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**Media Representation of Mental Disorders:
A Study of ADD and ADHD Coverage in Magazines from 1985 to 2008**

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Abstract

This research examines the evolution of media coverage of mental disorders, using magazine articles on ADD/ADHD as a lens through which to examine how media can stigmatize and normalize disorders. The study uses both content analysis and qualitative thematic analysis to probe changes in scientific terminology and tone over a 23-year period. Findings show ADD/ADHD is generally normalized, but stigmas such as medicalization of the disorder and an emphasis on danger persist.

Introduction

In his article about the evolution of Attention Deficit Disorder, Lakoff (2000) traces the changes in diagnosis and treatment of ADD, particularly noting its surge in public awareness during the 1990s. Lakoff reports ADD is the most commonly diagnosed mental disorder among school children and that in 1996, “1.5 million children—two and a-half more times than six years earlier—were taking Ritalin” (151). Furthermore, the diagnosis of the disorder was so widely accepted that courts started ruling that school districts must give special education to ADD students (152). In the 1990s ADD became not just a mental disorder but part of a cultural phenomenon, which largely played out in media, and specifically medical science news. The portrayal of mental disorders in media has largely fallen to psychologists and sociologists for study. While journalists report on mental health issues, journalism scholars have yet to effectively study mental disorders in media. Although

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other scholars have examined specific mental disorders and their representations in media, no one has studied ADD and ADHD's portrayal in the media. Thus, this study is an examination of how ADD and ADHD (Attention Deficit Hyperactivity Disorder) were represented in magazines from the United States from 1985 to 2008. The research illustrates how magazines promote certain social values by normalizing some aspects of the disorder while stigmatizing others.

Literature Review

This literature review examines how the public primarily receives their mental health information, how much the public knows about mental health, and how medical science news traditionally represents mental disorders.

How the Public Receives Mental Disorder Information

Media play a significant role in disseminating mental health information. In survey results provided by 1,326 people in 1989, Borinstein (1992) found most Americans might be receiving their information about mental disorders from mass media. He reports that 87% of people said they had seen something on mental disorders on television in the past couple of years. Similarly, 74% said they had seen something in magazines. In contrast to this, approximately three in ten people had received information from mental health professional or physician. With many Americans not receiving information from psychologists or psychiatrists, media might play a heightened and emphasized role in distributing this scientific information. While Jorm (2000) acknowledges that psychologists still know little about how people gain information about mental disorders, he states that about a third of the information comes from personal experience with someone who has a mental disorder and also friends and family of those with mental disorders. Another third of the information comes from media, signifying its prominent role in supplying the public with knowledge about mental disorders.

Public Interest in and Lack of Knowledge About Mental Disorders

The public at large has expressed both an interest in learning about mental disorders and a current lack of knowledge about them. Jorm (2000) defines mental health literacy as:

- (a) the ability to recognize specific disorders or different types of psychological distress; (b) knowledge and beliefs about risk factors and causes; (c) knowledge and beliefs about self-help interventions; (d) knowledge and beliefs about professional help available; (e) attitudes which facilitate and appropriate help-seeking; and (f) knowledge of how to seek mental health information (396).

While this presents a rigorous set of principles, it outlines the basics about mental disorders that the public should know. It is clear Jorm deems the public not “literate” in mental health issues, and he specifically notes the public’s inability to distinguish between diseases and understand psychiatric terms. Similarly, Wahl (1995) highlights the misunderstanding surrounding schizophrenia and multiple personality disorder. Many confuse the two terms, often referring to schizophrenia as a disorder that results in two personalities. Diagnostically, schizophrenia refers to the fragmentation of personality whereas multiple personality disorder refers to a person’s ability to have fully formed, distinct personalities (Wahl, 1995). This example illustrates the persistent misinformation that exists within the public. In fact, public information about mental health is not very structured or reliable (Nunnally, 1961). In a series of studies, Nunnally concluded, “people are unsure of the correctness of their information and will change their opinions readily” (p. 22). He finds that the public is just as likely to agree with inconsistent opinions as with consistent opinions. With the public’s attitude being mutable, it causes a lack of trust in mediated mental health information. Although Nunnally’s study is from 1961, it acknowledges trends found more recently with regard to mental health knowledge. In fact, Borinstein (1992) finds that 61% of people said that they found the articles they had read “somewhat believable” (p. 189). Perhaps this explains why he cites that most Americans do not feel that they are well informed about mental illnesses. One in four respondents to Borinstein’s survey said that they did not feel well informed and six in ten said that they should be better informed.

Other research also illustrates public ignorance of the medical science of mental health. For example, Salter and Byrne (2000) find the public attaches different prejudices to different mental illnesses, such as depression becoming a more “normalized” disorder whereas more “severe” mental disorders are stigmatized and characterized as violent.

While the public exhibits a lack of knowledge about mental health issues, it also exhibits a desire to know more about mental disorders (Nunnally, 1961; Borinstein, 1992). Nunnally posits, “mental-health topics have moderately high interest value” (p. 112). He notes that mental health topics appear as “popular” as physical health topics. However, he also notes that the public is more interested in some mental health topics than others, namely what he terms the “personal aspects of mental health: What causes it? How can you recognize it? What can be done to handle the immediate problem?” (p. 113). While the public may lack knowledge about certain aspects of mental disorders, it clearly wants to learn more about how mental disorders might affect them. Because media are a vital source of mental health information, it falls to science and health journalists to provide this information.

The Framing of Mental Disorders

A number of studies about media coverage of mental health come to a similar conclusion—media depict mental disorders in a negative manner (Allen & Nairn, 1997; Jorm, 2000; Metzl & Angel, 2004; Sieff, 2003; Wahl, 1995; Wahl, 2000). These negative

images arise for several reasons and revolve mainly around associating people who suffer from mental diseases with violence. The two most prevalent depictions of mental disorders are dangerousness and childlike dependence.

Before delving into the specifics of the prevalent depictions, it is important to introduce frame analysis because many researchers reference it as they describe the depictions. Scholars such as Goffman (1974), Gitlin (1980), and Entman (1993) have offered various definitions of frame analysis. Reese (2001) examines many of the common definitions and offers the following understanding: “Frames are organizing principles that are socially shared and persistent over time, that work over time, that work symbolically to meaningfully structure the social world” (p. 11). Reese’s definition is powerful because it indicates the shared nature of media frames; they work because audience members understand them and their social importance. As for why researchers look to content for most frame analyses, Entman (1993) writes, “the concept of framing consistently offers a way to describe the power of a communicating text” (p. 51).

Media frames can influence audience members through “framing effects” (Iyengar, 1991), which refers to changes in the decisions people make. Framing effects are not limited to the naïve and ignorant, according to Iyengar, but can have an influence on engaged audience members as well. “Nor can it be argued that framing effects are limited to judgments about trivial matters, for, as the nonlaboratory studies demonstrate, framing effects also apply to judgments of considerable personal relevance” (Iyengar, 1991, p. 13). The study of media frames of health issues, with an eye toward potential framing effects on readers’ interpretations of those health issues, is important to understand popular ideas about mental disorders.

The Dangers of the Mentally Ill

The most common views of the mentally ill presented in media are that those with mental disorders pose a danger to others and to themselves, with the most prevalent theme as a danger to others (Allen & Nairn, 1997; Sieff, 2003; Wahl, 1995). Wahl notes that those deemed mentally ill are most commonly linked in mass media to violence and criminal activities. He writes that although some people with mental illness are dangerous, the majority is not, and strangers are seldom the victims of violence, as is often depicted by media (Wahl, 1995). Therefore, the perceived violence of those with mental disorders is a fallacy. In her work on identifying media frames for mental illness, Sieff (2003) notes the prevalence of linking the mentally ill to violent or criminal activity, citing numerous examples in both print and television across countries. In examining how consumer magazines present OCD, Wahl concludes that while many articles about OCD are accurate, a majority of articles links obsessive behavior to stalking celebrities. He notes that those who don’t know the difference between obsession and OCD would easily attribute the negative and dangerous behaviors to OCD (Wahl, 2000). While these articles examine the

dangerousness attributed to those suffering from mental disorders, they do not offer an explanation as to why the behaviors occur.

One possible reason for the dangerous depictions could be a desire for sensationalism. By examining a series of articles designed for educational purposes, Allen and Nairn (1997) set out to reveal that sensationalism alone does not contribute to dangerous stereotypes about the mentally ill. The researchers' work illustrates that different types of dangerousness are attributed to those with mental disorders. Furthermore, the articles are not sensationalized, lending the accounts more credibility. Perhaps the most significant aspect of Allen and Nairn's (1997) article is their supposition of why so much violence is connected to those who are mentally ill. They posit that media judge "newsworthiness" by deviance and therefore, "if those with mental illness are only newsworthy when they generate conflict or constitute a threat to the community, then these aspects will be emphasized in organizing stories and headlining articles" (p. 380). The emphasis on the dangers that those with mental disorders pose is heightened because of how media function and judge stories as newsworthy.

The other dominant frame of the mentally ill portrays them in a childlike state, unable to care for themselves (Sieff, 2003; Wahl, 1995). Sieff notes that in several instances those who suffer from mental illness are depicted as humorous characters, meant to elicit laughter. Also, they are portrayed as happy, cheerful people and the seriousness of their illness is not addressed (2003). Similarly, Wahl notes how media tend to simplify those who suffer from mental illness. He notes that jokes about mental illness often attempt to "convey this same idea of mental illness as a humorous habit" (p. 30). However, the attempt is damaging. The jokes often are derogatory, making those who suffer from mental illness self-conscious. Both the jokes and the rosy portrait painted about mentally ill individuals contribute as much to perpetuating stigmas as the link between violence and mental illness.

Scholarly Focus on Individual Disorders

While there is a large body of research examining the broad topic of mental disorders in media, three studies have looked at individual mental disorders and their media portrayal. Wahl (2000) focuses on OCD's portrayal in magazines, finding that those that focus specifically on OCD are fairly accurate according to diagnostic information. However, there are very few articles on OCD, which diminishes the public's opportunity to learn about the disorder. In comparison, schizophrenia, which is a less prevalent disorder than OCD, was covered more than OCD. This comparison draws attention to the tendency for media to be biased toward more "severe" and perhaps sensational mental disorders. Wahl also notes the decrease in the use of non-medical sources, such as relatives or people with a disorder. Therefore, the emphasis is on medical symptoms and procedures, which is valuable information, but it leaves out environmental or social factors. This article illustrates not only how a single disease's presentation in media can be analyzed, but also the implications of how media portrayal can influence public opinion.

Metzl and Angel (2004) examine the depiction of SSRI (Selective Serotonin Reuptake Inhibitor) antidepressants in popular articles from newspapers and magazines and the researchers utilized the popular articles to reflect changes in public opinion about “normal” womanhood. Metzl and Angel (2004) report gendered descriptions of women’s depression as emotional and a decrease in the usage of DSM-related terms (*The Diagnostic and Statistical Manual of Mental Disorders*, which clearly defines symptoms for psychologists). Thus, with coverage of SSRI antidepressants, the media enhance stereotypes of women as very emotional. Also, Metzl and Angel note that SSRI coverage resulted in the “medicalization” of womanhood, in which medical terminology is attached to normal behavior. This study illustrates how media and popular opinion might be inextricably linked and perhaps, the process through which mental disorders are stigmatized or normalized.

In another example of a study of the presentation of a specific disorder, Linsky (1970) performed a study of alcoholism in periodicals from 1900 to 1966 to see whether coverage reflected larger social beliefs. His content analysis of articles on alcoholism looks at how this media depicted the causes of alcoholism. He notes a shift from external causes (environmental) to internal causes (weak will) to a more modern combination of the two. He also notes a shift in whether the articles used alcoholism to depict social criticism to looking at the biological and psychological causes of alcoholism. Not only does this article illustrate a methodology for study of the evolution of a specific mental disorder over time, it also illustrates how magazines can reflect changes in coverage of specific disorders.

Devices to Frame Mental Illness

Most of the analyses of mental illness in media focus on content analysis of articles or television programs, yet some focus on how media specifically shape the discourse about mental health issues. Several studies note that media misuse psychiatric terms (Metzl & Angel, 2004; Nunnally, 1961; Wahl, 1995). As previously noted, during the SSRI coverage, DSM-terminology was applied less to women than men, and men’s depression was seen as more “medical” (Metzl & Angel, 2004). It might be followed that such portrayal has led to stereotypes about acceptable behavior for women. Wahl (1995) notes several examples in which terms are misused, leading to public confusion specifically between schizophrenia and multiple personality disorder and also between psychotic and psychopathic. Another set of terms often confused are “mentally retarded” and “mentally ill” (Wahl, 1995). The confusion of these terms often portrays those with mental illness as slow, when they could be quite intelligent. The misuse of psychiatric terminology in media can directly contribute to stigmatizing labels within the general public, which leads to stereotyping.

Wahl notes another problem in psychiatric labels, namely that they are dehumanizing to individuals suffering from mental illness. To call someone a “schizophrenic” is to define that person by his or her disease. This can also make the disorder seem permanent, rather than a temporary condition. A problem that potentially poses a greater threat than psychiatric terms is media usage of slang terms, which are often pejorative

and exploitative. Slang terminology is just as likely to contribute to stereotypes as the misapplication of psychiatric terms. The terminology for describing mental disorders is inadequate and creates a form of “other” for the mentally ill. They are not like normal people, but something else. Media depictions portray them as looking different, having no family connections, and no occupation (Wahl, 1995). This further draws the line between them and us, creating an “other” type of frame.

A Call for Change

Psychology scholars have published the majority of the research about mental disorders and media, and much of this research claims media coverage to be negative and perpetuating of disparaging stereotypes about those with mental illness. This research often calls for a change from both health and science journalists and psychology professionals. Salter and Byrne (2000) call for psychologists to be aware of media practices and understand that journalists wish to capture their reader’s attention and not necessarily educate. While this point is debatable, it is certainly advantageous for psychologists to better understand how media function.

However, psychologists alone cannot correct the problem of misrepresentation and stigmatization of mental illnesses in media. Allen and Nairn (1997), who pointed out media’s attention to deviance, state that journalists should also be responsible for the depiction of mental disorders. Journalists should be aware that the dangerous behavior that they are portraying is atypical, they should provide context for the behavior, and they should note the many successful individuals with mental illness (Allen & Nairn, 1997).

Because the public generally relies on media to provide mental health information, the negative slant of media toward those who suffer from mental illness is important. How a medium chooses to frame a mental disorder can either lead to normalizing or stigmatizing the disease. Several psychologists claim they still see their patients stigmatized and call for a change in how media cover mental health. This study of an ADD and ADHD in popular periodicals will help to identify how magazines normalize or stigmatize diseases as well as provide a historical context for how media coverage of mental disorders has changed over time.

Research Questions

This research executes a study of attention deficit disorder and attention deficit hyperactivity disorder because they have typically been described as overdiagnosed or misdiagnosed. This study examines these disorders to look at how magazines reflect society’s values and particularly, how magazines normalize or stigmatize a disease. The research questions are:

RQ1: Do the types of articles featuring the disorders change over time?

In analyzing the types of articles that feature these disorders, we hope to determine the context in which the disorders are portrayed. The differences in the types of articles and their context could either work to normalize or stigmatize these disorders.

RQ2: What is the tone of the articles featuring these disorders? And how does the tone of these articles change over time?

An analysis of the tone of the articles is necessary to determine how the magazines discuss these disorders. Are they conveyed in a warm-hearted manner or is a tone of fear employed? Different tones convey different messages about the disorders and work towards either normalizing or stigmatizing the disorders. Researchers have noted that danger terms and violence terms commonly surround descriptions of mental disorders. Both of these types of words contribute to overall tone and subsequent stigmatization of disorders.

RQ3: What type of terminology do the articles use to describe the disorders? And how does the terminology surrounding the disorders change over time?

This question attempts to determine if there is a change in describing the mental disorders' diagnostic terminology from the *Diagnostic and Statistical Manual of Mental Disorders IV-TR*, which psychologists use to diagnose a person with the disorder. Also, this question attempts to determine if there is a change in magazines' usage of common language, which diminishes jargon. However, if magazines commonly use slang or pejorative terms to describe the mental disorders and those suffering from them, then this depiction could lead to the stigmatization of the disorders by society at large.

Overall, these questions attempt to help determine how magazine coverage of ADD and ADHD might have changed over a twenty three-year period and whether these changes could be a reflection of changes in society as well as if the disorders have been normalized or stigmatized over the years.

Method

These questions were explored using a content analysis. Because disorders are not widely explored by all magazines, we employed the same method for choosing articles as previous researchers (Linsky, 1970; Metzl & Angel, 2004; Wahl, 2000). Articles from popular magazines about ADD and ADHD were identified using the *Readers' Guide to Periodical Literature*, employing the key words: "attention deficit disorder," "attention deficit hyperactivity disorder," and "hyperactivity," from January 1985 to October 2008. This period of time was selected because 1985 was the first year in which ADD and ADHD were given their own specific headings in *The Reader's Guide to Periodical Literature*. Both of the keywords "attention deficit disorder" and "attention deficit hyperactivity disorder" were used because they present similar symptoms and it is sometimes difficult to distinguish between the two disorders. Hyperactivity was used as a key term because in a few instances, ADD and

ADHD were grouped under this heading. The acronyms ADD and ADHD were not used as key terms because no articles were listed under these headings. A sample ($N = 43$) of two articles per year were randomly selected from this list of total articles (234) except in the case of years from 1985 to 1988, in which there was just one article per year published.

The articles were checked to make sure that they explicitly mentioned the particular disorder. The articles appeared in a broad range of magazines and sampling several different magazines best captures how a wide variety of people receive information about mental disorders since the magazines have different target audiences. Articles were selected from such diverse magazines as *Newsweek*, *Science News*, *Forbes*, *Better Homes and Gardens*, and *Redbook* (see Appendix B for complete list).

For a content analysis of each magazine article, the articles were read and coded according to specific criteria. For RQ1, articles were examined to determine what type of story they were: human interest, scientific information, or both types within the same article. Human-interest stories are those that follow personality profiles and prominently feature people who suffer from the disorder or those that know someone with the disorder. Scientific information articles seek to impart information to the general public and do not delve into personal narratives. An example of an article having both types of information could be an article with a personal narrative introduction that transitions to scientific information. Also, the articles were examined across the entire twenty-three year time period as well as two halves (1985-1998, 1999-2008) to determine if there was a change in the ratio of the types of articles featuring the three disorders. (Note: The first half of the time period captures 13 years, and the second half captures ten years because coverage was sparse for the first three years.)

For RQ3, coders looked for diagnostic terminology from the DSM-IV TR, common language, and slang terminology (such as “nuts” or “crazy”) that typically surround mental disorders. The coding for all three types of terminology was tallied for each instance of a term within a clause. Also, common metaphors were noted and further examined in a qualitative analysis. Again, a comparative analysis of the articles during two different time periods (1985-1998, 1999-2008) examined whether the amount of each type of terminology changed over time.

Qualitative analysis was used to answer RQ2, whereby coders examined the various articles to determine the tone of the articles and elaborate on quantitative findings (especially the findings surrounding terminology). Coders specifically looked for a fearful tone in the articles (e.g., did the articles convey that people with mental disorders should be feared?) They looked for words that described fear, danger, and violence, which may have contributed to the tone of fear. Words conveying danger and violence have commonly been linked to mental disorders (Allen & Nairn, 1997; Sieff, 2003; Wahl, 1995). The focus on danger terminology could commonly lead to a tone of fear. Also, the dangers described were analyzed to determine if they fit into any of the following categories: danger to self, danger to

others, and danger to the community. The coding was then grouped accordingly. The coding numbers were evaluated and simple percentages calculated for all quantitative research questions. The percentages were from both the entire 23-year time period as well as from the two time periods (1985-1998, 1999-2008) in order to trace any changes that might have occurred.

A two-person intercoder reliability test was conducted on a random sample of 10% of the total sample. Cohen's *kappa* was used to measure agreement for each of four components of the coding. *Kappa* scores ranged from .75 to .93. *Kappa* scores above .75 represent excellent agreement (Olswang, Svensson, Coggins, Beilinson, & Donaldson, 2006).

Results

A total of 43 articles spanning a 23-year period were coded to determine how the portrayal of ADD and ADHD might have changed over time. Such areas as article type, the tone of the article, and terms used to describe the disorder were examined to determine how the disorders were portrayed. The results show that the portrayal of ADD and ADHD did change over time, reflecting shifts in society.

RQ1 asked what types of articles featured ADD and ADHD and whether the type of articles changed over time. Two trends emerged. Table 1 (see Appendix A) illustrates what types of articles were featured in the first 13 years and the latter 10 years. The 1985 to 1998 period featured very few human-interest stories with almost half of the stories consisting of scientific information. In the second time period the distribution of the story types was fairly even. When the two time periods are compared across the entire 23-year span of magazine coverage, a larger pattern emerges. More human-interest stories find their way into magazines with 66.67% of human-interest stories falling within the latter time period (see Charts 1 and 2, Appendix). Scientific information stories and stories with both types of information had a higher prevalence with scientific information representing 61.11% of stories in the first part of the span and stories with both type of information representing 62.5% of stories in the period. Thus, while equality among the types of stories emerges within the shorter periods, over the 20-year span there is a clear shift to more human-interest type stories.

RQ2 addressed what the tone of the articles might be and whether the tone changed over time. The tone of most of the articles was informative and educational, presenting straightforward information. However, some articles also adopted a sympathetic tone, most notably in the human-interest stories. An interesting trend in disorder coverage was illustrated by several articles written by people with the disorder. Four of the total 43 articles coded were written by someone with the disorder. These articles usually used metaphors and gave specific descriptions of the author's own disorder-caused behavior. They were more sympathetic in tone, seemingly inviting the reader to feel empathy. A few anomalies in terms

of tone also existed. A *Forbes* article in 1996 adopted a contemptuous tone toward people with the disorder, labeling them as “victims” (quote marks are theirs) (Machan, 1996). Furthermore, one article in *Science News* in 2002 adopted a cautionary tone, but this was probably due to the connections made between men who commit sex crimes and have ADD or ADHD (Bower, 2002). Overall, the tone of the articles was informative, especially fitting with the early prevalence toward scientific information stories or stories with both types of information.

Whether danger terminology was used to connote violence or fear and therefore create an overall tone of fear was also examined, as well as what type of danger was discussed: danger to self, danger to others, or danger to the community. While these danger terms did not contribute to an overall fearful tone (danger was only a minor element in most articles), danger terms did appear in 18.6% of the total articles with most of the articles promoting a danger to others scenario (75% of the articles with danger terminology). Danger to self was the second most prevalent (37.5%) and there was only one occasion of danger to the community. Furthermore, most of the danger terminology (62.5%) was in the later time period (1999-2008), and 66.67% of the danger-to-self-type scenarios fell in the later time period whereas the danger to others scenarios were split evenly between the two periods (50%). The later time period also holds the only occurrence of the danger to community scenario.

Danger to others was a common theme in many articles as ADD and ADHD behavior was described in terms of acting out, most notably motivated by rage and displaying itself in terms of kicking, hitting, or physically harming others. However, danger to others was also exhibited in the form of inflicting emotional damage on other people. A 1993 *Ladies' Home Journal* article discusses how ADD impacted one marriage—the behavior related to the husband's ADD which led his wife to seek therapy (Stich, 1993). Danger to self is the second most common theme as many articles noted a comorbidity (dual-diagnosis or accompaniment) of ADD and ADHD with drug abuse and depression, which in some cases leads to suicide. In a 1999 *Better Homes and Gardens* article, a mother blames her son's ADD diagnosis and subsequent Ritalin prescription with his later drug habit and death from heroin overdose (Peterson, 1999). The single occurrence of the danger to community scenario is the 2002 *Science News* article linking sex offenders and ADD and ADHD. However, this is probably due to the nature of the crimes rather than the disorders directly.

The metaphors did not really contribute to the overall tone of the article, but there were some noticeable patterns. Most of the scientific information articles do not employ the usage of metaphors, but human-interest articles do. The metaphors follow two distinct patterns, although not in relation to time. One pattern is normalizing the taking of medicine for ADD/ADHD by comparing it to such things as diabetics taking insulin or people with poor sight wearing glasses. The other pattern that emerges is describing people with ADD/ADHD as space cadets or daydreamers. In the 1996 *Redbook* article, the author (Brush, 1996) describes her ADHD symptomatic behavior as “like a bottle of champagne

with the cork popping out and the champagne spilling all over the rug.” A 1997 *Psychology Today* article even goes so far as to describe ADD as the symbol of American life, using the disorder to explain the hectic chaos of the modern world (Hallowell, 1996).

RQ3 addressed what types of terms magazines used to describe the disorders and whether the type of terminology changed over time. The terms used to describe the disorders were examined to determine how the disorder was specifically described. Table 2 (see Appendix A) shows the breakdown of terms within the two time periods. Within both time periods, there is a trend toward using common language, and both time periods feature diagnostic criterion second. Overall, there is a common description of the fuzzy diagnostic terms for ADD and ADHD. Sometimes articles fail to make a distinction between the disorders, although no patterns emerge across the time period. Finally, contrary to the literature, slang and pejorative terms are used the least in articles. It should be noted, however, that when pejorative terms did appear in articles, they were mostly in reference to what “others,” such as society, would say about people with the disorder. Nevertheless, there are a few exceptions, such as when people with the disorder used pejorative terms to describe themselves. In the March 14, 2005 issue of *Newsweek*, a man with disease refers to himself as a “screw up” (Underwood, 2005). In the 1996 *Redbook* article, the title is taken from one of the author’s quotes (who has ADHD), saying, “I always thought I was nuts” (Brush, 1996). One notable exception was an article in *Forbes* in 1996. As noted above, *Forbes* repeatedly refers to those with ADD or ADHD as “victims.” The quotation marks surrounding the word trivialize the experience of many with the disorder.

The broader pattern of terms and total number of terms during the 23-year time period was also examined. Most of the terminology falls within the first time period (1985-1998), and it is more pejorative (See Charts 4, 5, and 6 in Appendix A). The time period from 1985 to 1998 features 82.05% of diagnostic terminology, 87.1% of slang and pejorative language, and 79.95% of common language. Thus, most of the terminology describing the disorders falls within the first half of the period, a finding probably due to the increase in descriptions of Ritalin and its effects in the latter half of the 23-year span. The lack of terminology in the latter time period is due to the fact that most magazines no longer described the disorders, but just referred to them by their proper titles or acronyms—ADD and ADHD.

Interestingly, there is not a trend toward more articles stating that the disorders are overdiagnosed in the latter half of the 23-year span. Rather, this statement is prevalent throughout. Even the 1985 *Psychology Today* article, which is the first article featured in the *Reader’s Guide to Periodical Literature* under the heading of attention deficit disorder, states that there is a trend toward overdiagnosis (Carpenter, 1985). Also, there is not a trend toward more coverage of the link between Ritalin and treatment for ADD/ADHD. Rather, there is a shift in the type of coverage with articles in the latter half of the time period focusing more on new brain scans and studies. Perhaps the most prevalent theme in all of the articles is the presence of the academic setting, as ADD and ADHD are almost never

mentioned without a connection to the classroom. How the disorder affects other aspects of these people's lives receives relatively no coverage. A 2003 article in *Time* is even written by a sophomore high school student with ADHD. *Education Digest* frequently focuses on how to handle ADD and ADHD in the classroom.

Discussion

Magazine coverage of ADD and ADHD changed over time, albeit in several different ways. While in the latter half of the 23-year time period, there was a more even distribution between story types, there were still more human-interest stories than in the earlier time period. This is probably due to people becoming more familiar with the disorders and therefore requiring less scientific information. Instead, magazines seek to give the disorders a more human face rather than presenting people with cold hard facts. Because there is a tendency to feature classroom-type settings in describing this disorder (it is a learning disorder), many of the articles probably shifted to reflect these classrooms as settings and the story takes place as part of the drama of the classroom.

What is even more interesting is that the tone of these articles does not represent a shift over time. They remain above all informative, with the human-interest stories taking on a slightly more sympathetic tone. Both the informative style and the sympathetic style work toward normalizing the disorders by creating a better-informed audience as well as an empathetic one. Furthermore, by using the human-interest stories to primarily evoke empathy, the magazines helped to normalize the disorder by making it seem as though it could happen to anyone, rather than creating a separate "other" entity. One metaphor trend, that comparing Ritalin to insulin, also contributes to normalizing the disorder, at least in the sense of normalizing taking medication. This connection puts ADD and ADHD on par with other general health problems, rather than setting it apart. These findings seem to contradict the literature that most media representations of mental disorders are negative (Allen & Nairn, 1997; Jorm, 2000; Metzl & Angel, 2004; Sieff, 2003; Wahl, 1995; Wahl, 2000). These findings likely differ because this study deals with a specific disorder whereas the literature was generalizing for multiple mental disorders across all forms of media.

However, there still existed a few instances in which the tone reflected a general disdain for those suffering from ADD and ADHD. The 1996 *Forbes* article particularly victimizes those with ADD and ADHD by calling them "victims" and trivializing the disorder. Also, by linking ADD to sexual deviants, the 2002 *Science News* article transfers some of the dangers associated with sexual offenders to those with ADD. Both of these articles contribute to stigmatizing the disorder. Also, the fact that some people with the disorder refer to themselves by pejorative terms, such as "screw up," illustrates that even people with the disorder have picked up on these stigmatizing stereotypes and think of themselves in negative terms. However, these only appeared on a few occasions and in a minority of the coverage.

The terminology of the magazines does not reflect a stigma as pejorative and slang terminology was seldom used to describe ADD and ADHD. This finding is contrary to what has been discussed by the literature (Wahl, 1995). While there was slightly more pejorative terminology in the earlier time period (1985-1998), most of the language referred to what society would say about those who suffer from the disorder rather than the magazine using that terminology. In general, the magazines seemed to attempt to distance themselves from the pejorative terms by refusing to take ownership of them. Therefore, pejorative terminology is used infrequently and does not contribute to stigmatizing the disorder.

However, there was a preponderance of terminology describing danger of the disorder. This is surprising because ADD and ADHD are learning disorders and there is no mention of violence in the diagnostic specifications. Most of the danger terminology centered on danger to self and danger to others. Therefore, ADD and ADHD are not perceived as a specific danger to the community at large, although one article did describe them in that manner. This was probably due to the more severe disorders discussed in that article rather than ADD or ADHD themselves. Rather, ADD and ADHD reflect mostly physical violence. The articles perhaps portray the disorders in this manner because the physical violence is how the magazines choose to express the frustration that often accompanies these particular disorders. However, these findings represent ADD and ADHD as more violent than they actually are, perpetuating the stigma of violence and mental disorders. These findings support previous literature stating that there is a prevailing frame of the dangerousness of mental disorders, especially a danger to others (Allen & Nairn, 1997; Sieff, 2003; Wahl, 1995). Not only does the danger to others terminology disseminate a stigma about ADD and ADHD, but it further adds to the “other” frame surrounding mental disorders by creating the character of the dangerous other. Medical science journalists should be aware of the tendency to overexaggerate that danger.

Overall, ADD and ADHD have become a “normal” part of culture in several ways. These disorders are portrayed sympathetically and taking Ritalin is regarded as a normal activity. However, a few stigmas still exist, including a medicalization of the disorder, the marginalization of people with the disorder, and the danger of having a mental disorder. The medicalization of the disorder could have several meanings (as previously above) and further research would be needed to determine its effect. The marginalization of people with the disorder is worrisome because it silences an important voice that works to humanize the disorder. The stigma of the danger of mental illness probably surrounds these disorders because it is common to emphasize deviance in news stories. Deviance is an attractive part of news, as it adds sensationalism to the article since this disorder is not viewed as “severe” as other disorders such as schizophrenia or manic-depressive disorder.

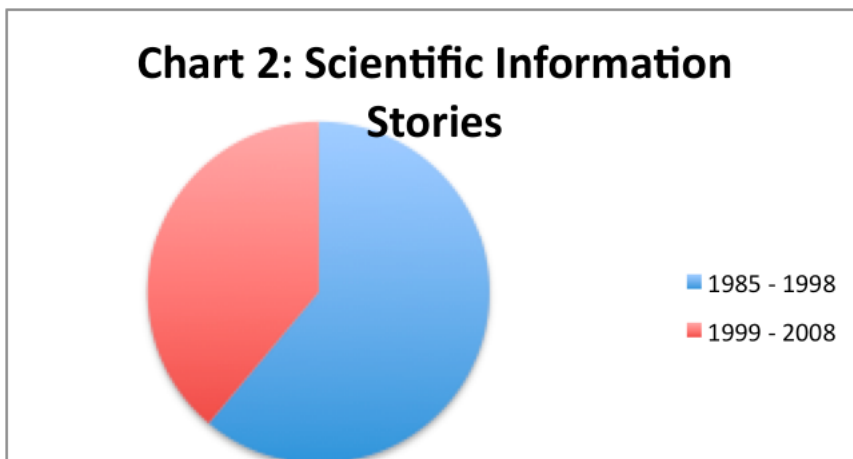
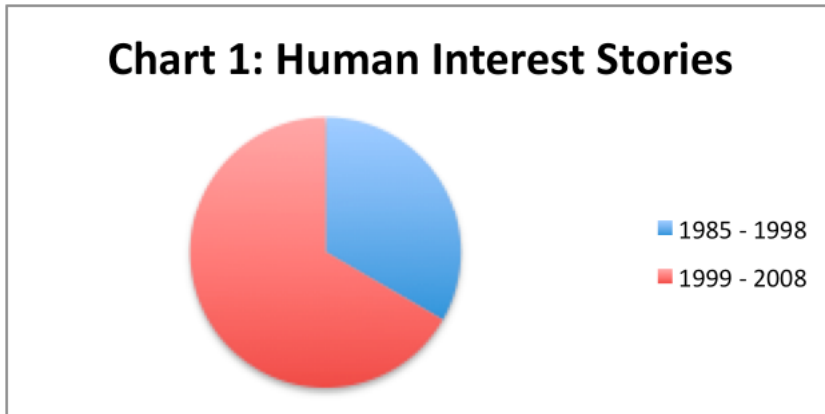
While this study adds to the understanding about how mental disorders, and especially ADD and ADHD are represented in magazines, it is by no means comprehensive. A study with a greater sample size from the time period would offer a more complete picture of how ADD/ADHD representation might have changed over the years. Furthermore,

because the terms ADD and ADHD first appeared in 1985, that is where this study begins. However, a study of coverage prior to this time period might show the greatest changes coinciding with establishing criteria for diagnosing this disorder. It also would be worthwhile to examine some other disorders that have commonly been referred to as overdiagnosed, such as mental depressive disorder or Asperger's syndrome. If there is a common thread of overdiagnosis, then there might also be a common thread of "normalization" of the disorder. Therefore, further research in which magazine coverage of multiple mental disorders was examined would help round out the growing literature on how media portray mental disorders. As the first article to examine ADD and ADHD specifically in media representations, this research fills a gap in the research and illuminates how magazines might have influenced public understanding of the disorder over a 23-year time period.

Appendix A

Table 1				
Percentage of ADD/ADHD Article Types Within Two Time Periods				
Periods	Human Interest	Scientific Information	Both	Total
1985 - 1998	12.5%	45.83%	41.67%	100%
1999 - 2008	31.58%	36.84%	31.58%	100%

Charts 1, 2, and 3:
Percentage of ADD/ADHD Article Types Across the Entire 23-Year Span



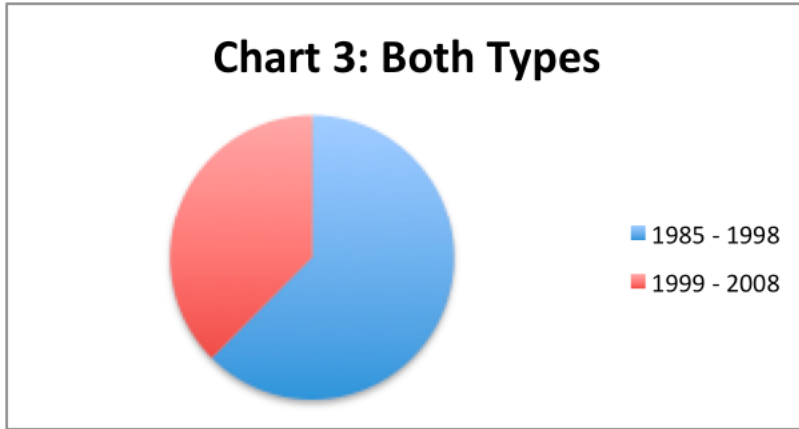


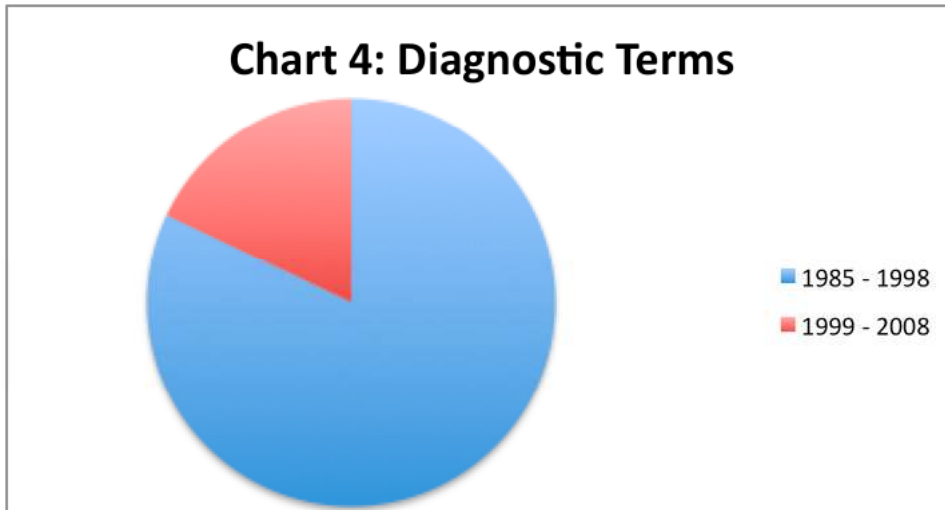
Table 2

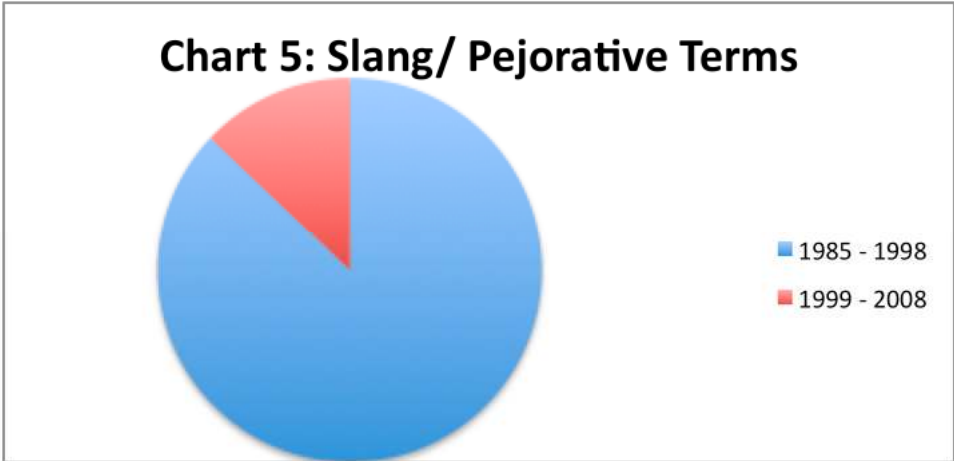
Percentage of Terminology Types Within Two Time Periods

Periods	Diagnostic	Slang/Pejorative	Common Language	Total
1985-1998	32.92%	5.56%	61.52%	100%
1999-2008	30.7%	3.5%	65.79%	100%

Charts 4, 5, and 6:

Percentage of Terminology Types Across the Entire 23-Year Period





Appendix B

Psychology Today 1985
New York Times Magazine 1987
Newsweek, Science News 1988
Parents, Better Homes and Gardens 1989
Science News, Time 1990
McCall's, Mademoiselle 1991
Ladies' Home Journal, Science News 1992
American Health, Ladies' Home Journal 1993
Science News, Time 1994
Education Digest, Essence 1995
Redbook, Forbes 1996
Psychology Today, Prevention 1997
Current Health 2, Science News 1998
Better Homes and Gardens, Science News 1999
U.S. News & World Report, Newsweek 2000
Education Digest, Maclean's 2001
Prevention, Science News 2002
E-The Environmental Magazine, Time 2003
U.S. News & World Report, Psychology Today 2004
Newsweek 2005
Dance Magazine, Science News 2006
Maclean's, People 2007
Maclean's 2008

References

- Allen, R., & Nairn, R. G. (1997). Media depictions of mental illness: An analysis of the use of dangerousness. *Australia and New Zealand Journal of Psychiatry*, 31, 375-381.
- Borinstein, A. B. (1992). Public attitudes toward persons with mental illness. *Health Affairs*, 11(3), 186-196.
- Bower, B. (2002). Men of prey: Scientists peer into the dark world of sex offenders. *Science News*, 162(4), 59-60.
- Brush, S. (1996). I always thought I was nuts. *Redbook*, 186(5), 63-66.
- Carpenter, E. (1985). New measures of attention. *Psychology Today*, 19, 20.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51-68.
- Gitlin, T. (1980). *The whole world is watching*. Berkeley: University of California Press.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge, MA: Harvard University Press.
- Hallowell, E. M. (1997). What I've learned from A.D.D. *Psychology Today*, 30(3), 40-47.
- Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago: University of Chicago Press.
- Jorm, A. F. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry*, 177 (5), 396-401.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H-U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the national comorbidity survey. *Arch Gen Psychiatry*, 51(1), 8-19.
- Lakoff, A. (2000). Adaptive will: The evolution of attention deficit disorder. *Journal of the History of Behavioral Sciences*, 36(2), 149-169.
- Linsky, A. S. (1970-1971). Theories of behavior and the image of the alcoholic in popular magazines 1900-1966. *The Public Opinion Quarterly*, 34(4), 573-581.
- Machan, D. (1996). An agreeable affliction. *Forbes*, 158(4), 148-149.

- Metzl, J. M., & Angel, J. (2004). Assessing the impact of SSRI antidepressants on popular notions of women's depressive illness. *Social Science and Medicine*, 58(3), 577-584.
- Nunnally, J. C. (1961). *Popular conceptions of mental health: their development and change*. New York: Holt, Reinhart and Winston.
- Olswang, L. B., Svensson, L., Coggins, T. E., Beilinson, J. S., & Donaldson, A. L. (2006). Reliability issues and solutions for coding social communication performance in classroom settings. *Journal of Speech, Language, and Hearing Research*, 49(5), 1058-1071.
- Peterson, R. (1999). Is Ritalin Right? *Better Homes and Gardens*, 77(9), 270-272.
- Reese, S. D. (2001). Prologue—Framing public life: A bridging model for media research. In S. D. Reese, A. E. Grant, & O. H. Gandy (Eds.). *Framing public life: Perspectives on media and our understanding of the social world* (pp. 7-32). Mahwah, NJ: Lawrence Erlbaum Associates.
- Salter, M., & Byrne, P. (2000). The stigma of mental illness: How you can use the media to reduce it. *Psychiatric Bulletin*, 24, 281-283.
- Sieff, E. M. (2003). Media frames of mental illness: The potential impact of negative frames. *Journal of Mental Health*, 12(3), 259-269.
- Stich, S. (1993). Why can't your husband sit still? *Ladies' Home Journal*, 110(9), 74-77.
- Underwood, A. (March 14, 2005). The gift of ADHD? Two new books look at the upside of a disorder. *Newsweek*, 48.
- Wahl, O. F. (1995). *Media madness: public images of mental illness*. New Brunswick, NJ: Rutgers University Press.
- Wahl, O. F. (2000). Brief report: Obsessive-compulsive disorder in popular magazines. *Community Mental Health Journal*, 36(3), 307-312.