threat" to this scientific endeavor. In 1946 Dr. Spock's seminal work *Baby and Childcare* invited mothers back into their children's lives, with the encouragement to "trust" themselves. As the historian Michael Zuckerman (1975) points out, however, the Watsonian image of mother was not replaced so much as subtly amended in the permissive era. In both periods, mothers were seen as impediments, first to men of science (who interpret the laws of nature), and then to natural law itself. As the vision of the child changed from a creature needing strict management to one needing very little outside control at all, the child with the "inborn wisdom" to know his needs was hampered by mother's comparatively poor childrearing instincts (Weiss 1985). Mothers needed to rely on experts to avoid becoming impediments to their boys' development. A notion that boys operated according to certain "natural laws of being" (Bevans 1946a) encouraged mothers to keep an appropriate distance from their sons. From this distance, mothers, drawing upon expert knowledge, could observe the boy and monitor his needs. Magazine columnists warned mothers that discipline or control could tarnish a boy's natural "joy of living" and his desire to do good (Bevans 1946b). Zuckerman has suggested that Spock's manual is punctuated by a "concerted effort to detach the youngster from the moral authority of the immediate family" (Zuckerman 1975, 226). My reading of magazines in the same period narrows the relevance of Zuckerman's point: *sons* need to be detached from *mothers*.

Magazine columnists rarely acknowledged that advice given to mothers about childrearing was written from the perspective of a particular paradigm. This gentle gloss over complicated and contested territory was, and is, relatively usual fare for a magazine column. In the late 1940s, however, it veiled the growing influence of psychoanalysis on ideas of mothering and the mother-son relationship. Psychoanalytic ideas shaped Spock's perspective on mothers and childrearing, and almost certainly influenced the focus on the mother-son relationship during early childhood in magazine articles written during this period (Weiss 1985). It was probably near impossible to soften psychoanalytic theories of mother into the agreeable tones of the

<sup>11</sup> From here on I will refer specifically to "boys" and "mothers" instead of "children" and "parents" to underline the implicitly gendered nature of the discussion in the pages of these magazines.

standard magazine column without emasculating the message entirely. But the complex interplay between mother's presence/absence and her son's well being, hinted at in magazine columns, is fully elaborated in many psychoanalytic writings, most famously, perhaps, in Frieda Fromm-Reichmann's articulation of the "schizophrenogenic mother." In 1948 Fromm-Reichman wrote: "The schizophrenic is painfully distrustful and resentful of other people due to the severe early warp and rejection he encountered in important people in his infancy and childhood, as a rule mainly the schizophrenogenic mother" (Fromm-Reichman 1948). Two important qualities characterized the schizophrenogenic mother: overprotection and rejection. The result of these mothering qualities was boys who grew up to be dictatorial, weak, or psychotic.

In the postwar period, these kinds of men were not viewed merely as an annoyance or disappointment to their communities. They were a threat to democracy. Fromm-Reichman claimed that Hitler and other fascist leaders were born of a fatherless homeland following World War I (Neill 1990). In a widely read book called *Their Mothers' Sons*, psychiatrist and U.S. surgeon general Edward Strecker argued that mental breakdown during war reflected a soldier's immaturity. Mature men were essential to ensuring the future of democratic nations: "There is nothing of which Psychiatry can speak with more confidence and assurance than the danger to our democratic civilizations and cultures from keeping children enwombed psychologically and not permitting them to grow up emotionally and socially" (Strecker 1946, 219). Unfortunately for democracy, psychiatrists and psychologists working in World War II diagnosed 12 per cent of all recruits as predisposed to mental breakdown during pre-screening tests. Over one million more soldiers suffered from some form of neurosis during combat (Herman 1995).

Against this backdrop of World War II, the breezy voice of the 1940s magazine columnist appears disingenuous, veiling a deep connection between concerns about the normalcy of male behavior and the supremacy of the democratic world, as well as a trenchant political and moral critique of mothers and their relationships with their sons. Such connections among mother, son, nation, and neurosis were further encouraged by a new generation of childrearing experts propelled into schools and communities under the aegis of the National Committee on Mental Hygiene (NCMH). The central mission of the influential NCMH was prevention of mental illness, which was regarded as a problem involving the personality rather than the brain. Hygienists believed that a child's "adjustment" or "pre-delinquent" states would be most effectively identified through the school, which they saw as "an institution to develop children's personality." Combining psychoanalytic premises with biomedical understanding of disease prevention, hygienists' ideas for American education effectively resulted in what Sol Cohen has called the "medicalization of American education" (Cohen 1983a). Newly trained teachers, counselors, social workers, and psychologists flooded the schools. The presence of these experts helped to reinforce the idea that parents were the root cause of early psychological and

behavioral damage to children; parents sowed the seeds of mental disorder in children through “harsh restraints, prohibitions, and punishments” (Cohen 1983b).

The hygienists’ emphasis on preventive mental health care likely helped encourage the scientific establishment of normative standards of children’s cognitive and emotional behaviors. In magazine articles, the pervasiveness of the scientific attitude is clear: mothers are invited to avail themselves of evaluation and assessment of the child in the home (social worker); the school (school psychologist, school nurse and guidance counselor); and the clinic (psychologist, psychiatrist). The “scientific attitude” according to one columnist, “pervades everything we see, think and know – including our functioning as parents and as people” (Puner 1958, 40). As a result parents are “self-critical and self-examining” while children are being “watched, studied, measured and tested as never before” (Barclay 1957, 76).

### **The “Normal” Boy**

By the end of the 1950s, magazine columnists had moved away from talk about maternal instincts and permissive childrearing and had embraced a different agenda, focusing on two interrelated topics: discipline and normalcy.<sup>12</sup> In 1959, Dorothy Barclay, the *New York Times Magazine* childrearing advice columnist from 1949 to 1963, celebrated a “decade of progress” outlining not only the changes in childrearing philosophy but also the extent to which experts had taken over from parents:

Research revealing that children as well as adults suffered in an atmosphere of total license led to a renewed setting of reasonable standards of behavior and a return to favor of “discipline” achieved through education, guidance, planning and, wonders of wonders, a firm “No!” when necessary. . . . Counseling services have increased and parents in growing numbers turn to them for help. (Barclay 1959, 24)

Barclay’s emphasis on discipline through education and guidance echoes the ideals of national education put forth in the 1958 National Defense Education Act (NDEA). Enacted partially in response to the Sputnik launch of 1957, one of the Act’s stipulations was to identify gifted young people through testing, and with the help of the guidance counselor ensure their early and successful planning for a college education. The Act helped officially establish the guidance counselor in schools, and institutionalized testing and college counseling. The NDEA once again reminded the public that the probing of boys’ mental and emotional depths was a matter of national interest. As one columnist suggested, the NDEA was meant to strengthen community

<sup>12</sup> Ehrenreich and English link this change in childrearing ideology to the failure of the Americans to beat the Russians in the satellite launch race. After 1957, they argue, education became an issue of national defense. While it seems unlikely that a widespread change in ideology would be linked so intimately to one event, it is certainly true that the cold-war climate encouraged a variety of defense-based education initiatives, such as the National Defense Education Act.



and citizenship by uncovering not only intellectual gifts, but also deviance and trouble (Bemer 1964).

The new "toughness in schools" and the "new discipline" were also part of an institutional attempt to undo the damage of parents who had "been said to be too permissive" and who had seen a "loss of authority" with their children (Hechinger and Puner 1959; Mead 1958). Therefore mothers were told to encourage their children to use the school's resources: "Children with worries know they can go to the school social worker. He has been trained to listen" (Bemer 1964, 78). Mothers themselves could draw upon these external resources to discover their sons' problems: "Go to the school psychologist, who will consult with your child's teacher" (Carson 1959, 44).

Mothers trained in the wisdom of the permissive era were likely in need of some education in face of these new ideals of childrearing. Good mothering was now dependent on discipline, and discipline had an important relationship to "normalcy." Articles on discipline-related areas, such as obedience and aggression were heavy with talk about normative levels of (boys') aggressiveness, impulsiveness, and conformity. Such articles emphasized that mothers should be able to make a distinction between normal and abnormal behaviors, but confirmation of this distinction and intervention of most any kind was the job of the expert. However well mothers observed their sons, boys' behavior was not straightforward and therefore normalcy was difficult to ascertain. Mothers might view behavior as a manifest sign of normalcy, but experts knew that behavior was not necessarily a reliable sign of mental health. As one columnist wrote, "It is a common misconception that 'being good' is a sign of mental health in a child" (Honor 1957, 57). Articles on "sound adjustment," "emotional balance" and "temperament" revealed the murky depths of psychopathology; and mothers needed expert help to determine "pre-school growing pains from real trouble" (Carson 1959, 44).<sup>13</sup> The specter of "real trouble" must have been particularly frightening for mothers, especially when psychological problems were compared with severe physiological illnesses. In a move that clearly medicalized behavior, treatment for a psychiatric disorder was likened to treatment for a physical illness, thereby underlining the need for preventive care and emphasizing need for expert attention. Two well-known psychologists compared untreated emotional problems in a child to "an untreated cold [that] could be a symptom of pneumonia" (Ames and Ilg 1957).

There is some critical reaction to experts' jurisdiction over children in the pages of these magazines, aimed mostly at the homogenizing goals of expert evaluation. One columnist told mothers not to worry about normalcy, for they, and their children, were "different, peculiar human beings" with "all the vagaries and foibles that go with individual differences" (Jenkins 1958, 71). Similarly, another columnist argued that

<sup>13</sup> Talk about "adjustment" and "balance" was likely derived from the work of Adolf Meyer on mental illness as maladaptation. Meyer's version of psychoanalysis was enormously influential in shaping American psychoanalysis generally.

normal was average, and “great men aren’t normal” (Whitman 1960, 46). Expert advice was viewed as undermining parents, who had a “gnawing sense of insecurity about how their youngsters measure up” (Tolchin 1961, 32). To avoid the experts, mothers should rely more on their own knowledge and celebrate the “simple wonderfulness” of their boys (Hunt 1957, 35).

Yet only a handful of articles indicate such resistance to the experts; the majority of writers appeared to find experts’ scrutiny and research both helpful and necessary for proper childrearing. One reason for the lack of resistance may be that by 1960 an increasing number of articles were written by experts themselves. Articles by non-experts often just summarized expert research on a particular topic. A few articles propounded the importance of a lay perspective; one such author urged mothers to speak up about the boys “[we] *know* as our own” (Hunt 1957, 35).<sup>14</sup> Much more often, however, mothers’ authority was undermined and expert advice pushed forward. This loss of authority culminated in advice that sent mothers themselves to the experts, not only to understand their children but also to seek advice and help for their own behavior. Columnists recognized that mothers might feel “overwhelmed” with all their tasks; they might feel “guilty” for promoting emotional difficulties in their children; they might “inflate disturbances.” Most often the advice was to “seek professional help.” The cycle renewed itself: expert opinion caused mothers confusion and anxiety that was properly managed by consulting more experts. As Julia Grant has pointed out in her study of mothers’ letters to advice columnists in this period:

Whatever negative behavior their children exhibited, mothers questioned what they might have done, or failed to do, to cause the problem. The mothers who wrote to child-care experts during the 1950s judged themselves harshly, often seeking in vain to find the source of their children’s troublesome behavior in their own conduct as mothers. To some extent, they had incorporated enough of the philosophy of scientific utopianism to believe that proper child management could alleviate their intrinsic difficulties. (Grant 1998, 227)

The new emphasis on a boy’s mental health served to further remove mothers from jurisdiction over their sons’ development and codified deep anxieties about mothering behaviors and the mental stability and strength of young boys through scientific discourse. Childhood psychiatric diagnoses had become a ground on which local and national anxieties surrounding mothers and sons could be elaborated. In the early 1950s, magazine columnists began to pay more and more attention to one such diagnosis, an ancestral form of ADHD called “emotional disturbance.”

<sup>14</sup> It seems important to note that mothers did speak up in their letters responding to expert columnists. These letters document a more robust critique and resistance of experts than I found within the magazine articles themselves (see Grant 1998, chap. 7).

## **Emotional Disturbance**

Emotional disturbance was the most commonly noted mental health problem affecting young boys in magazine articles spanning the 1950s to 1965. The symptoms of emotional disturbance, culled from the pages of women's magazines and clinical psychology textbooks of this period, suggest a close relationship to the contemporary ADHD diagnosis. Symptoms affected boys almost exclusively, and included hyperactivity, inattention, moodiness, delinquency, and impulsiveness.<sup>15</sup> In magazine articles emotional disturbance has a number of variants including "emotional trouble" and "emotional illness." A clinical psychology textbook published in 1965 indicates that contemporary researchers saw emotional disturbance as the "eminently normal result of abnormal (in the case of socially and morally deviant) behavior" (Mowrer 1965, 243). Proposed causes for these deviant behaviors were split predictably along the nature-nurture divide; but emotional disturbance itself was viewed for the most part as a set of secondary symptoms of underlying disorder. When the underlying disorder was left untreated abnormal behaviors would multiply, thereby exacerbating the emotional sequelae of the disorder.

Emotional disturbance is increasingly referenced in articles at a moment when mothers' attention is excruciatingly fixed on the mental and emotional normalcy of their sons. Discipline, conduct, and aggressive behavior had been the mainstay of mothers' concerns about their sons, as represented in these magazines, and these qualities are at the center of the symptom cluster that characterizes emotional disturbance. However as a descriptive diagnosis emotional disturbance must be viewed as an immature scientific category, extending an extremely wide net over a range of behaviors that were, as yet, not categorized as distinctive disorders. Magazine articles and clinical textbooks of the period suggest that the disorder was not well differentiated from dyslexia and learning disabilities, disabilities resulting from head injury, behavioral disorders of childhood such as oppositional defiant disorder and conduct disorder, and depression. Emotional disturbance was explicitly linked, and occasionally interchangeable with Minimal Brain Dysfunction (MBD), which most researchers consider an early diagnostic form of contemporary ADHD (Barkley 1997; Diller 1998). MBD was the term most often used in a scientific context; its name points to the hypothesized organic cause of disorder. Emotional disturbance had a more ambiguous etiology and was a term more often found in popular venues.

This close association between emotional disturbance and MBD is somewhat curious, given that emotional disturbance was often identified as a psychological problem borne of anxiety and conflicts, and MBD was almost always seen as an organic problem. The frequent linking of the two actually reveals an interesting

<sup>15</sup> Emotional disturbance is still referenced in social science and medical journals today, and it is still a somewhat ambiguous category. In addition to symptoms such as depression, emotional disturbance can also include ADHD or other disorders now categorized as neurobiological disorders. My overall impression, however, is that today's emotional disturbance connotes something deeper and more severe than ADHD.

interaction between traditionally psychoanalytic ideas and ideas more usually found in biological psychiatry, as related to the production of a scientific diagnosis for boys' problem behaviors. Historians of psychiatry have tended to present great antipathy between biological psychiatry and psychoanalysis during this period (Shorter 1997); however, in the case of children's behavior disorders pediatricians and child psychologists brought these disorders and associated treatments into the limelight in work that overtly pulled from competing positions within psychiatry. Their work created an inter-disciplinary setting in which experimentation with drug treatments for children's behavior problems could occur alongside other psychoanalytically oriented treatment approaches with relatively little fanfare.

### **Benzedrine Experimentation in a Cooperative Atmosphere**

In 1937, Charles Bradley, a pediatrician, published the first article documenting experiments with the stimulant Benzedrine on children with a wide variety of "behavior problems" in the *American Journal of Psychiatry* (Bradley 1937a). Bradley performed his experiment on 30 children, ages 5 to 14, who manifested a variety of behavior disorders ranging from specific educational disabilities to epilepsy. All the children had normal intelligence. He pronounced the results most "striking" in the effect of Benzedrine on school performance. Almost half the children responded in "spectacular fashion" presenting with unusual motivation to work, and an enhanced ability to read, comprehend, and do arithmetic. In their "emotional response" too, Bradley reports that half the children became "more placid and easy-going," a clinical improvement in the opinion of the staff.<sup>16</sup> In a series of subsequent articles, Bradley and his colleagues build on this body of work, publishing their results in the major psychiatric and medical journals of the day.

Charles Bradley was the director of the Emma Pendleton Bradley Home in East Providence, Rhode Island, which opened in 1931 as the nation's first psychiatric hospital devoted to children. The Home was "planned and equipped especially for the care of children with neurologic and behavior disorders" (Bradley 1936, 651). In 1936, there were 269 patients at the Home, 80 with behavior problems, 64 with convulsive disorders, 40 with CNS (central nervous system) birth disorders, 37 with mental deficiency, and the remainder with a variety of disorders including reading disability and post-encephalitic syndrome. Bradley does not specify the gender of these patients; however patients included girls as well as boys. In his first published experiment with Benzedrine Bradley included approximately twice as many boys as girls (21 boys, 9 girls); in subsequent research the proportion of boys is larger. Bradley asserts that these numbers reflect the incidence of behavior problems by gender in the clinical population. By 1940 one of Bradley's samples includes 77 boys and only 23 girls. Much of the other research with Benzedrine on children during this period did

<sup>16</sup> Bradley does not specify the gender of children in his analysis of results.

not include girls at all in part because behavior problems were so closely associated with delinquency, and experiments were frequently performed in homes for delinquent boys.<sup>17</sup>

The design of the Home in Bradley's descriptions appears to have been grounded in a combination of behaviorist, psychoanalytic, and mental hygienist principles, emphasizing a natural, healthy, and encouraging environment as essential to a child's mental well being. Bradley contrasted this environment with the environment of the family home, which he felt was chaotic and troubling to his patients, often sending them into relapse upon their release from the hospital. Bradley felt the Home's environment was particularly therapeutic for children with behavior problems, who benefited from multiple activities based in natural and cultural surroundings, reinforced by nurses and teachers "who have combined the rare endowment of an attractive, unruffled and ingenious personality" (ibid.). But while Bradley grounded the plans for his patients' daily life in these environmental principles, he also emphasized more active biomedical interventions with patients. The Home was envisioned specifically as a hospital for treatment of children's psychiatric disorders, with the facilities and opportunity for therapeutic experimentation. A surgery handled the more extreme therapeutic interventions, while experiments with drug therapies were performed in a more naturalistic setting, but under closely controlled conditions. To add to the therapeutic mix, Bradley also had children undergo individual psychotherapy, believing that "even the best environmental adjustment does not preclude the advisability of personal psychotherapy, particularly in cases in which a rather exhaustive analysis and reconstruction of the patient's personality are indicated" (ibid., 652).

In his published work Bradley mixes psychoanalytic, behaviorist, biomedical, and mental hygiene perspectives quite masterfully, finding ways to appease potential critics from all sides. A central factor in this process is his repeated emphasis that drug therapy is not a reason to ignore modification of the environment in the promotion of children's mental health. Indeed, the success of Bradley's Home, which housed patients anywhere from 6 to 18 months, was predicated on the therapeutic efficacy of separating children from the environment of their family homes. Writing in the *American Journal of Orthopsychiatry* in 1940, Bradley and his colleague Margaret Bowen state:

<sup>17</sup> As Conrad and Schneider have noted in their book, *Deviance and Medicalization* (1980), stimulants are part of the medicalization of delinquent behavior. The authors do not make much of the gender dynamics at play here, but clearly delinquency is a gendered phenomenon. Since the history of Ritalin is part of the history of delinquency, and both are part of the history of ADHD, it is not so surprising that ADHD too is largely a problem of boys. When ADHD is presented purely as a neurochemical problem, neurochemistry must explain the gender skew.

The use of pharmacological agents such as amphetamine sulfate, offers a supplementary . . . approach to the treatment of children's psychiatric problems. This approach in no sense replaces that of modifying a child's surroundings and so removing the sources of conflict. Neither can it offer the same assurance of mental health as do forms of psychotherapy which enable a child to work out his emotional problems. . . . However, distressing surroundings cannot always be altered, and lack of facilities frequently make effective psychotherapy impossible. In such situations the simple administration of a drug that produces an improved social adjustment or accelerated school progress may offer considerable assistance. (Bradley and Bowen 1940, 102)

Throughout the 1940s, children with disturbances thought to be of psychological and biological origin were subjected to experiments with Benzedrine, usually by child psychologists and pediatricians. This research continues the kind of cooperative, all-inclusive tone initiated by Bradley. In 1948, a well-known psychologist explained that, "an illness [minimal brain damage] which interferes with normal maturation will give rise to anxiety" (Bender 1948, 412); and Benzedrine was a "useful adjunct to the treatment of the neurotic child" (Bender and Cottingham 1942, 116). Such explanations helped create the ground for a productive interconnection between biomedical orientations and psychoanalytic perspectives around MBD and emotional disturbance in the 1950s.

Throughout this period of experimentation with Benzedrine the possibility of mother's toxicity and the necessity for separating mother and child went unchallenged in published articles. Indeed, one important factor that these diverse scientific positions agreed upon was the potentially harmful nature of a child's family environment, with special focus on mothers. From the hygienist perspective, mother was not expert enough to be given the responsibility of her child's upbringing; her understanding of the child was "pre-scientific" (Cohen 1983b, 129). Behaviorists like Watson (1928) felt that mother-love was a "dangerous instrument" while psychoanalysts stressed the pathology-inducing nature of mother-love. Even Dr. Spock (1946), under the influence of psychoanalytic ideas, subtly expressed that "the life of a child can be harmed by improper mother love" (quoted in Weiss 1985, 291).

Thus we see at the center of this early experimentation with Benzedrine therapy for problem children certain ingredients for a scientific model for ADHD and Ritalin treatment. First, and simply, there is the pairing of mother and son. This pairing will be the normative object of investigation in most family based studies of ADHD in the past several decades.<sup>18</sup> Second, there is the centrality of mother in the development of problem behaviors in boys. Third, there is the centrality of separation from mother in the construction of healthy male development.

<sup>18</sup> In a review of ADHD literature using the psychology database PSYCHINFO I found only a handful of articles involving fathers in hundreds of studies in the past 15 years. Of 25 studies I reviewed concerning effects of medication on parent-child interactions, two involved fathers and two involved girls. In my experience in public and clinical ADHD-related settings, fathers are largely absent from the clinic, support groups, and public talks and conferences on ADHD.

## **A New Name and A New Drug Treatment**

By the late 1950s, the spirit of cooperation between biologically oriented pediatricians, psychiatrists, and psychoanalysts was in decline. Frustrated with the lack of therapeutic results in psychoanalysis, some child psychiatrists decided to challenge the psychoanalytic identity inherent in the term "emotional disturbance" by emphasizing the organic etiology in the term MBD.<sup>19</sup> Their efforts were assisted by two developments. First, a new term appeared to describe emotional disturbance/MBD. The term was "hyperkinetic disorder of childhood," coined in 1957 by Maurice Lauffer, the new director of the Bradley Home. Reflecting the cooperative atmosphere at Bradley, Lauffer was trained as a pediatrician *and* a child psychiatrist. But Lauffer and his co-author, Eric Denhoff, writing in the *Journal of Pediatrics* rather than in a psychiatric journal, emphasized the "organic components" of the disorder and recommended the use of "amphetamine" for its treatment. With this move, Lauffer and Denhoff effectively narrowed MBD and emotional disturbance to one symptom through nomenclature and drug specificity, and grounded the new disorder in biological foundations.

Following Lauffer and Denhoff, psychiatrists urged the community to make up for its neglect of biology and organicity. In psychiatric journals, writers encouraged "the consideration of organic factors when diagnosing children's behavior because the psychogenic factors have so often been exclusively emphasized" (Knobel 1959, 319). Others suggested that child psychiatrists look "as carefully among the myriad of possibilities of organic causation as we have in the past among the interpersonal, deprivation and stress factors" (Clements and Peters 1962, 17).

Among childhood psychiatric disorders, "hyperkinetic syndrome" held unique promise for a revived biological psychiatry because it was already connected to a specific drug treatment. Indeed, Lauffer and Denhoff claimed that "a favorable response to amphetamine is supportive evidence for a diagnosis of the hyperkinetic syndrome" (Lauffer and Denhoff 1957, 473). These revivalist psychiatrists had to tread carefully, and well into the 1960s their articles still offered some integration of psychoanalytic and biological perspectives.<sup>20</sup> The important conceptual shift, however, was that biological psychiatrists now emphasized medication not as an adjunct to psychoanalytic therapy, but as a therapy with its own specific role.

The second important development during this time was the appearance of a new stimulant called Ritalin, marketed by Ciba Pharmaceuticals (now Novartis) in 1955. Ritalin was not initially indicated for hyperkinetic syndrome; instead it was a

<sup>19</sup> Leon Eisenberg, a child psychiatrist now at the Department of Social Medicine at Harvard, was one of the first psychiatrists to urge this change in nomenclature. He told me his reasons in a conversation we had in the fall of 1996.

<sup>20</sup> Even DSM-II, which appeared in 1968, hedged on the etiology of "hyperkinetic reaction of childhood," specifying that "if this disorder is caused by organic brain damage it should be diagnosed under the appropriate non-psychotic organic brain syndrome."

treatment for mild depression and narcolepsy. Treatment for “various behavior problems in children” was first indicated in 1961.

### **Marketing Ritalin**

Stimulants were one of three major types of drugs used for behavior modification in children during this period; tranquilizers, such as Raudixin, were also used, as were anti-depressants such as Tofranil and Aventyl (Ladd 1970, 68). Ritalin came to market at a time of extraordinary growth and competition within the pharmaceutical industry: According to one estimate, there were 150,000 pharmacological preparations available in 1961 (when Ritalin was first licensed for use in children for behavior problems), of which 90 per cent did not exist in 1951. In 1961, approximately 15,000 new drugs were being put on the market each year, while about 12,000 were dying off each year (*Time* 1961).

It is likely that Ciba Pharmaceuticals were aware early on of Ritalin's benefits as a patented drug with a strong research record, few side effects, and known benefits for children's behavior. Pharmaceutical companies invested heavily in sponsoring experimental research in clinical settings. Smith-Kline-French supported Charles Bradley's Benzedrine experiments (Bradley acknowledges the donation of tablets in his published work); and Diller claims that “Ritalin research fueled many grants and careers in the 1960s,” although he provides no direct support for this statement (Diller 1998, 25). Ciba played an important role in the promotion of Ritalin within the medical industry through paid clinical research, advertising in physicians' journals, and direct sales strategies.<sup>21</sup> This kind of promotion was standard practice for drug companies in this period, and unethical advertising practices would prompt a series of congressional hearings, notably the Kefauver (1957), Nelson (1967–1979) and Kennedy (1979) hearings.<sup>22</sup> In the Kefauver hearings particular concern was voiced over the industry's role in popularizing anti-depressant drugs for relatively common “unpleasant tension states” (Kefauver Hearings 1960). Later critiques would focus on the medicalizing of “human problems of living” through drug advertisements (Katz 1972; Hill 1977). It is more difficult to establish Ciba's role in promoting acceptance of Ritalin within the domestic realm. It can be argued, speculatively, that Ritalin benefited from a shift in public understanding of mental illness, promoted in part by the creation and marketing of drugs for a nation of “worried well.” In particular, the success of anti-depressant drugs may have contributed to mothers' acceptance of Ritalin for relatively common behavior problems in boys. The pharmaceutical industry and the medical profession probably targeted women for anti-depressant

<sup>21</sup> Shrag and Divoky (1975) provide some useful information about Ciba's marketing strategies for Ritalin in the 1970s and they cite interviews with (anonymous) Ciba sales representatives and FDA officials during this period.

<sup>22</sup> See Smith 1991 for a very useful, but generally uncritical compilation of material from these hearings relevant to the regulation of drug advertising.



diagnoses and treatments (Cooperstock 1978), and women accustomed to drugs for their own relatively common problems may have been more likely to accept Ritalin for their sons' problems. The history of Ciba's marketing agenda for Ritalin is difficult to access; therefore much of the above remains speculative.<sup>23</sup> In recent years, however, Novartis has clearly demonstrated its interests in the domestic realm. For the past decade it has funded the major American ADHD parents' organization, CHADD (Children and Adults with ADD). This organization provides such a powerful lobby for Ritalin that in 1995 the United Nations International Narcotics Board issued a warning about its role in rising rates of Ritalin consumption (United Nations INCB Report 1995).

Novartis and other stimulant drug-makers have also actively employed the relationship between mothers and sons in contemporary public advertisements for Ritalin. Direct-to-consumer advertising of Ritalin, a controlled substance, was prohibited in 1971 as a result of the Convention on Psychotropic Substances of 1971 (*ibid.*). Until approximately two years ago, the pharmaceutical industry respected this prohibition and did not advertise Ritalin and other stimulants to the public. Today advertisements for ADHD drug treatments can be found in many popular magazines including women's and parenting magazines. The great majority of advertisements for Ritalin and other stimulants for ADHD depict only two characters – a boy and his mother.<sup>24</sup>

## **Popular Reactions**

For mothers with problem boys, the news about drug treatment and the emphasis on the organic nature of children's behavior problems appears to have been very welcome. Schooled to give their children up to expert treatment, weary of mother-blame, and anxious to look good in the eyes of society, mothers represented in these magazines appeared to herald drug treatment for their sons' problem behavior as a true miracle. Magazine articles on this topic were filled with positive testimonials

<sup>23</sup> In the spring of 1998 I had several telephone conversations with a representative from Novartis Medical Information Services. I was given Medical Information Services each time I called Novartis to ask about archival and historical information about clinical testing and marketing. Unfortunately I was not given much information in these conversations. I was sent a half-page time-line of Ritalin-related developments. I asked whether Novartis could provide access to their records of the procedures that led to the approval of Ritalin for child behavior problems. I was told that the approval was based on a "large number of physician testimonials made by private investigators during the 1950s," and given a list of five references (Letter, March 2, 1998). Novartis must protect its own interests, of course, but the lack of access and information will do little to encourage accurate reports on Ritalin's history.

<sup>24</sup> My own collection includes ads for Ritalin, Metadate, Adderall, and Concerta, since 2001. In September 2001, *Time* published an article entitled, "New Ritalin ad blitz makes parents jumpy" (Novak 2001). The author claims that the U.S. never passed a law in line with the 1971 UN prohibition on public advertising of controlled substances (although the U.S. did sign the UN document). According to the article, the FDA and DEA do not have the authority to control public advertising for Ritalin and other stimulant treatments for ADHD.

from mothers; the titles of many articles themselves reinforce the sense that there is a new future for troubled boys and mothers, highlighting “new frontiers” and the “opening [of] doors” in child psychiatry. Popular women’s magazine articles uniformly assert both the overwhelming presence of mental illness in children and the need for expert medical intervention, including drugs. One writer called “childhood mental health” America’s “Number One Neglected Health Problem” and urged the medical profession to further differentiate and categorize illnesses (Krieg 1960).

None of the magazines I surveyed contained an overtly negative article on the issues surrounding children and psychostimulant medication. Although the child psychiatrist Leon Eisenberg writes in 1964 of the “heat” generated in discussions of “the proper role of drugs in treating disturbed children,” I found little evidence of such debate in the pages of popular women’s magazines (Eisenberg 1964, 167). Ritalin and the various diagnostic terms for “problem boys” likely benefited from the positive atmosphere surrounding drug treatments following the “pharmaceutical revolution,” which also helped bring about a renewed emphasis on the organic etiology of mental and emotional disorders (Lasagna 1969). The emphasis on organicity found its way into media treatment of psychiatric disorders. Following a U.S. Public Health Service report on MBD in 1966, the editor of *Time* took on the task of public education in face of a possible epidemic:

There are hundreds of thousands, possibly millions of such boys and girls in the United States [with MBD] and little is being done about them. There are not enough pediatric psychiatrists to treat them all, and most of them get no farther than the family doctor’s office. (*Time* 1968, 92)

Such editorials should not be taken to mean that parents were not skeptical about psychiatric labels and drug treatments for their children’s behaviors. It does appear that these magazines did not give voice to dissent during this period largely because they promoted expert advice and research so actively, and because of a tendency to soothe parents’ anxieties by reducing problems and presenting absolute solutions. The cocoon-like atmosphere of these magazines is further illustrated by the lack of discussion about the active debate around pharmacology generally in the late 1950s and ‘60s, which is documented in many articles in weeklies such as *Time*, *Newsweek*, and *U.S. News and World Report*. Although most of the concern focused on regulation of the pharmaceutical industry, a few editorials take on the larger philosophical questions surrounding the use of pharmaceuticals to manage not only disease but also behavior (e.g., *Newsweek* 1959).

Another reason for the lack of criticism of drug use may have been that a biological tool suggested a biological problem. An increased emphasis on the organic underpinnings of childhood behavior problems meant that mothers were more often assured that mental illness was not their fault. Still, the dynamic of mother’s presence/absence in relation to a boy’s problems remained complicated. While an organic account of mental illness potentially absolved a mother of blame it simultaneously

removed her from the sphere of authority over her son's behavior and well-being. Thus even while articles in magazines do more to relieve the burden of guilt and blame on the mother, there remains a pervasive undercurrent of judgment. This judgment appears in a number of guises but continues to be organized around the dynamic of mother's presence/absence. Articles that dealt with the stigma of mental illness in children, for example, sometimes judged mothers harshly for neglecting their children's mental health in order to preserve the public appearance of family harmony. One writer claimed that "the well-to-do children are often the last to get help. They suffer the most because their parents feel that emotional trouble will affect the family's social position" (Honor 1957, 57). While the aestheticized ideal of the 1950s American family held little room for mental illness or family upset, mothers were likely conscious that not only their social position but also their quality of mothering would be harmed by an admission of emotional problems in a boy. A mother whose son was put on medication for emotional disturbance assured readers of both her social position and her love for her son: "We are the average one TV, two-car family; we go places on weekends . . . and to church in the morning . . . friends who drop by in the afternoon. . . . Our boy has a decent home; he loves his family and is loved" (Dunn 1962, 45).<sup>25</sup>

However the close association between problem boys and problematic mothers lingers even more insidiously in the suggestion that mothers of out-of-control boys had themselves become out-of-control. A (male) writer recalls a mother whose realization of her son's needs (medication) "changed her life"; she is "calmer, more poised, more attractive" (Moak 1959, 35). Mother's self-control is linked directly with her aesthetic qualities: "Her newly learned self-control has made her a more attractive person." Given that this aestheticism is, in the 1950s, so closely linked to ideals of domesticity, I would suggest that to some extent this writer hints at a project of domestic sanitization, through medication. Part of what is sanitized within the family is mother's authority. As scientific practices displace mother's authority, mother is able to more nearly achieve the ideals of 1950s domestic life.

Medication use also tended to raise the specter of mother-love albeit now in sanitized fashion. Mother's inability to love her troubled son was amended through expert treatment: "Now I can love this child again," claimed one mother (*Time* 1968). This admission of lack of mother-love for a problem boy echoes the association between maternal neglect or rejection and child psychopathology. In another article a (female) columnist quotes a "pretty young mother" as saying, "[With expert intervention] Mark has become the potentially loveable child he always was" (Welton 1964). A mother who loves her son achieves an aesthetic ideal – as long as her mother-love is mediated, sifted and sanitized, through expert intervention.

<sup>25</sup> Of course the lifestyle outlined by this mother is not so "average" at all; in fact it is privileged. This points again to the nature of readership in these magazines and reminds us not to generalize from this commentary to the experiences of women of other social classes and ethnicities.

It is important to say that articles which heralded the discovery of drug treatment and organic theories for emotionally disturbed children were also punctuated by the real anxiety and distress mothers felt over their boys' behaviors. While much of the discussion above tends to incorporate a critique of scientific attitudes toward mothers during this period, it is by no means meant to minimize the emotions of families dealing with problems associated with emotional disturbance and other associated disorders. Many women at a loss over their sons' behaviors did probably see remarkable improvements not only in their sons' behaviors but also in their own mental and emotional well-being through the "magic of child psychiatry" (Moak 1959, 35). The decision to treat children for emotional disturbance was clearly not made lightly by mothers: "The hardest part . . . was recognizing that our boy did have a problem and needed more help than we, his parents, were able to give, and then going out and getting it for him" (Dunn 1962, 46). In face of writers urging that emotional disturbance "needs to be treated quickly" (Tolchin 1959, 70) mothers who made such decisions no doubt felt their sons' behaviors were intolerable and that they were doing the right thing in medicating them.

Given the historical stream of events that links mothers, sons, and childhood psychopathology in the period preceding the development of Ritalin, magazine writers' apparent reluctance to protest drug treatment for boys' behaviors is not so surprising. A problem boy struck his mother at the heart of her insecurity about the quality and the repercussions of her mother-love. No matter what the ultimate cause of a boy's behavior, mothers who questioned their ability to love their boys properly were programmed to worry that their inadequacies could do further harm to their sons. Consulting the experts and accepting medical intervention had the paradoxical effect of absolving mothers of some blame and guilt, and displacing their authority with social-scientific ideals.

### **Lingering Residue: Mothers, ADHD, and Ritalin Today**

The philosopher of science Elizabeth Lloyd uses the phrase "pre-theoretical assumptions" to describe "the social assumptions and prior commitments of scientists [that] play a major role in the practice of science itself" (Lloyd 1993, 150). Multiple social assumptions and prior commitments played leading roles in the creation of ADHD categories and Ritalin: the construction of certain kinds of "problem behavior" in boys as a medical problem; the belief that science had superior methods for raising psychologically healthy boys; and an association between problems in boys and problems in mothers. These social assumptions do not just shape the way science is done. They also shape the way scientific knowledge is received and incorporated back into society, thereby creating a complex interrelationship between social assumptions and scientific knowledge. This dynamic can lay the groundwork for the legitimizing of social and cultural prejudices through scientific theory and practices.

The social-scientific assumption that a boy's ADHD-type behaviors are associated with the neurotic behavior of his mother is disturbing enough that we may wish to dismiss it as an idiosyncrasy of mid-century thinking. I believe we would be wrong to do so. Mothering ideals continue to powerfully shape American women's experiences of mothering.<sup>26</sup> In addition, rising rates of ADHD, depression, and violence among young American boys have prompted psychologists to declare a national crisis: "Boys today are in serious trouble, including many who seem 'normal' and to be doing just fine" (Pollack 1998, xix). A recent explosion of popular books, television shows and conferences related to the psychological problems of young boys helps fuel this crisis.<sup>27</sup> Many of these popular books on boys' problem behaviors contain direct prescriptives for better mothering of sons. In particular, ADHD symptoms are now seen as evidence of boys' psychological and emotional distress, possibly over a rejecting mother. One prominent psychologist has argued that ADHD-type behaviors in boys are a sign of boys' distress at being forced by mother and a cultural "boy-code" to separate emotionally and physically from mother at an early age (*ibid.*). Other psychologists suggest that mothers' emotional separation from, or rejection of, sons is a result of mothers' confusion over how to raise "happy, successful men" (Kindlon and Thompson 1999). These publications and the enormous public interest in them (several of these books spent many weeks on the *New York Times* bestseller list) indicate the extent to which the linkages between problem boys and problematic mothers linger today. Even as authors attempt to persuade mothers that their sons' problems are not medical, they enforce the idea that mothers are part of boys' problems and that professional intervention into the mother-son relationship is required for boys' future wellbeing. I would suggest that under these conditions contemporary American mothers are likely to view medical intervention into their sons' problem behaviors as one of an array of available professional services of which they will avail themselves in the process of trying to be good mothers to their sons.

Modern American mothers are historically programmed to worry about their sons' behaviors and to blame themselves when those behaviors do not meet normative standards of achievement and success.<sup>28</sup> Mothers' perceptions of their sons' behaviors are likely to be filtered through their desire to be good mothers, the pressure to produce good sons, the need to consult expert opinion, pervasive media coverage of

<sup>26</sup> The "good mother" ideology is often mentioned in feminist treatments of mothering, and there is substantial agreement as to the substance of the good mother aesthetic. See, for example, Thurer 1994; O'Reilly 2001; and Glenn et al. 1994.

<sup>27</sup> For a sampling of books, see Pollack 1998; Kindon Thompson 1999; Garbarino 2000; Newberger 1999; and Gurian 1998.

<sup>28</sup> Susan Bordo (1998) has argued that women are especially vulnerable to technologies that promise to enhance women's appearance, behavior, and performance in line with cultural and social norms. Bordo has written about the use of cosmetic surgery to bring women's bodies into line with cultural ideals; others (*i.e.*, Kramer 1993) have suggested that Prozac can be used to improve women's behaviors in line with social ideals. Part of Ritalin's appeal is that it can "improve" mothers and sons.

ADHD and Ritalin, and blatant advertising appeals to improve their relationships with their sons through the use of stimulant medication. Mothers are not to blame for rising diagnoses of ADHD; however it is possible that mothers' tolerance for their sons' problem behaviors is reduced because of the factors outlined above, leaving them vulnerable to medical intervention. It is important to incorporate an awareness of mothers' vulnerability to ADHD diagnosis and Ritalin treatment into public and clinical spaces. While this vulnerability is still veiled, or unspoken for fear of blaming mothers, mothers are less able to resist medical intervention for their sons' behaviors.

## **Conclusions**

I hope this elucidation of the historical concerns with the behaviors of mothers and sons in the particular context of ADHD and Ritalin brings an embodied perspective to the predicament of mothers of boys with ADHD. When we embody the overly generous spaces of this diagnostic category with historical actors we begin to glimpse the scaffolding of a gendered social order that the diagnosis serves and upholds. Mothers' talk about the effects of their boys' medication surfaces a deep identification with the cultural script that connects behavior problems in boys to problematic mothers. As a diagnostic category, ADHD serves and maintains this anxiety about boys and their mothers.

A question remains related to historical memory: Why is the history of ADHD and Ritalin largely unrecognized, indeed, forgotten, in the heat of contemporary debates? My own thinking about this puzzle begins with Foucault (1965) and his ideas about the processes by which social behavioral norms become codified in psychiatric categories. Foucault argued that these categories appear to be divested of social "subjective" meaning even while psychiatric practices continually reproduce normative social standards and (re)inscribe them on the social body. Psychiatric categories thereby reify social norms as objective truths by removing them from the social body and from the historical space the body inhabits. Scientific understanding of ADHD in this decade has actively promoted a disembodied reality to ADHD through a brain-based discourse of neurotransmitters, receptor sites, and chemical processes. The brain, divorced from the body, is divested of time and history in which the body moves, and so ADHD, which resides in the brain, would also appear to have no history.

Unfortunately this Foucauldian answer to the puzzle of memory ignores the fact that a substantial portion of the social body strongly contests scientific explanations of ADHD. These contestations would appear to re-embodiment ADHD, casting it as a social phenomenon invested with a litany of social anxieties and elevated to cultural icon status. However as cultural icon the ADHD phenomenon is sufficiently inflated to have become a site crowded with noisy ideological debates that often lose sight of grounded realities. As it becomes more and more difficult to look at on-the-ground

experiences with ADHD and Ritalin, it also, paradoxically, becomes more difficult to understand ADHD and Ritalin as embodied phenomena.

And so I would venture the hypothesis that our historical memories fail us because from both a sociological and a scientific perspective, we do not tend to treat ADHD and Ritalin as phenomena grounded in time, space and people's lives. We in a sense reify the icon through research and analyses that produce a-historical medical narratives and disembodied social critiques. Both types of narratives veil the medical profession's long (and potentially embarrassing) romance with ADHD diagnosis and Ritalin as tools to manage a professional concern: the relationship between mothers and sons.

A final note: Throughout this discussion I have attempted to treat ADHD as simultaneously a real and a constructed diagnosis. While the legitimacy of the diagnosis is obviously at stake in an analysis of its social functions and historical roots, I am not here attempting to say that ADHD as a neurological disorder does not exist. Indeed, it is impossible to say definitively whether ADHD does or does not exist. It is perhaps more useful to note that the diagnostic category has expanded significantly over the past century, incorporating ever milder and more ambiguous behaviors. The state of the diagnosis today is such that many young American boys fit diagnostic criteria, and that if a diagnosis of ADHD is desired, it can very likely be obtained. The important question, it seems to me, is not about the reality of ADHD; rather it has to do with the *desire* for ADHD diagnosis.

Ritalin is an effective, quick and safe drug for improving focus and attention.<sup>29</sup> A major NIMH study has recently found that Ritalin is the most effective treatment for ADHD (MTA Group 1999). However successful Ritalin treatment provides no proof that a diagnosis of ADHD is "real." In fact, Ritalin has been found to improve attention and focus in "normal" as well as ADHD boys (Rapoport et al. 1978).<sup>30</sup> Therefore Ritalin is a key factor in the desire for ADHD diagnosis, as long as ADHD diagnosis is required for a Ritalin prescription.

As with many psychiatric disorders, the evaluation of children's behavior as symptomatic of pathology is subjective, and the strident and narrow attitude of some biological accounts of ADHD reflect the effort to lessen the subjective nature of this ambiguous diagnosis. No matter what future evidence for the biology or genetics of ADHD emerges, it seems important to remember that children do not ask for Ritalin; adults do. Therefore adults and the adult-world are necessarily and legitimately included in the scope of diagnosis and treatment. The child's developing

<sup>29</sup> As an amphetamine, Ritalin's effects are felt within 30 minutes, and last only about 3–4 hours. Children must take several doses a day to experience lasting improvements in behaviors. Side effects to Ritalin are usually mild and include loss of appetite, sleeplessness, and tics. These side effects can often be ameliorated by adjusting the daily dosage schedule. At present, there is very little research support for media reports about long-term side effects to Ritalin use.

<sup>30</sup> Ritalin's widespread effectiveness in improving attention and concentration is (anecdotally) confirmed by reports of its use among American university students as a "study-aid."

brain is embedded in the collective mind in any case, in addition to having its own inherent strengths and weaknesses. The real complexities surrounding the ADHD-Ritalin phenomenon are surely most productively elaborated from this embedded starting point.

## Acknowledgments

I would like to thank Anne Harrington, Hans Pols, and two anonymous reviewers for their comments on earlier versions of this paper.

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## **Letters**

- March 2nd, 1998. Letter from Amishi Shah, Novartis Medical Information Services