Fall 2012

Attention Deficit Hyperactivity Disorder and Bronfenbrenner's Ecology of Human Development

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ATTENTION DEFICIT HYPERACTIVITY DISORDER

AND

BRONFENBRENNER'S ECOLOGY OF HUMAN DEVEMOPMENT

by

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(Under the Direction of John Weaver)

ABSTRACT

Attention Deficit Hyperactivity Disorder (ADHD) and the norms associated with this condition in the United States have evolved over time. Culturally established beliefs control how the disorder is defined and treated. This study will explore the idea that ADHD is a socially constructed disorder that impacts multiple levels of society. These levels include the child, the family, the school, the medical community, and the advertising agencies. Social construction theory will be used to establish a framework for this study. Urie Bronfenbrenner's (1977) system theory describing the ecology of human development will also be used to investigate the impact that different levels of society possibly have on the growth and development of ADHD and how this disorder has become institutionalized in our society with suggested norms and routine treatments.

INDEX WORDS: Attention Deficit Hyperactivity Disorder, Cultural Studies, Bronfenbrenner's Ecology of Human Development, Curriculum Studies, Systems, Cultural Construction

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A Dissertation Submitted to the Graduate Faculty of Georgia Southern University in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF EDUCATION

STATESBORO, GEORGIA

2012

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Electronic Version Approved:

December 2012

DEDICATION

I dedicate this dissertation to my husband – Gary – and to my children – Emily and Trey.

ACKNOWLEDGMENTS

The Curriculum Studies Program at Georgia Southern University has given me the opportunity to broaden my thinking and knowledge of the world in which I live. The professors in this program taught me to think critically and read critically so that I could become a better educator.

The person most responsible for helping me complete this program is my husband, Gary. He has been a constant support throughout this degree as well as the other degrees I have achieved. He has helped with household responsibilities and encouraged me to continue even when I felt I could not. I also want to thank my children, Emily and Trey. Without my children, my life experiences would be different, and I would have a very different perspective of the topic I chose.

Also, my parents and my mother-in-law have been a constant support along the way and deserve a huge thank you as well. My parents have always said that I could do anything or be anything I wanted to be. Without that determination instilled in my soul, I probably would have given up on this degree months ago.

I would also like to acknowledge my co-workers. I have several friends that work with me that have been encouraging throughout. There are two whose names need to be mentioned: Rebecca Smith and Kathy Alexander. They are both in the Curriculum Studies program and have been willing sounding boards when I needed to tease out complicated issues. Without the two of them, I would still be in the drafting stages of this dissertation.

Finally, I would like to thank my students. Without them, I would not have developed a passion for this topic as I have.

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CHAPTER ONE

ADHD AS A SOCIAL CONSTRUCT: INTRODUCING THE NOTION OF SOCIALLY INFLUENCED MEDICAL DISORDERS

"Are there any limits to what can be medicalized, or are all human problems and variations in socially desirable characteristics fodder for medical diagnoses and treatments?"

- *Conrad and Baker, 2010*

Attention Deficit Hyperactivity Disorder (ADHD) is part of the common conversation in schools in the United States today. ADHD is believed to be a neurological disorder that is diagnosed by a medical doctor based on common characteristics of inattention, hyperactivity, and disorganization which are exhibited by the patient - whether child or adult (American Psychiatric Association, 2000, p. 85). This disorder has "morphed from a relatively uncommon condition 40 years ago to one whose current prevalence is estimated to be just under 8% of US children 4 – 17 years of age" (Eisenberg, 2007, p. 282). The purpose of this study is not to confirm or deny the existence of ADHD but to explore the possibility that the disorder is socially constructed with beliefs that have been institutionalized into our thinking. Social construction theory will be utilized to investigate the potential connections to the growth of ADHD with

multiple levels of cultural systems, namely the individual, the school, the medical community, and the advertising world.

According to Conrad and Barker (2010),

> Social construction is a conceptual framework that emphasizes the cultural and historical aspects of phenomena widely thought to be exclusively natural. The emphasis is on how meanings of phenomena do not necessarily inhere in the phenomena themselves but develop through interactions in a social context (p. 67).

Understood through the lens of social construction, the phenomenon of ADHD itself does not develop the understanding of its meanings or characteristics solely due to its existence… the meanings are gained as society reacts to it. Over time, society develops norms for the phenomenon and its existence becomes second nature or habitual. When this happens, the phenomenon becomes institutionalized in society's belief systems. Dewey (1938) reminds us that, "In a word, we live from birth to death in a world of persons and things which in large measure is what it is because of what has been done and transmitted from previous human activities" (p. 39). How we believe and make meaning of our surroundings is impacted by our lived experiences. This is true in the school as well. Teachers develop beliefs about the culture of school based on what they see and the experiences they have encountered while teaching.

Kincheloe and McLaren (1994) point out that:

> Cultural studies scholars believe that traditional boundaries and distinctions between areas of knowledge and conventional scientific modes of understanding and analysis are not adequate to interpret the contemporary, postmodern world. Rejecting the notion of a single, authentic version of knowledge or reality as absolute 'truth,' scholars interpret reality as socially constructed (p. 41).

This reinforces the notion that reality is not solid or concrete. Reality is fluid and in a constant state of change based on experiences. Beliefs seem to change as humans interact with their environment and develop meaning regarding their existence according to these experiences. This reminds me of the shoreline. Strong storms and the ebb and flow of the daily tides shape the shoreline. Sand is shifted with the current of the water, and the stronger the current is the more sand is moved/removed from the beaches. No matter how hard humans try to interfere with the process of change, nature prevails. Nature reminds us that we exist in a constant state of change. I believe our existence and our belief systems are also in a constant state of change, like nature. One minute all is well, and the next something catastrophic could happen to totally rock our world. Our lives seem to be controlled by cultural systems that influence each other.

Urie Bronfenbrenner (1977) uses systems to describe his theory of the ecological model of human development, and his approach will be used to explore the idea of social construction and ADHD more closely. This theory will provide a means to delve into the notion that ADHD is socially constructed by comparing the way that human development is impacted by the environment to the way that a disorder "grows" based on a belief system constructed in society. According to Bronfenbrenner (1977),

> The ecology of human development is the scientific study of the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing immediate environments in which it lives, as this process is affected by relations obtaining within and between these immediate settings, as well as the larger societal contexts, both formal and informal, in which the settings are embedded (p. 514).

Bronfenbrenner describes the influence that he believes the environment has on developing human beings. His work details the environmental influences in terms of systems that interact.

Bronfenbrenner (1977) has given names to each of the interrelated systems that will be used to examine and enhance the complicated study of ADHD as a social construct.

Bronfenbrenner's (1977) systems seemed to mimic the impact that a small pebble has when it is tossed into a body of water as well as the impact that the waves have on the beach. The small pebble, when tossed in the water, creates ripples that flow away from the point of impact. As the ripples move across the surface of the water, the objects that the ripples come in contact with are moved as well. The small pebble did not have to touch the other object to make it move – it could do so from a distance through the ripples. A child's ADHD diagnosis works much the same way in the family with new responsibilities and actions needed. The diagnosis may cause new questions to surface related to the responsibility of the family. The parent(s) might ask: Should I take my child to the doctor? Is his condition really as bad as the school insists that it is? What can I do to help my child?

Once the parent(s) decides to take the child to the doctor, the "waves" of knowledge about the disorder start rolling in like they do on the seashore. They can be constant and pounding…unlike the ripples from the tiny pebble, the waves are going to be much more powerful and influential. They may continue to "pound the shoreline" and seem as if they are coming from all directions. The "waves" within the system of ADHD (the influence of the doctors and drug commercials) may seem very demanding and unforgiving at times for the family.

Even though Bronfenbrenner's (1977) model/systems describe human development, his ideas are relevant when examining the growth of a disorder, such as ADHD, that is socially influenced. The same types of environmental factors that influence human development also impact socially constructed disorders. Children, as they develop, are influenced by their families,

their peers in the community and at school, and the multitude of technological apparatuses (i.e., television, internet, computers, cell phones, etc) in their lives. The norms associated with culturally constructed disorders can be impacted by similar things. One can learn about the attributes of a disorder such as ADHD from listening to teachers and other parents, from information attained from television commercials, internet searches, and advice from medical professionals. The systems Bronfenbrenner (1977) uses will be described in more detail in the remaining chapters and will be utilized to help explore the view that ADHD is a social construct with influences from the school, medical community, and media.

AUTOBIOGRAPHICAL ROOTS OF THIS STUDY

The catalyst of this study evolved from my early experiences as a new teacher and a young parent. My early experiences as a new teacher and a young parent illustrate how ADHD is a social construct fabricated from institutionalized belief systems that influence the dynamics of how we interact as a society with this disorder. My experience began nearly twenty years ago teaching in a middle school in the Southeastern region of the United States. As each year passed, it seemed as if more and more students were diagnosed with ADHD. I also raised a daughter who was diagnosed with Attention Deficit Disorder (ADD) when she was in the second grade. Her behavioral characteristics did not include hyperactivity which is the "H" in ADHD. She only had trouble maintaining attention to her tasks at school. Her teachers described moments when she would "drift off". These episodes were compared to petit mal seizures by the adults observing her.

In the early 1990's, I entered my first classroom as a brand new teacher with both fear and enthusiasm. I realized very quickly that things were different from the classroom that I had entered as a student of public schools only a few short years prior to this. Upon reentering the

school system as a teacher, problems seemed more prevalent and students appeared to have a difficult time staying on task. This could be attributed to a change in focus in schools from instead of teaching children to think and synthesize information to teaching them to be good multiple choice test takers. Today's schools are faced with increased accountability from the state and county level with the center of attention placed on passing state mandated tests. In my experience as a classroom teacher, a child's inattention that interferes with his ability to learn causes the school to look for possible reasons why s/he is having difficulty because the behaviors tend to disrupt the classroom's equilibrium. When the classroom is in a state of imbalance due to the behaviors exhibited by the students, it is normally easier for the teacher to look for blame in the students than in the structure of the lesson or the routines in the class. Dewey (1938) points out that

> If the pupil left it instead of taking it, if he engaged in physical truancy, or in the mental truancy of mind-wandering and finally built upon an emotional revulsion against the subject, he was held to be at fault. No question was raised as to whether the trouble might not lie in the subject – matter or in the way in which it was offered (p. 46).

I am not attempting to place blame on educators and dismiss the actions of the children, but a reflection of teaching practices may prove beneficial when exploring possible reasons for inattention.

I sympathize with the teachers who are affected by the increase in ADHD and the increase in the seeming necessity to medicate ADHD, but human nature makes it simpler to look for blame in others rather than looking within. Dewey (1938) reminds us that

> The principle of interaction makes it clear that failure of adaptation of material to needs and capacities of individuals may cause an experience to be non-educative quite as much as failure of an individual to adapt himself to the material" (pp. 46-47).

As a result, some children experience a lack of success in the traditional classroom. When educators and parents start looking for answers some children are unnecessarily labeled ADHD because of the characteristic symptoms exhibited. The next logical step after the ADHD diagnosis seemed to be the administration of medication so that the child could exist in the current structure of the classroom. Some important questions to ask are: Is the medication given to benefit the child or the teacher? Whose best interest is at stake?

As a novice teacher, I was able to distance myself from the growing problem of medicating students because ADHD did not yet affect me personally as a parent. I did not worry about the implications of medicating children on a daily basis so that they could exist in school. At the same time I was a beginning teacher, I became a new parent. Since my daughter was an only child and there were no other small children in my life, I thought she was developing normally. I never dreamed that when my child entered school I would also be faced with the difficult decision of whether or not to medicate her due to attention problems. As a teacher, I tolerated the medication for my students. The issue was not personal for me because the children taking the medication were not my biological children. However, it would not be long before the question of medication came to my home. I had a difficult time accepting this new information about my daughter.

All of this did not occur in my daughter's first year of school, but by the end of her second grade year, her teachers were strongly suggesting that we take our child to a medical doctor for further evaluation. We even made the decision to retain her in second grade. Oddly

enough, she was not failing academically or getting up out of her seat. I was not willing, at this time, to try medication for her. By now, I had been teaching for seven years and observing the side effects these medications had on the young bodies in my class. Morris (2008) reminds us that "Every medicine has a side effect. The side effects sometimes are worse than the disease" (p. 2). I was not able to describe first-hand how the medications affected the children since I was not taking the drug myself, but I could describe what I observed in my classroom. To me, many of the children seemed like zombies rather than actively engaged learners. I was aware that the dosages given to the children sometimes caused them to be withdrawn and almost vegetative. The observations led to concern for the children and their well-being. Not only could the medicine hurt the children physically, but it could also negatively impact how they felt about themselves. Morris (2009) points out that,

> Those who are injured psychically and physically might just get numb. Being numb is perhaps a defense mechanism and protects the psyche from overloading. But too much numbness or coldness can be terribly self-destructive. The lack of emotion – like being numbed on Prozac – kills the inner spirit (p. 65).

Physicians rely on teachers, other school personnel, and parents to monitor the effectiveness and side effects so that the dosages could be regulated. When a child was too withdrawn, the dosage could be changed. The goal was to get the optimal dose which provided the best level of attention for the child with the least amount of side effects. Some children had trouble describing how the medication made them feel, so the parents and physicians relied on the observation of the teachers.

My observations as a professional educator led my husband and me to stand by our decision to keep our daughter off medication while she was young. With redirection in the

classroom, she was reminded to stay on task and maintained good grades. Her teachers would call her name when they noticed she was drifting away or casually walk by and tap her on the shoulder. Even though my husband and I intended to stand by our decision to not medicate her, the school continued to pressure us to change our minds. Each time we attended a parent conference at the school, the teacher brought up the suggestion of medicating my daughter. When I think back to the conversations that took place during those conferences, I wonder how the teacher felt comfortable making that recommendation. What was it about the social structure in the school at the time that empowered the teacher to feel all right making that sort of suggestion? Were there pressures in place in the school on the teacher that prompted the need for her to make sure that each child conformed to current socially constructed educational beliefs? Did the teacher feel as if she was looking out for the best interest of my child? Schools are institutionalized settings where expectations regarding behavior and performance are put in place by culturally defined norms. Conrad and Barker (2010) note that "with culture defining the norms, society influences what is considered to be normal" (p. 67). One that is not "normal" can be referred to as the Other . . . one that is unlike the one comparing . . .one that appears to need be "fixed" or "molded". Burman (1994) in Cannella (2002) states that,

> Within the 'child'construct(s), younger human beings are reified as the 'other.' This othering labels them as innocent (i.e., simple, ignorant, not yet adult), dependent (i.e., needy, unable to speak for themselves, vulnerable, victims), cute (i.e., objects, playthings, to be watched and discussed), and needing control (i.e., savage, lacking discipline, needing structure), to name just a few. Rather than benefiting human beings who are younger, these constructions often place them in positions in which they are labeled and treated as abnormal, lacking agency and competence, without knowledge, and

> disqualified, especially when representing nondominant diverse backgrounds and cultural values (p. 3).

This seemed to be true in this situation with my child. She was not "fitting in" with the other children in her class, and her attention problems were causing her to appear different from the other "normal" children in her class. Who, though, has the power to decide what is normal and what is not?

As a teacher, I experience many differences in children. I am empowered with the task of teaching all children the same subject matter but in a different manner to make sure the needs of all students are met. Schooling implies that all students can learn and will learn in the same manner and at the same pace; however, reality tells that not all children can or will learn at the same rate. I felt like I did not have a say in my child's educational well-being. It seemed as if the teacher was willing sacrifice my child's best interest in order to make her day more bearable. As Spock from the Star Trek series said, "The needs of the many outweigh the needs of the few." I felt as though the need of the teacher and the other students outweighed my own daughter's needs. I understand Pinar (1999) when he says, "Perhaps someday we will enjoy more influence, but for now we must move ahead, not wring our hands over lost or imagined influence. We must work to understand what education is and might be. And this means that we must focus on education, not just on schooling" (p. xvi). Everyday *schooling* consists of a need for efficiency with the daily tasks of taking attendance, checking papers, ordering lunches, and monitoring behavior while *education* should consist of helping children understand themselves and become life-long learners.

I recognize that a school has to run efficiently, and that to only consider my child and her needs is selfish. In Understanding Curriculum, Pinar (2002) reminds us that "curriculum without

a social perspective leads to . . . self-absorption" (p.127). While my own flesh and blood was my priority, I sympathized with the teacher because I was experiencing the same phenomena in my classroom on a daily basis.

Even still, it was not long before the constant demands by the school and the teachers led my husband and me to make an appointment with a doctor that specialized in treating students with ADD/ADHD. Since I was hearing the same thing from different educators year after year, I wondered if I was just being stubborn. Was I being selfish and not willing to admit that my child was different? Who do they think they are? Pinar (1994) points out that "often those who take upon themselves a calling to intrude in the lives of others are precisely those who have failed to intrude in, or study, their own lives" (p. 53). It seemed as if it was easy for the teacher to point out the weaknesses my daughter exhibited without taking a look at her own issues maintaining equilibrium in the classroom. My daughter was in the fourth grade when we finally made the decision to pursue medication. We asked other parents for a recommendation and selected a physician who was highly recognized in our town. The reflection on this decision gives me the opportunity to compare the school's views at that time with my opinion on how I believe things should have been. As a family, this decision was very difficult to make.

The next step was the doctor's visit. My experiences during that visit were something I will never forget because I entered this situation with preconceived views of how this appointment should be handled. My daughter and I entered the waiting room which was full of parents and children. We waited a long while in the lobby before we were asked to enter the room where the doctor came to talk to us. He came in and asked me to describe the problems she was experiencing in school. I proceeded to tell him that she had trouble paying attention and completing tasks. He said that she probably suffered from ADD/ADHD, and medication should

help. That was about the extent of the conversation. He then wrote a prescription and said that we needed to come back in one month. The visit left questions on my mind. Why was medication the first thing that the doctor suggested trying? Were there other possible solutions to the problem we were experiencing? Why did I feel so guilty about giving in to the school and my child's teachers? Would there be long term side effects to this decision that I was making? Why was the school so adamant regarding the use of medication for my child? Conrad and Barker (2010) state that

> when difficulties in children's attention and behavior get defined as attention deficit hyperactivity disorder (ADHD), school policies increasingly encourage the use of medication and special accommodations for learning disabled students; yet these responses fail to address the social and nonmedical causes of children's classroom inattention or agitation, such as increasing class size or the termination of physical education programs (p. 75)

Conrad and Barker describe a situation that seems to exist in many schools today. The societal institution of education has become a place where efficiency is the key. Efficiency in education means that the teachers are expected to use class time wisely so that the maximum level of transfer of standards can take place on a daily basis. This aspect has become important from day one of school because that is when the countdown starts for the state mandated tests which occur in the spring of the school year.

GOING ROGUE: RESISTING THE PRESSURE FROM SOCIETY

The year that we decided to medicate our child became a very trying year for our family. Our morning routine involved coaxing out daughter to take her medicine. She could not swallow a pill, so my husband or I had to open the capsule each morning and place the contents in cool

whip so that it would be easy for her to swallow. At this time, there were not alternatives such as the patch available for her use. She would cry and ask why she had to take the medication. She would tell us that she did not like the way it made her feel. Her appetite was suppressed, and although she was not a heavy child to begin with she lost fifteen pounds. She was also very emotional while on the medication. She would cry about almost anything, especially when the medication was wearing off late in the afternoon. The medicine she was on was time-released and started to wear off about four o'clock in the afternoon. In our case, the positive side effects (increased attention and improvement in grades/learning) did not exist at such a level that they outweighed the negative side effects mentioned above, so we decided to stop giving the medicine to her.

The side effects she was experiencing were not uncommon. Many other children experience very similar reactions and feelings about taking the medication. Breggin (2002) reported that "children taking Ritalin were most commonly reported to develop – in the following order – agitation, hostility, depression and psychotic depression, abnormal thinking, hallucinations, psychosis, and emotional instability (called 'liability')" (p. 30). Breggin (2001) also referenced a study that was conducted that included 52 children diagnosed as hyperactive. The researchers that conducted the survey observed the children and questioned adults about how the children felt about taking the stimulants. The study found that

> forty-two percent 'disliked' or 'hated' it. Six children reported feelings of 'depression' in reaction to the drug, such as 'I don't want to play,' 'It makes me sad…' and 'I wouldn't smile or anything.' Seven reported a 'drugged feeling' including 'spaced out,' 'It numbed me,' and 'It takes over of me; it takes control.' Ten reported negative changes in perception of self, such as 'It makes me feel like a baby' and 'Don't feel like myself.'

> One reported rebound, stating he was 'wild' after the medication wore off…16 of the children felt that 'taking medication was a source of embarrassment to them (p. 110).

The side effects as Breggin mentioned are undeniable. Stimulants are strong drugs capable of making large changes in a child's body and how he/she feels about him/herself. Are the side effects worthy of ignoring because of the suggested advantages of taking the drugs? Has society contributed to the lackadaisical approach to medicating children? This study does not explore the opinions/perceptions of children diagnosed with ADHD or the feelings they have when medicated, but these attributes/questions could be included in a future study. The only frame of reference I have to base an opinion on whether or not children should be medicated is the experiences I encountered as a teacher and a mother. The negative side effects provided a huge influence on our decision to stop medicating our daughter.

We took her off the medication after the state mandated tests were over which was very close to the end of her fourth grade year and never put her on it again. She seemed to feel so much better and was happy. I remember one of her teachers was very upset with me for taking her off the medication. She wrote a note to me in my daughter's planner stating that I was "doing my child a disservice" by taking her off the medication. I was appalled. How had I allowed the school and its teachers to have that much power over me? Had I become only a service agent for the teacher instead of the parent? Why did I succumb to the pressure that had been placed on me? Is society, by means of information gathered at school and the media, sending a message that ADHD is an illness that is treatable only by the use of medication? This places a great deal of power in the hands of the systems that impact the comfort level that society has regarding the diagnosis and treatment of ADHD. "The approach foregrounds how illness is shaped by social interactions, shared cultural traditions, shifting frameworks of knowledge, and

relations of power" (Conrad and Barker, 2010, p. 69). Looking back, I now realize that I did allow these pressures to control my decisions and I wonder how many other parents feel the same way… Because of my family's journey, I am very sensitive to children who have been placed on medication for 'attention deficits'.

I have never regretted making the decision to take her off the medication. Our family learned ways to support her and her needs. We had parent/teacher conferences every year at the beginning of the school year. I told the teachers that her ADD caused her to 'daydream'. She would need to be redirected occasionally and sit near the front of the classroom. She has never been an all 'A' student, but she has done well without medication. My daughter graduated from high school in 2011 and currently attends technical school in the field of culinary arts. She continues to need additional support with her school work, but her problems are not as pronounced as they were when she was in elementary school.

PURPOSE

My experiences as an educator and a parent have made me acutely aware of societal influences on the growth of the ADHD diagnosis and the medication as the primary mode of treatment. Breggin (2001) reinforces this statement when he reveals that "recent studies have shown that 7-10% or more of America's school-age children are being prescribed stimulant drugs to control their behavior, and the actual figures may be higher…There has been a tenfold increase in the production of methylphenidate (Ritalin) in the United States in the last decade" (p. 3). I am also amazed at the number of drug advertisements that are on television, in magazines, and in doctor's offices. The purpose of this study grew out of these experiences and led to the following research questions: Is ADHD a social construct fabricated from institutionalized belief systems in our society such as the schools, the medical community, and

medical advertising? How does institutional beliefs influence how we interact as a society with ADHD and how does ADHD embody these institutional beliefs? Does Curriculum Studies offer an alternative way for schools to deal with ADHD and similar concerns?

The school provides an example of a socially constructed institution where cultural beliefs deem what is considered appropriate and what is not. Children exhibiting problems with attention defy these culturally constructed norms. The characteristic behaviors displayed by a child with ADHD have not changed over time. What seems to have changed is the way in which our society chooses to interact with the diagnosis.

This study will explore the possibility that ADHD is a socially constructed illness whose norms and treatments have been established by society since social construction of illnesses seems to be determined by social interactions and traditions that are defined by the culture in which they exist. Schools have predetermined socially acceptable norms that have been in place for decades. A child is expected to behave according to these socially acceptable norms. While school is in session, the child is asked to sit still in a desk without moving or talking while the teacher presents the lesson. During the lesson, the child is asked to pay attention and learn the material so that s/he can regurgitate the same material on an upcoming assignment or test. Should the child not be able to maintain an appropriate level of attention under these conditions, the teacher may begin to explore possible reasons for the inattentiveness such as an ADHD diagnosis. Is the child exhibiting abnormal behavior or is the child just bored in today's schools? Conrad and Barker (2010) note that "what comes to be identified as deviant behavior or a social problem is not 'given,' but rather is conferred within a particular social context and in response to successful 'claims-making' and 'moral entrepreneurialism' by social groups" (p. 68). To state this another way… whose best interest is served? Are social groups, such as medical doctors and

large pharmaceuticals, only concerned with the amount of money they can make by promoting the idea that ADHD is a medically diagnosed illness?

SYSTEM'S THEORY, BRONFENBRENNER, AND SOCIAL CONSTRUCTION

Social construction and Bronfenbrenner's ecology of human development were interwoven to provide a frame for this study with the purpose of finding a link between ADHD (a socially constructed disorder) and the systemic environmental influences that contribute to its social construction. Specifically, social construction of illness, as approached in this study, can be linked to social problems theory and research from the 1960s and 1970s. The scholars in this area believed that what becomes described as deviant behavior or a social problem is not 'given,' but is developed within a particular social context. The naming of these behaviors happens in response to successful 'claims making' and 'moral entrepreneurialism' by social groups. In addition, to popular intellectual trends of the 1960s – symbolic interactionism and phenomenology – contributed significantly to this social construction of illness approach. Phenomenological tenets were used by medical sociologists to demonstrate how people make sense of their illness and how they manage physical and social restrictions. (Conrad & Barker, 2010, p. 68).

This study demonstrates that when 'something' is socially constructed, the norms associated with the 'thing' that has been constructed is influenced by systems that are in place in a social setting. Bronfenbrenner (1977, 1979) used systems to provide a means for describing how a child's development is influenced by layers of systems in place in his environment. Bronfenbrenner (1977, 1979) compares the ecological environment to a set of embedded Russian dolls with the innermost tiny doll being the developing person. The ecology of human development does not emphasize the:

> traditional psychological processes of perception, motivation, thinking and learning, but on their content – what is perceived, desired, feared, thought about, or acquired as knowledge, and how the nature of this psychological material changes as a function of a person's exposure to and interactions with the environment (Bronfenbrenner, 1979, p. 9).

This model uses systems to frame the description of how the environment impacts a child's development. The systems are described as layers of interactions. Each layer impacts the child differently – from the microsystem (the innermost layer used to describe the child's family) to the macrosystem (the outermost layer used to describe the larger cultural influences on a child's life).

Bronfenbrenner's (1979) ecology of human development was highly influenced by Lewin (1935) and Piaget's (1954) book entitled *The construction of Reality in the Child*. Lewin's (1935) work emphasized "the close interconnection and isomorphism between the structure of the person and of the situation" (p. 9). Bronfenbrenner's (1979) theory describing human development "lies at a point of convergence among the disciplines of the biological, psychological, and social sciences as they bear on the evolution of the individual in society (p. 13).

Lewin's influence on Bronfenbrenner is important to note because Lewin (1935) is considered one of the major contributors in the history of the field of General Systems Theory. Other major contributors include "Alfred North Whitehead, Ludwig von Bertalanffy, Anatol Rapoport, Kenneth Boulding, Paul A. Weiss, Ralph Gerard, Kurt Lewin, Roy R. Grinker, William Gray, Nicolas Rizzo, Karl Meninger, and Silvano Arieti (Laszlo & Kippner, 1998, p. 48). General systems theory is used to "model complex entities created by the multiple interaction of components by abstracting from certain details of structure and component, and

concentrating on the dynamics that define the characteristic functions, properties, and relationships that are internal and external to the system" (Laszlo & Kippner, 1998, p. 48).

Early contributors of General Systems Theory noted that observed phenomena do not always come in nicely named packages labeled scientific, humanistic, and transcendental. Instead, they involve a complex mixture of the fields which contribute to the need to have a holistic approach for their solution. In addition, this approach offers a powerful way to grasp the interrelation of human beings and the "associated cognitive structures and processes specific to them in both society and nature" as well as a way "to view the world in terms of irreducibly integrated systems" while focusing "attention on the whole and the complex interrelationships among its constituent parts (Laszlo & Kippner, 1998, p. 52 - 57).

A systems approach to social construction provided the foundation needed to explore the complex (and somewhat) hidden components of the ADHD dilemma in our society and the interrelations among these parts (see Appendix C). When a disorder, such as ADHD, is socially constructed, its norms are created by society and become second nature over time. Apple, (2000) notes that when members of the curriculum field do not reflect on what takes place in schools current practices become second nature, and 'habits of thought' are developed. He continues by stating that "our 'habits of thought' are exactly that: habits that have become part of our taken-for-granted reality, a reality that has become so commonsensical that we have ceased even to question it" (pp. 120-121). Within the ADHD debate, some would note that schools have become too complacent about the diagnosis and treatment of disorders such as ADHD. Has society's influences become so strong that the methods for dealing with ADHD have become commonsensical as Apple describes?

Schools, as educational institutions, are places where established norms do not seem to be questioned as readily by society. Decisions are made every day on behalf of students that may not really be in the students' best interest due to societal pressures inside the school and outside the school. Apple (2000) reinforces this notion when he states that:

> The crucial point to be made is that beneath our usual patterns of decision making about educational institutions there are perspectives that may commit us to certain ways of confronting other human beings – in this case, students – that tend to ignore basic ethical issues about the proper modes by which one human may seek to influence another or do not enable us to grapple significantly with the political and economic reasons that our educations institutions are repressive (p. 129).

Each chapter in this study will use a different level of Bronfenbrenner's (1977, 1979) ecology of human development to reinforce how influential each level of interaction is on the development of an illness/disorder such as ADHD and how this contributes to the social construction of illnesses as noted by Conrad and Barker (2010).

CURRICULUM STUDIES AND ADHD: RECONCEPTUALIZING A DISORDER

"We live in a different time" (Pinar, et al, 1995, p. 6). This statement was made in *Understanding Curriculum* as an introduction to the historical events that led to the Reconceptualization of the field of curriculum. These six words provided a powerful message to the scholars of curriculum at a time of turmoil during the Reconceptualization and still can be used to describe the face of education today. Educators then and now can be heard blaming the inadequacies in schools on 'living in a different time' with children who are 'different from the generation before'. Are the changing children to blame or is there a problem with the curriculum/delivery of curriculum that needs to be addressed? Pioneers in the field of

Curriculum Studies described a need to change the general field of curriculum to begin to address the changing needs in the schools. Pinar, et al, (1995) notes that

> . . . the general field of curriculum, the field interested in the relationships among the school subjects as well as issues within the individual school subjects themselves and with the relationships between the curriculum and the world, the field is no longer preoccupied with development . . . the field today is preoccupied with understanding" (1995, p. 6).

Understanding of curriculum was encouraged on many levels and through many lenses (i.e. political, historical, gender, racial, theological, autobiographical, etc) with a hope of making sense of the impact that the politics and happenings in the world have on the curriculum, the school, and the children.

This study explores the idea that the modern phenomenon in schools, ADHD, is socially constructed with its norms established by the very people impacted by the disorder – the society. There are parallels that can be established between the events leading to the Reconceptualization of the curriculum field and the events leading to the growth of ADHD in our society. This section will point out those parallels while demonstrating a need for curriculum theorists to write about, research, and discuss the issues related to ADHD in schools including drugging our children. Educators are encouraged to develop an understanding of curriculum so that they can deliver the most effective instruction possible while providing a positive learning environment for children.

The history of the Reconceptualization demonstrates a change in thinking among the curriculum scholars that could be compared to the need for re-evaluation necessary in schools today related to the norms that have been established by society for ADHD. In the 1950s, "quiet

voices suggesting alternatives began to be heard" (Pinar, et al, 1995, p. 156). Dwayne Huebner and Arno Bellack taught a course at Teachers college, Columbia University which stressed non-Tylerian ideas. These professors explored problems with curriculum through analytic philosophy, phenomenology, and political science. Huebner continued by introducing his ideas to the field 10 years later (Pinar, et al, 1995, p. 17).

Prior to this time, as Miller points out:

> emphasis on curriculum theory and development . . . was on social efficiency, on linear and sequential constructions of teaching and learning, with curriculum conceptualized as 'content' or 'course of study', as information that could be dispensed by teachers and received by students at predetermined, developmentally appropriate states, and then returned to the teacher in measurable, testable, and standardized forms (2005, p. 150).

This type of curriculum development was based on the Tyler Rationale of 1949 and was what the early curriculum reconceptualists were arguing against. The Rationale was described as the "quintessential articulation of the curriculum development paradigm" (Pinar, et al, 1995, p. 15) with its major elements related to behavioral objectives, learning experiences, organization, and evaluation. The early curriculum texts at this time that were written for teachers and administrators emphasized the components of the Tyler Rationale and curriculum development (Pinar, et al, 1995, p. 15). It was not until the Reconceptualization of the 1970s that nonmeasurable and nonobservable traditions of psychology, theology, and philosophy reentered curriculum conversations (Pinar, et al, 1995, p. 89).

An early pioneer of the Reconceptualization, James Macdonald, in 1964, began to discuss issues related to the "relationship between society and the individual, and specifically the ways in which society defined individuals" (Pinar, et al, 1995, p. 178). With socially constructed

disorders, such as ADHD, society is still demonstrating its power over individuals and its ability to define the norms associated with the aspects of an individual's life. This study points out the impact society has on establishing norms at multiple levels and could be used to support Macdonald's argument that society defines its individuals through the relationships that exist between society and the individual. Macdonald continued in 1966 by describing in an essay the need to incorporate "a concern for the person" (Pinar, et al, 1995, p. 178) and this challenge became "the thematic heart of the Reconceptualization of the 1970s" (Pinar, et al, 1995, p. 179).

Macdonald's notion that curriculum needs to consider the impact that society has over the individual as well as his belief in a true need for concern of the individuals seems to have been forgotten or misconstrued. It seems that many educators 'portray' a similar concern for the children in their classes when they describe the need to medicate children for attention problems. Is this a selfish need on behalf of the teachers to control the students so that the pressures in the modern classroom seem more bearable? Whose best interest is really at heart?

During Macdonald's time the school structure was described as dehumanizing. Looking back at this description while reflecting on the present state of education makes me wonder why things seem to still be the same as what he is describing. His argument for reconceptualization of schools and curriculum so that self-conscious and complete human beings can be nurtured seems to be grounds for the same argument today. . . not much seems to have changed. When a child receives a label in school, such as ADHD, does he believe that he is less of a human being? Is he confused about his place and function in society?

Around the same time that Macdonald was questioning the current state of education and curriculum, Dwayne E. Huebner began to raise important questions of his own. His pursuits began because of dissatisfaction with his own educational experiences. He decided to make it

his mission to being theology and philosophy to the field of curriculum. His worked urged a shift in curricular attention "from the disciplines' structures to how persons are in relation to each other" (Pinar, et al, 1995, p. 181).

In 1966, Huebner wrote *Curriculum as a Field of Study*. In this essay, Huebner introduced four radical ideas for the time. His first argument was that the development of curriculum tended to be tied to 'technique' and not linked to the human spirit. He went on to say that the curriculum field still "suffered from an overdependence upon values conceived as goals or objectives" (Pinar, et al, 1995, pp. 181 - 182). His third idea involved the "correction of this concept of curriculum" (Pinar, et al, 1995, pp. 181 - 182). He noted that this could be accomplished "partially by the design of an educative environment conceived as valued educational activity" (Pinar, et al, 1995, pp 181 -182). Finally, his fourth idea, presented the idea that "curriculum design was inherently a political process by means of which the curricular worker sought to attain a just environment" (Pinar, et al, 1995, pp. 181 -182).

Huebner's description of an overdependence of objectives and curriculum design could be also used to describe a reason why schools are willing to accept the norms established by society related to ADHD. If children are not able to perform according to expectations in the classroom, there must be something wrong with the children . . . not the instruction. Are educators so overwhelmed with the data derived from standardized testing that they are not able to see beyond the business of school and view the students in the class who need to be educated beyond being able to pass a test?

These early attacks on quantifiable behaviorist techniques derived from the Tyler Rationale including bureaucratization and standardized evaluation and measurement of learning represented the first stage of the Reconceptualization of the static and limiting traditional

curriculum field. Reflecting on the description that is given related to the state of the curriculum field during the 1960s and early 1970s reminds me of many of the current issues in education today. The No Child Left Behind Act brought back standardized assessments as a means of incorporating accountability at all levels in public schools in this country. Some would say that so much emphasis is placed on these assessments that many other aspects of school get ignored. All decisions in the school seem to be based on the numbers generated on these standardized assessments. Children are reduced to a number on a paper. Decisions about how and when they will be educated are based on scores on tests. Low test scores result in questions… questions about whether or not the children are 'normal'. Macdonald and Huebner's concern for the individual in curriculum seems to be lost, and they were not the only curriculum theorists making such an observation about schools.

Silberman's observation made in 1970 related to a current educational setting at the time, and a similar observation could easily be made in many schools today. He said that : "It is not possible to spend any prolonged period visiting public school classrooms without being appalled by the mutilation visible everywhere – mutilation of spontaneity, of the joy of learning, of pleasure creating, in sense of self" (Silberman, 1970, p. 10). Weaver (2010) reinforces this notion forty years later when he states that: "Today students are being asked to stop learning almost completely so that they can take, yet again, another battery of examinations. Learning has stopped being the purpose of schooling while test taking has replaced it" (Weaver, 2010, p. 43). Both Silberman and Weaver describe school settings that are mundane at best. Some would state that even children who do not normally exhibit symptoms of hyperactivity or lack of attention may exhibit such characteristics in school settings that exist primarily for the purposes of preparing children for tests. It seems to become more important (in settings such as this) to

control students rather than instill a love of learning. What are current educational institutions doing to children? What educational values are being portrayed?

Are we lost in a spiraling downward slope in education? Will anything change in the future that brings back the vision of the early scholars in the Reconceptualization movement? Huebner answer this with his view that "educators are lost, that they will remain lost as long as they accept the promise of a 'quick fix' through slogans and bandwagons as long as they do not act to change the educational world. Such action, Huebner is careful to point out, requires risk taking" (Pinar, et al, 1995, p. 214). This quote from the past - from the earlier reconceptualization movement - provides another parallel to current educational practice related to the norms established by society in an attempt to 'control' the symptoms of ADHD. It seems that medicating children has become the 'quick fix' answer to children with attention problems, and this practice has become so commonplace that questioning no longer takes place in most instances. Weaver (2010) makes reference to this in his book entitled *Educating the Posthuman*. In this book, Weaver describes a sad state of affairs in America's schools where children are drugged to control them. Early curriculum reconceptualists would probably argue that this current educational practice is dehumanizing. At what point will schools, teachers, families, and the medical community wake up and understand what is happening to the children? To bring greater awareness to this issue, curriculum theorists need to research, write about, and bring to the forefront the issues of drugging children supposedly in the name of education. Is the act of drugging children in their best interest or is it being done to better serve the need for efficiency and control in schools?

The need to ensure efficiency could help explain the school's desire to control every aspect of educating children. Parallels can be found in the literature regarding the control that is

apparent in many institutional settings such as the school. Foucault (1977), Pinar (1994), and Breggin (2001, 2002) describe the need for institutions such as schools to control the students where children in the classroom are viewed as bodies in need of control and transformation instead of humans in need of respect and education. Foucault (1977) notes that

> The classical age discovered the body as object and target of power. It is easy enough to find signs of the attention then paid to the body – to the body that is manipulated, shaped, trained, which obeys, responds, becomes skillful and increases its forces (p. 136).

Even though Foucault does not mention the use of drugs to enhance this manipulation that is occurring on the body, his experience describes the need for humans to control other humans to make sure that the overall goals are achieved whether the situation involves running an efficient school or training proper soldiers in the military. As Pinar (1994) observes, this environment of control has a particular impact on students: "Relatedly, the schools' insistence upon discipline . . . indoctrinates our children to political and cultural, as well as intellectual, passivity" (pp. 66 – 67). Are educators giving up actively engaged learners in the name of control? Does passivity among students demonstrate a respect for the discipline in the classroom or a simple lack of concern for its routines?

In schools, this form of control for some is achieved by the use of stimulant medications. Breggin (2002) describes human control that is happening in schools and the method to achieve this level of control when he notes that "drug induced impairments cannot make a child wiser, more thoughtful, or better informed. They can only make children sit down, shut up, and do what they are told" (p. 23). Children who are subject to this type of educational setting are successful when they are willing to subject themselves to the expectations without question and become what Foucault (1977) refers to as a 'docile body'. He defines a docile body as "a body that may

be subjected, used, transformed, and improved" (p. 136). Is the medicating of children to ensure educational efficiency producing a classroom full of docile bodies not capable of thinking for themselves? Is the current educational system shortchanging the children when the only concerns involve keeping the children still and quiet so that standards can be transferred efficiently? This type of environment seems to be commonplace in America's schools today with children receiving medication to make school bearable.

Pinar (1994) points out that "Schools are centers where the young are trained to perform competently the tasks their elders present to them as socially necessary and expedient" (p. 67). These situations in schools, as described by Pinar, are places where some children could experience a lack of success conforming to the expectations set forth. Breggin (2001) answers with the point that "Ritalin makes children more manageable in boring, unstimulating, and otherwise frustrating environments" and "only an occasional stimulant-treated child will become obviously robotic or zombie-like; but most children on Ritalin become more docile and obedient" (p. 84-85). This need for docility in schools noted by Foucault (1977), Pinar (1994), and Breggin (2001, 2002) seems to link past in schools where children are controlled with behavior techniques to today's method of control which is medication. Society seems to have accepted the idea of medicating children because of the pressures to ensure that 'no child is left behind'.

Are current educators going to continue to stand idly by and watch children take medication so that they can (supposedly) attend better to the tasks at school? Huebner (1975) points out that:

> The school is but a manifestation of public life. As educators we must be political activists who seek a more just public world. The alternative of course is to be school

> people – satisfied with the existing social order – the silent majority who embrace conservatism (p. 280).

Apple (1975), a student of Huebner, goes on to point out that ". . . the modes of activity, the forms of language, the basic ideologies, even the things we do that supposedly 'help' kids are in need of radical (in the sense of going to the very root of an issue) rethinking (p. 89). Could it be argued that schools are so caught up in the numbers game of standardized testing that they forget to pay attention to the individual students sitting in the classes? Do educators truly believe that medicating children is the best way to 'help' kids? As curriculum theorists point out, much as what we do in schools is in need of radical rethinking. This seems to not have changed very much from the earlier days leading up to the Reconceptualization of the field of curriculum studies.

Teachers face many obstacles in schools today and are expected to teach all children to meet the grade level expected standards without regard for the current level the child is on when entering the classroom. To do this, instruction is expected to be differentiated so that the children who are below level can learn the grade level standards as well. The tests that are given in the spring have become so important that many schools are limiting the amount of time students spend in non-academic environments such as physical education and the arts. This policy change inhibits the amount of time the children are allowed to move around and socialize with other children. Without an opportunity during the school day to release energy, some students can no longer control their hyperactivity and inattention. All of these factors could be attributed to an ADHD diagnosis which sometimes results in medication for treatment of the symptoms.

Students in the Curriculum Studies program are encouraged to think about education on a much larger scale and are asked to explore "political, philosophical or psychological frameworks and foundations of education and curriculum" (Ropo, 2009, p. ix). To put this another way, students would study and discuss the "myriad dilemmas, questions, and problems related to societally and institutionally organized education" (Ropo, 2009, ix). It is much more difficult for me (now) to simply accept things just because that is how things are always done or because that is the current mandate by the present state or local school systems. I wonder how many teachers in schools today feel this way. Am I only concerned about such issues because I have been forced to think this way? I would definitely say so… I get very frustrated when my colleagues are not willing (or able) to question the current state of schools in our state (or our country). How can current educators feel like they are truly giving today's children what they need? Are we providing the best education for our students? Will the students in our classes look back with regrets when they get older? What is causing teachers and administrators to feel this way?

In the beginning of the Curriculum Studies program, I had been teaching long enough (approximately ten years) that I had experienced changes in what would be taught, how we were expected to teach, and how we were expected to reach ALL students in our class, but I did not consider where those decisions were coming from or who was making them. As a result of the program, I developed questions such as: Should the important decisions about school be left to the politicians and other special interest groups? Should teachers passively accept the mandates without question? As time passed, I realized that the issues related to external educational control would continue because teachers, as a group, are not brave enough to overtly question things that were happening.

At the same time that the questions surfaced for me due to my studies, my questions about Attention Deficit Hyperactivity Disorder (ADHD) began to burn in my brain. Why were my child's teachers pressuring me to medicate my child? How and why were so many school children being diagnosed with ADHD and other disabilities? Were educators receiving so much pressure as a result of the accountability mandated by the No Child Left Behind act that they were willing to suggest medication to parents? Was ADHD medication used for behavior management in lieu of improving classroom management skills?

In one of my classes, taught by John Weaver, the students were required to read Sadie Plant's (1999) *Writing on Drugs*. During this semester, I realized that I wanted my dissertation topic to be something related to ADHD diagnosis and treatment methods. The class discussed controversial topics related to drugs used as performance enhancers, and this complicated conversation led to a discussion of medications for children with ADHD. My desire to continue with the topic of ADHD diagnosis and treatment was further enhanced by the reading of Weaver's (2010) book entitled *Educating the Posthuman*. In this book, Weaver describes a sad state of affairs in America's schools where children are drugged to control them. He questions the interests of the pharmaceutical companies and makes the reader wonder if drug companies create the drugs and market them to help children or only to make money. When manufacturing these medications, can the drug companies *both* help the children *and* make a significant profit without jeopardizing their own interests or the best interests of the children?

Later in my studies as a Curriculum Studies student as I continued to read, reflect about what I read, and think about what I wanted my study to encompass, I realized that the process I

was experiencing was the autobiographical method of *currere* that Pinar (2004) describes. He notes that:

> the method of *currere* – the Latin infinitive form of curriculum means to run the course, or, in the gerund form, the running of the course – provides a strategy for students of curriculum to study the relations between academic knowledge and life history in the interest of self-understanding and social reconstruction (2004, p. 35).

Telling my story and writing this dissertation required me to 'run the course' and experience each of the four steps of *currere* that Pinar (2004) describes. In the first step, the regressive, a person looks back at the past and his lived experiences. This new 'data' encompasses information that the person needs to construct new meaning about what is going on in the present. I found this step necessary to help remind me how it felt as a parent to experience the pressures from the school and the doctor to medicate my child. I remembered how I felt sitting in conferences listening to the teacher describe the attention problems my daughter seemed to experience. I will also never forget how it felt sitting in the doctor's office waiting to see the doctor who would prescribe the medication that I would give my child each morning. The next step, according to Pinar (2004), is the progressive. In this step, a person looks forward and imagines possible futures. As a result of this step in my process, I began questioning what could possibly be the results of a society too willing to diagnosis and medicate children for ADHD. Next is the analytical step in which one looks at the past and the present. As Pinar (2004) describes, one should ask the following question: "How is the future present in the past, the past in the future, and the present in both" (pp. 36-37)? When I reflect on this step and my process, I wonder how many people think about their experiences in this way. How many people realize

that their lived experiences impact their decisions about the past and the future, and how many people allow these experiences to influence their decisions?

After going through the first three steps, I was ready to enter the synthetical step that Pinar (2004) describes and think about where I am right now. This step causes the person to re-enter the present. He notes that "Listening carefully to one's own inner voice in the historical and natural world, one asks: what is the meaning of the present?" (p. 37). Coming back to the present after going through the *currere* process helped me make sense of the ADHD dilemma in my mind. I expected to show in my study that ADHD is diagnosed at such high levels because schools were looking for excuses for students who were not learning. When I started exploring the notion that ADHD is socially constructed, I thought that meant that the disorder was not real and created by society. In contrast, I found that socially constructed illnesses, such as ADHD, are real. The social construction of the illness is what gives meaning to the disorder and creates social norms that become as Apple (2000) would describe as 'commonsensical'.

My story allows me to share my experiences dealing with ADHD as an educator and a mother and expose the process of going through the steps of *currere*. Through this story, I hope other educators and parents will come to a new plateau of understanding about this disorder. For me, the process of telling my story could bring about a new sense of awareness and understanding of the way schools react to students with differences that I hope other people impacted by a diagnosis could also achieve. Pinar (1994) reminds us that, "Autobiography . . . is important to us not as a genre of literature, but as a form of consciousness" (p. 45). I am not convinced that I would have reached my current level of awareness about ADHD without the amount of soul searching required to write this story. It is not my wish to convince the reader

that medicating children is bad or malicious. I write this dissertation with the hope that the information provided will promote questions and thoughtful conversations about a seemingly socially acceptable practice in our schools today and fill a void in the scholarly literature by describing an educator and parent's journey trying to make sense of the ADHD diagnosis. I would hope that others would be encouraged to develop these thoughts and questions as I have been encouraged to do during the course of my work as a Curriculum Studies student at Georgia Southern University.

INTRODUCING THE FIVE CHAPTERS

Chapter one will introduce this study and provide background information related to same. A description of social construction will be given as well as Bronfenbrenner's (1977) ecology of human development to provide a frame for the remaining chapters in the study.

Chapter two will explore the impact that society has on the diagnosis process and treatment methods for ADHD. Bronfenbrenner's (1977) microsystem and mesosytem will be utilized to enhance the look at ADHD at the school level. American schools are expected to teach children so that they can pass the state mandated standardized tests in the most efficient way possible. This chapter will examine the ADHD diagnosis and its connection to the medicalization of the human condition. A definition of ADHD will be given with a discussion on what is considered 'normal'. This chapter will explore how large pharmaceutical companies capitalize on the ADD/ADHD market by placing fear in the minds of parents.

Chapter three will describe the history of drugs from the late 1800's to present including drugs for the treatment of ADHD. Bronfenbrenner's exosystem will be employed to frame this look and to investigate how the medical community has impacted the institutionalized beliefs

regarding the treatment of the disorder. In addition, the history of drugs will be described to help paint the picture regarding our society's current views on medication. "Historically, individuals seek out drugs for three major reasons: pain relief, speed, escape" (Weaver, 2010, p. 58); however, our country has seen a change in the use of medication ranging from medicinal purposes to curing ailments, to enhancements for the fast paced life-styles that we live, and eventually as a means to control individuals.

Chapter four will address advertising and its potential impact on our decision making process as it relates to medication as well as look at how commercials have raised an awareness of ADHD and other mental disorders in our society. Bronfenbrenner's (1977) macrosystem will be used to enhance this glance at the "overarching institutional patterns of culture and subculture" (p. 515) that are in place in regards to advertising in the United States. Our society is greatly influenced by advertising, and this process is engrained in our culture so deep that it would be almost impossible to remove. Billions of dollars are spent every year on television commercials, magazine advertisements, billboards, radio spots, and other means of promoting products in our consumer society.

Chapter five will discuss the implications for education. The study will examine the impact that labeling, mediating, and advertising has had on our school children and the concerns that develop as a result of the recent changes in American education. One major concerns related to medicating children is future addiction. This chapter will address this issue and the possible consequences of the same. Also, chapter five will explore the possibility of human evolution while looking at how changing our bodies for the present could change our bodies for the future.

The "institution" of ADHD informs all aspects of this disorder with accepted behaviors for everyone involved that are governed by the culture in which we live. As all want to be

accepted, involved and important in life and learning, we also want to feel supported to improve our circumstances and wellbeing. What if we like the way we are and do not want help? What happens when there is resistance to the ways things are? Why do we allow ourselves to be governed by these institutional structures? Is ADHD socially constructed? If so, is there a way to change what has become the protocol?

I am not proud of buckling under to the pressure to treat my child like everyone else, but I learned a lot about the possibilities that exist outside the way things are "supposed" to be. Today I hope that any others who feel the pressure to conform will ask themselves the same questions and make an informed decision about the way they want things to be for themselves and their families in spite of societal pressures. There still does not seem to be much support for individual choice and that makes me wonder: Who is benefitting from the way things are today and who would lose the most if things changed? This question is central in examining ADHD as a social construct.

CHAPTER TWO

A SYSTEM'S APPROACH TO EXPLORING ADHD

"What makes diagnosing ADHD all the more challenging is that, unlike medical conditions like diabetes or cancer, there is no definitive diagnostic test for ADHD"

-Barbara Sheen, 2009

The purpose of this study is to explore the notion that ADHD is socially constructed. To further this notion, it becomes necessary to look at the influences on ADHD at the innermost level and explore the influences on the diagnosis process. This chapter will take a closer look at the impact that society has on the diagnosis process for ADHD using Bronfenbrenner's (1977) systems approach (See Appendix C). Normally, the diagnosis process begins once families are made aware of a child's attention problems/hyperactivity when the child enters formal educational settings, such as school or daycare, for the first time. At this point, for small children, the family and the school has the most immediate impact on a child's development since the components of this system come into close contact with the child on a daily basis. Bronfenbrenner (1977) refers to this system as the microsystem. He defines this system as "the complex of relations between the developing person and environment in an immediate setting containing that person (e.g., home, school, workplace, etc.)" (p. 514). The microsystem is considered the center of all of the systems and has a limited area of direct impact. Even though

other systems indirectly impact diagnosis, the microsystem is where the whole process begins with the child and his behavioral characteristics represent the core.

Once the key behaviors are exhibited by the child at home or at school that are characteristic of ADHD, the parent (s) or the teacher start questioning the components of the system in an attempt to possibly figure out what is going on with the child. The parent may ask the teacher if the child is behaving differently than the other children in his class. The teacher may ask the parent about the behaviors that are observed in the home or other structured extra-curricular environments that the child may encounter in order to make comparisons to the behaviors observed at school. The answers to these questions may prompt the teacher to suggest the possibility that the child may have ADHD which currently requires a medical diagnosis.

At this point, interactions may continue to occur between and among the school, the family, and the child. This level of interaction takes place within the system that Bronfenbrenner (1977) refers to as the mesosytem. This system is made up of "the interrelations among major settings containing the developing person at a particular point in his or her life" (p. 515). For example, a 5 year old child entering kindergarten for the first time will be influenced by his family, the teacher/peers in the classroom, and any other adults that the child is exposed to as a result of extra-curricular activities. An older child could possibly have more areas of interaction and would therefore have additional influences at this level. The mesosystem provides a frame to explore the components of the teacher/parent/student interaction that takes place when children are in school. The way in which the teacher and the parent(s) react to the child's ADHD characteristics could influence how the child responds to the possible diagnosis. These societal influences may help define who the child is and becomes the first point of contact for the ADHD process.

This chapter will explore the impact that society has on the diagnosis process for ADHD at the lowest level, or the core. A current definition of ADHD will be given which will include criteria for diagnosis. When a child is diagnosed with ADHD, s/he receives a label and all of society's expectations that go with the label. Society's institutionalized beliefs related to ADHD may result in the assumption that the child is not 'normal'. Who has that authority to decide what is normal? Are students with ADHD disabled, different, or both? How far from society's vision of normal does a child have to be to receive an ADHD diagnosis/label?

Our society seems to be continually looking for answers to why children have attention problems. With the medicalization of the disorder, a new aspect of research has been opened to explore ADHD and the physical characteristics of a person diagnosed with the disorder. Currently, this research is looking to genetics to possibly discover a connection between brain development, DNA, and an ADHD diagnosis. This topic is new to the ADHD debate and the DNA research is ongoing. Scientists have found evidence of brain differences and DNA strands unique to children with ADHD. Much of the DNA research is in the early stages and inconclusive at this time, but is beginning to shed light on the ADHD diagnosis.

ADHD DEFINED

According to the Diagnostic and Statistical Manual of Mental disorders, 4th Edition (2000), "the essential feature of Attention-Deficit/Hyperactivity disorder is a persistent pattern of inattention and/or hyperactivity – impulsivity that is more frequently displayed and more severe than is typically observed in individuals at a comparable level of development (Criterion A)" (American Psychiatric Association, 2000, p. 85). This description of ADHD could be misconceiving because children are diagnosed due to behaviors displayed in comparison to peers. This comparison can often be very unfair. In a typical American classroom, the students

should all be very close to the same age, but with age cut-off dates established by school systems, some children will be almost a whole year older than other students in the same class. For example, in the county in Georgia where my children go to school, students have to be 5 on or before September 1st to start kindergarten. Therefore, a child born on September 1st will be able to start school in August at 4 years of age (turning 5 in a couple of weeks). This child could be sitting next to a child born on September 2nd. As one child is turning five on September 1st, another child in the class could be turning 6 on September 2nd. This makes this child an entire year older than his classmate. Most people would not think that one year would make much difference in the development of a child, but children grow, mature, and change rapidly during their school age years. These age differences can influence the behaviors that are exhibited by the students and explain why some students are not as mature as their classmates. This immaturity which leads to impulsivity is normally the first thing teachers notice related to a child's behavior in the classroom environment. These targeted behaviors can lead to an ADHD diagnosis when the child exhibiting the behaviors is acting normal for his current age. When a child is an entire year younger due to the age cut-off dates established by the school, it would not be unusual for the child to display immature and impulsive behaviors compared to the other older children in the class.

Teachers are encouraged to see each of her students as individuals, but sometimes they do not have the skills to recognize which students have true attention deficits and which ones are just misbehaving. The only frames of reference most teachers have are the behaviors displayed by the majority of the students in their classes. In schools, teachers make decisions about children based on socially constructed norms established by the school. It is not unusual for staff development to take place in which teachers are taught how to recognize the characteristics of

ADHD children as well as characteristics of other learning disabilities. Once a teacher is armed with this knowledge, it is not difficult for teachers to fit children into these preconceived molds. After the child 'fits the mold', the teacher is expected to implement strategies in the classroom to encourage behavior modification so that the child can be successful functioning with the disability. Even though this is typically viewed as a method of helping the child, this could also be seen as an excuse to enforce control over the child. In a Foucauldian sense, the teachers are conditioned to impose the power they have on the students in an attempt to help the child exhibit more 'normal' behaviors. Like the discipline soldiers receive in military training, children in school must learn the proper behaviors in school. Foucault's (1977) description of a soldier's training is not unlike what some students face in school.

> …the soldier has become something that can be made; out of a formless clay, an inapt body, the machine required can be constructed; posture is gradually corrected; a calculated constraint runs slowly through each part of the body, mastering it, making it pliable, ready at all times… (p. 135).

It is when a child does not conform to the expectations in the classroom and continues to act in a way that is considered inappropriate according to school norms put in place by the institution that the child receives a closer look at what could possibly be causing the problems and becomes labeled ADHD.

One issue related to the ADHD labeling process is the method of diagnosis. School officials and physicians are expected to following the guidelines established in the Diagnostic and Statistical Manual, 4th ed. According to the manual, a child must meet the following criteria to be diagnosed with ADHD (Complete criteria in Appendix A). There are two main categories. The first which is known as category A addresses students with inattention as their primary

problem. To qualify under this category, six or more of the designated symptoms must be present for at least six months in excess of what would be deemed developmentally appropriate. The symptoms of inattention are exhibited in children who do not give close attention to detail or make careless mistakes in schoolwork or other activities, have trouble maintaining attention on the task at hand or play activities, do not seem to listen when spoken to directly, have trouble following through on instructions with causes them to not finish schoolwork, chores, or duties at work, have trouble organizing activities, often avoid tasks that take a lot of mental effort for a long period of time, often loses things needed to complete school work, easily distracted, and are forgetful (American Psychiatric Association, 2000, p. 83-84).

Category B addresses the symptoms of hyperactivity-impulsivity. Like category A, six or more of the symptoms described must be present for at least 6 months at a level that would be developmentally inappropriate for this child's age. The symptoms include fidgeting with hands or feet or squirming in a seat when sitting still is expected, getting up from seat when staying in seat is expected, running about or climbing excessively, not playing or doing leisure activities quietly, seems to be 'on the go' or acting as if they are 'driven by a motor', talking excessively, blurting out answers before questions are completed, having trouble waiting his/her turn, and interrupting or intruding on others conversations or games (American Psychiatric Association, 2000, p. 83-84).

The manual also requires that some of the symptoms be apparent before the age of 7 years as well as existing in two or more settings – such as school and home. To qualify there must be evidence of significant impairment in social situations such as school or work. Also, the impairment/symptoms need to be exclusively caused by ADD/ADHD. If there are other mental disorders evident (such as Pervasive Developmental disorder, Schizophrenia, or Psychotic

disorder), the child may not receive the ADD/ADHD label (American Psychiatric Association, 2000, p. 83-84).

Using the above criteria, the Diagnostic and Statistical Manual recognizes three types of ADHD. The first type is referred to as ADHD, Combined Type. A child receives this label if s/he meets the criteria from both category A and category B for at least six months. The second type is referred to as ADHD, Predominantly Inattentive Type. A child receives this label if s/he meets the criteria for category A but not category B for at least six months. The third type is referred to as ADHD, Predominantly Hyperactive-Impulsive Type. A child receives this label if s/he meets the criteria for category B but not category A for at least six month (American Psychiatric Association, 2000, p. 83-84).

To determine which of the above criteria the child exhibits, teachers and/or parents receive rating scales to complete. Even though rating scales vary state by state according to requirements, the rating scales are usually very similar in the construction and components of the survey. On the document, the participants are asked to rate the child's behaviors using a scale with a one stating that the target behavior is non-existent up to a five stating that the behavior occurs often and is a problem. The survey consists of a large number of questions that are organized in categories based on target behaviors. There are numerous questions that seem to be asking the same thing but reworded. To give an example, the complete list of questions on the Vanderbilt ADHD Diagnostic Teacher Rating Scale has been included in Appendix B. On this diagnostic tool, teachers are asked to rate a child's behavior on such things as:

- Fails to give attention to details or makes carless mistakes in schoolwork
- Has difficulty sustaining attention to tasks or activities
- Has difficulty organizing tasks and activities

- Is forgetful in daily activities
- Fidgets with hands or feet or squirms in seat
- Leaves seat in classroom or in other situations in which remaining seated is expected
- Has difficulty waiting in line

These are only a few of the questions on the diagnostic tool. Most children exhibit some of these behaviors part of the time, so how excessive does a child's behavior have to be to be considered ADHD? How fair is it that a teacher's opinion of a child made evident on an instrument such as this can be one of the determining factors in a child's diagnosis? If this disorder is truly believed to be neurological by doctors and educators, how is it possible that a rating scale completed by a child's teacher can be used to influence what could be going on in the brain of the child?

Once the rating scales have been completed, the parents take them to the child's physician to analyze. The doctor tabulates the responses and makes a decision about the child's diagnosis and treatment. These rating scales have become the main tool used to diagnose this "disorder" while the doctor's visit may be described as streamlined with predetermined outcomes. Livingston (1997) notes that "treating physicians have collapsed a thorough diagnosis regime into a one-hour visit" (p. 13). It seems as if the physicians rush patients through appointments and give the parents what they generally are looking for: an ADHD diagnosis. Are the doctors rushing patients through so that s/he can see more patients? Other factors (such as vision, hearing, etc) could be explored by the physician to rule out these factors which have also been responsible for attention problems in some children.

I have filled out such rating scales before, and I wonder how accurate the results actually are. The rating scales are very long and difficult to answer. The questions start sounding the

same, and the 1-5 scale makes it confusing to decide how the particular target behavior should be rated. Because of these difficulties in filling out the forms and limited time to complete them, some teachers may not give them their best level of attention. Consequently, the child is the one impacted when the adults completing the form do not complete it thoroughly and with proper concern.

Since the rating scales are subjective, the child could be rated differently by all people that fill out a rating scale. When a teacher completes a rating scale on a student, it should be done with impartiality. Parents trust the teachers' judgment in this matter and take the word of the teacher to the physician who diagnoses the child. Porter (1995) reminds us of the problems with making decisions about a person's diagnosis or health impairment and this objectivity of these processes. When a diagnosis is a result of tabulated responses on a rating scale, the resulting numbers can be used to reveal what the administrator/evaluator wants the outcome to be, but because the rating scale seems scientifically based with understood interpretations of the results made by a medical doctor, the determination about applying the ADHD label is normally not questioned. Porter notes that, "A decision made by the numbers (or by explicit rules of some other sort) has at least the appearance of being fair and impersonal. Scientific objectivity thus provides an answer to a moral demand for impartiality and fairness" (p. 8). Morris (2008) also describes the subjective nature of reporting symptoms to a physician for the purposes of determining a diagnosis when she points out that, "What the patient reports is subjective (and untrustworthy) what the lab reports is objective (and true). Numbers are objective (and serious); stories are subjective (and trivial)" (p. 38).

Morris (2008) describes the scenario of what occurs when the patient visits the doctor with a laundry list of symptoms. It seems as if the patient's complaints are discounted until the doctor has proof from tests to confirm or deny the existence of a medical problem. This process of running tests and looking at lab work for a diagnosis can be compared to the use of rating scales to determine an ADHD diagnosis for children. The symptoms of ADHD may or may not be present, but the numbers on the rating scale tell the story and offer proof of the existence (or not) of the disorder.

The diagnosis process for ADHD, which seems like a scientific process defined by clear guidelines to most parents, promotes a great deal of trust in the outcome of the diagnosis. What parents do not understand – as well as many members of society – is that the very people completing the survey may not provide unbiased results due to problems associated with the child in their classes. Should a teacher have classroom management issues, the child may seem to exhibit more inappropriate behaviors in his/her class than s/he does in other classes where better classroom management is exhibited. Again, the teacher is seen as the expert who is completing the rating scale with objectivity. One cannot be sure that this is actually taking place and that the diagnosis is correct. It is difficult to discount the subjective nature of the rating scales which are impacted by the norms in place in the institution of school.

Pinar (2004) points out that, "Subjectivity is cultural, and the cultural is subjective" (p. 129). This reminds me that the decisions educators make in the classroom (or on rating scales) is impacted by their understanding of what they *believe* school and education should be like. Each teacher could have his/her own opinion in this regard. Bottom line is cultural issues are established according to opinions on what one believes things should be like, and opinions are

subjective. This subjectivity could influence the decisions that are made in the classroom related to children.

Teachers with different teaching styles and different behavior tolerance levels are going to fill the form out differently. Someone who teaches traditionally with very few opportunities for hands-on experiences will view student behavior differently than teachers who incorporate hands-on activities. Students who exhibit characteristics of ADHD typically perform better in non-traditional classrooms where activities are offered which incorporate hands-on approaches.

At the middle school where I teach, we are required to attend team meetings. During these team meetings, administrators require the teachers to discuss academic progress of the students on our team. It is not unusual to be discussing a particular child and his behavior and hear from one or two of the teachers, "I don't see those behaviors in my room", or "He does not give me any trouble". When conversations such as this evolve, I wonder how a child can be so different from one class to the next. Many factors influence a child's behavior in class beyond psychological issues. One such factor is time of day. Some children are more likely to do better in morning classes, while other children perform better in the afternoon. Also, the relationship a student has with a teacher can be very influential in determining the types of behaviors a child exhibits. Most children try harder, behave better, and perform at a higher level in a class where the teacher has clear expectations and shows a mutual respect for the students.

Using the current diagnosis procedures, children who are not ADHD could be diagnosed with the "disorder", and children with the "disorder" may struggle in school and never be diagnosed. Because the diagnosis criteria is currently subjective, there is a fine line between a normal child exhibiting changes in mood and liveliness, a lively child that is easily distracted, and a child who truly has a "disorder" that he cannot control.

EXPLORING ADHD AWARENESS

There are many theories in current research addressing the possible reasons why we are seeing larger numbers of students in our classes with the ADHD label. One of the most prevalent explanations found in the research is a wider awareness of the problem. Mander (1978) in Pinar, et al. (2004) notes that "the environment in which we live has been totally reconstructed solely by human intention and creation… Living within artificial, reconstructed arbitrary environments that are strictly the products of human conception, we have no way to be sure that we know what is true and what is not. We have lost context and perspective. What we know is what other humans tell us" (p. 473). Our society has numerous ways to promote awareness of such a problem, and Mander (1978) supports the notion that we tend to believe what we hear and are told, especially when the information comes from trusted people such as teachers and doctors. Schools, as a product of human conception, have established norms related to behaviors and expectations that are accepted without question.

Culturally and without question from many people, ADHD seems to be an accepted and expected diagnosis for attention problems and distractibility. Our society seems to have impacted our understanding of this "disorder" through interactions between teachers and parents at schools, drug advertisements that are seen on television, and parents talking to each other about their children. This level of contact between individuals involved in the diagnosis process may support Livingston's (1997) notion that states that "the most innocent explanation is that as teachers, and to some degree parents as well, have become better educated about this problem, they have tended to seek professional help when signs of ADHD are first detected" (p. 15). People in society tend to gain information, when needed, from the people in which they have the most accessible level of contact. For parents looking for information about their child's attention

problems, the teachers, the child's doctor, and the media provide information that could lead to the answers for the parents.

Inquisitive parents account for a portion of the increasing numbers of children diagnosed, but America's educators seem to have a certain level of responsibility related to the increasing numbers as well. States have revised curriculum and increased accountability while stressing outcome-based programs. Most states in the country require tests to exit selected grade levels and tests to graduate from high school. These new requirements hold the teacher directly accountable for the performance of each child in the class, regardless of IQ or motivation. This new level of accountability seems to have changed the way in which teachers react to and support children with ADHD. Jardine (1998) points out that,

> In all of this, we render children into strange and silent objects which require of us only management, manipulation, and objective information and (ac)countability. Children are no longer our kin, our kind; teaching is no longer an act of 'kindness' and generosity bespeaking a deep connectedness with children (p. 7).

The *art* of teaching seems to have become the *business* of teaching with very little room for creative design. Teachers must show gains on tests that the children take or answer as to why there are none. This may seem to be a very overwhelming task for some teachers because of the number of children in the room with differing abilities.

Even with all of the expectations, pressure, and stress teachers are expected to meet the needs of all children in what can be a diversified classroom with students having multiple levels of abilities. "Teachers now become desperate seekers after anything that will enable them to improve the child's performance to the mandated level" (Livingston, 1997, p. 16). Strategies such as small group assessment, allowing extra time, or giving frequent breaks are not allowed

for non-labeled children in a standardized testing situation. Without documented differences, either ADHD or learning disabled, the teachers have limited control over the changes that can be made for the testing environment.

Testing is not the only instance providing stress on today's teachers. Classroom management is also a struggle for today's educators with some teachers being told that the performance of the students in their classrooms has been impacted by poor classroom management skills. Also, school systems have a limited repertoire of consequences that can be used to deter the negative behaviors exhibited in the classrooms. Livingston (1997) explores the possibility that limitations in the schools related to behavioral strategies has led to the temptation to " suggest that the ADHD diagnosis for regaining control of the classroom" (p. 17) is used. Jehlen (2008) supports Livingston's argument and adds that "critics say that drugs are often a substitute for skilled classroom management in school and conscientious parenting at home" (p. 34).

Research also suggests that the number of students with ADHD has increased simply due to changes in the Diagnostic and Statistical Manual of Mental disorders from version III to version IV. Were there pressures in society that caused the changes in the manual related to an ADHD diagnosis? Who in society benefits the most from the changes…the kid, the parents, the teacher, the school, the drug companies? Regardless of the reasons, the DSM-IV "reduced the number of symptoms required to meet ADHD criteria from eight to six, a subtype limited to symptoms of inattention was created, and a residual category 'ADHD, not otherwise specified' was added for which prominent symptoms that do not meet full ADHD criteria" (American Psychiatric Association, 1987, p. 518). With fewer symptoms necessary to meet the criteria, more students are receiving the ADHD label. Whether or not the above theories are accurate in

describing the reasons why more students have received the ADHD diagnosis, the increasing numbers seem to have influenced the increasing number of students receiving medication for treatment.

Medicating children seems to have prevailed as a quick fix for problem behaviors at school in our society. Because of this, many teachers and parents do not seem to question this mode of treatment and accept the diagnosis because that is 'just how things are'. What some people do not understand is that the "drug simply makes the child more manageable and better able to work to the level of the system's expectations. It does not seem to produce long-term changes in cognitive functioning" (Livingston, 1997, p. 17). Other research studies have supported these findings. "In fact, in seventeen studies reviewed, 83.6% of children were unaffected by medication in academic achievement testing" (Ballard, 1997, p. 15).

Are drugs the answer to the multiple problems some children exhibit in schools? Do educators want all children sitting quietly in their seats which are organized in nice, straight rows? Most teachers would like to see students who are inquisitive and curious – not little robots sitting in the classroom with glazed over looks on their faces. Education should provide an opportunity for children to learn how to learn so that they can continue to be studious long after their traditional education is complete. Unfortunately, the need to have efficient, orderly classes could possibly have led teachers to be willing to accept medication as a mode of treatment since this seems to be a quick and immediate fix.

To further develop the ADHD diagnosis criteria and understand the reasons why more students have become labeled ADHD, the next section will discuss 'normalcy'. I have always wondered how some students end up with the ADHD label and others do not. Is it appropriate that doctors, teachers, parents, and the DSMIV are allowed to determine where the fine line is

drawn in the sand that must be crossed to put a student on 'the other side'? There are days in my classroom when students who are supposed to be 'normal' do not pay attention to the lesson. How much of the attention issues in class are caused by boredom or lack of interest? It is overly optimistic to think that teachers are going to engage all students every day during all lessons. That is just not realistic. Students have different interests, different backgrounds, and different experiences before they leave the house each morning. All of these factors can influence a child's behavior, and in turn, influence an ADHD diagnosis.

Hayles (2007) describes ADHD in another way and may prove to be connected to the way many schools conduct business and many teachers teach. The current educational system in the United States makes determinations about a schools effectiveness based on how well students perform on mandated standardized assessments. This type of learning may create an environment which does not promote enthusiasm on the part of the students. Hayles (2007) states that ADHD might also be called 'the search for stimulation' disorder. The above characteristics noted in the Diagnostic and Statistical Manual of Mental Disorders (4^{th} ed) as symptoms like not paying close attention to detail, having trouble maintaining focus, avoiding tasks that require large amounts of mental concentration, and organization should not be understood as misbehavior but as the search for additional stimulation than the task at hand creates. Many times, the students search for additional stimulation by looking out the window, fidgeting, or by talking with nearby children (p. 191).

WHAT IS NORMAL?

Do students labeled with a 'disorder' or mental illness feel trapped and insignificant – somewhat unimportant? Gilman (1995) in Morris (2008) points out that,

> [s]ince the early 19th century being ill meant being subhuman . . . illness is understood in the medical (and pathological) literature of the 19th century as dependent in the definition of the normal. The healthy are the baseline for any definition of the acceptable human being, as if the changes of the body, labeled as illness or aging or disability, were foreign to the definition of the 'real' human being (p. 9).

Even with the understanding that students struggle with labels, our culture seems to be comfortable with educators and parents finding problems with students rather than looking for areas of strength that a student can rely on to be successful. Does this label make students feel subhuman? Is it in the child's best interest to place such a label on him/her?

Since the method of diagnosis for ADHD is based on the opinion of teachers and parents, the tolerance level of the adult becomes a factor in the diagnosis. Most children exhibit most of the behaviors on the rating scales some of the time. Children, by nature, do not pay attention all the time, fidget when asked to sit still for long periods of time, and can at times be impulsive. Adults can be that way too. Go to any faculty meeting taking place in the afternoon after a long day of school and look around the meeting room. The teachers will either be grading papers, talking to their neighbors, or checking the clock planning for a quick exit. Obtaining an ADHD diagnosis can be the result of one bad teacher at one grade whose tolerance level is very low. Because of these issues, this next section will discuss the concept of normalcy. When I reflect on my past school years, I remember the number of students in each class with some sort of label: 504, LD, MID, ADHD, autistic, bipolar, gifted, or some combination of each. Jokingly, I have asked my colleagues if there are any 'normal' kids left in public schools.

The difficulty with a response to this statement is that the answer would have to rely on another question: What defines normal? Looking around a typical public school classroom in the

United States, teachers see differing genders, multiple races, blondes, brunettes, brown eyes, blue eyes, green eyes, small stature, large stature, etc. These qualities are outward visible differences one can see upon making a casual visual scan of the students on the first day of school. As the school year progresses, teachers begin to see qualities making each child even more unique. From economic status to IQ, no two children are alike. With accountability at the forefront of every conversation in public schools, academic efficiency has created a need for all students to conform to what is considered to be acceptable or normal behavior in a classroom. This can equate to a square peg fitting in a round hole. No matter how hard the system tries to make all students conform, some students' differences are too pronounced to overcome. Once teachers tried behavior modification strategies; now, the emphasis is on drugs.

Once a child obtains the ADHD label (or any label), the child is associated with all of the negative connotations that come with that label. In a society of norms, individuals with differences are looked upon as humans who need to be fixed. Educators seem to not truly understand how to accept the differences and challenges associated with teaching children with limited attention spans or other intellectual problems. This lack of understanding could be attributed to some teachers having generic expectations on a child based on a label. When a child receives a label, s/he begins to lose his/her individualized identity. S/he begins to be known by the label and the characteristics associated with the label. "We are constantly being named by different names which add up, disappear, accumulate, and so on" (Derrida, 1985, p. 105). These numerous and different labels come with understood cultural beliefs that have institutionalized our thinking about what to expect from an individual. The beliefs influence how a teacher interacts with the students in his/her class. The characteristics associated with a label may be placed on a child before the teacher even meets and observes the child.

Attaching a label to a child diminishes his identity even more because he has been grouped with every other person diagnosed with the same "disorder". Once this grouping takes place, certain behaviors are expected even if they do not exist. Students become everything that ADHD suggests (whether they exhibit the behaviors pervasively or not). Parents and schools must be careful when accepting this medical "disorder" and assuming certain behaviors will be seen. "Medical perceptions must be directed neither to series nor to groups; it must be structured as a look through a magnifying glass, which, when applied to different parts of an object, makes one notice other parts that one would not otherwise perceive, thus one would not otherwise perceive, thus initiating the endless task of understanding the individual" (Foucault, 1977, p. 15). Foucault describes the importance of looking more closely at an individual in terms of a medical examination. Teachers could benefit from the same 'closer look'. In the classroom, teachers may benefit from taking the time to get to know each child before passing judgment based on a previously assigned label. Some students will display many of the characteristics associated with a certain label, but not all children will display all of the characteristics of the label. How many educators fall for the stereotypes associated with the different labels found in each classroom? Even though children do not want to be perceived as different, the reality is that they are! How far from "normal" does a child have to stray and for how long for a special education label or ADHD label to be placed upon him? Educators should possibly question society and the medical community as to what they are trying to create and sell. Commercials show happy children doing schoolwork. In a very short segment, viewers are led to believe that children can be made more productive and successful by taking medication. The ADHD characteristics given in the commercial could possibly be generalized to most children in schools today.

The issue of labels is very important to the middle school children I teach. These students normally do not like to be perceived as different. They try very hard to belong and do not like connotations associated with a label. They want to be like everyone else. McDougall (1989) points out that, ". . . the wish to rid oneself of one's essential otherness, of both body and mind, in order to fuse with the primitive mother universe, persists in the heart of every human being" (p. 35). It becomes very important for the child to "fit in". The child's identity and how others perceive him/her are vital to children at this age.

The challenge for young children is to determine what one's identity is. Too often, children do not have very good role models in society to imitate. Our young people look up to sports figures, yet many of the famous sports figures are accused of taking steroids to enhance performance. It seems as if society is talking out of both sides of its mouth. Children are told it is not acceptable to take medication for athletic performance, but some of the same students are drugged to succeed in school. For example, an athlete who takes steroids does not intend for anyone to find this out that s/he is doing it because it is an illegal practice. Likewise parents give the medication to kids before arriving at school so that children do not have to answer to their peers regarding the need to take medication. When people take drugs to mask a problem, they usually do not want other people to know. Drugs have become a means for survival for some in this society.

Will the newly medicated individual be a true reflection of his/her non-medicated counterpart? The drug may cause the person taking it to portray himself differently than who s/he really is. The medications we take may mask who we really are, and others may not get to know who our true selves. Our students who are medicated in our classrooms each year may not be displaying their true selves either. They may have been medicated for such a long time, that

they may not even realize who they truly are when not medicated. These labels that lead to medication can have a detrimental effect on how the child views himself and the perceptions of the child's abilities from others.

Schools become uncomfortable places for these children. Their differences make it very difficult to feel as if they belong. Many American schools incorporate traditional teaching models where a teacher stands in front of the class and presents material, and the children are supposed to sit in their desks like nice little children and soak up the knowledge immediately and willingly. This creates a power struggle where the child has to conform or be disciplined. Pinar (1995) points out that,

> Perhaps the child has failed to transfer his dependence to the teacher; assume he has little need to identify himself via another. Assume he still wants to succeed. He must be obedient, but he need not believe in what he does. He comes to view the schooling process as a game, with a myriad of rules to follow in order to win, and himself as a player (p. 376).

Pinar describes a situation in education that exists at all levels – form kindergarten to college. Students at all ages must figure out how to 'play the game'. Students have to complete all of the required tasks even if they seem menial at best in order to complete the class and pass.

Many children are not successful, unfortunately, because they have a very difficult time conforming to the traditional school setting and traditional class requirements such as these. It may have nothing to do with the child's ability to learn, but s/he may not agree with the process of school and its rules. Collins states that "many students perceive school success solely in terms

of absorbing what their teachers want them to repeat back to them. Sadly, many teachers and school personnel interpret their jobs in a similar fashion" (Collins, 2009, p. 28).

Educators have entered an era of accountability, and students are suffering as a result.

Accountability has created an atmosphere in schools where data through testing is used to determine abilities and weaknesses for students as well as job performance for teachers. Using data is not a bad thing, but when state mandated tests are used to determine whether or not a teacher has been successful the teachers get very anxious and worry that the data could be misconstrued. Very often, the teachers who seem to generate better test scores are given the students who struggle the most. It would not be unusual for this teacher to feel intimidated because her performance evaluation could possibly be based on how well her children perform and the lowest performing children may not perform as high as the administration in the school would like. Because so much emphasis is placed on test scores, much of the school day is planned around making sure the students are as prepared for the tests as possible. This atmosphere could be described as discouraging – at best, and many teachers who have taught for a number of years are not happy with this change of course in schools. Pinar (2004) points out that,

> Because the public sphere – in our case, the classroom – has become so unpleasant for so many, not a few teachers have retreated into the (apparent) safety of their own subjectivities. But in so doing, they have abdicated their professional authority and ethical responsibility for the curriculum they teach. They have been *forced* to abdicate this authority by the bureaucratic protocols that presumably hold them 'accountable,' but which, in fact, render them unable to teach. (Instead, they are supposed to 'manage learning.') (p. 3)

How has education arrived at such a place? What will be the outcome of education if schooling continues to be so driven by test scores? What is it going to take to make the political officials who are making the mandates understand how they are impacting the perception of education for teachers and students?

This increased attention to the tests has trickled down to the perceptions of school for students. Last year, one of my students informed me that the only reason she had to come to school was to learn how to pass the state mandated spring tests. I was alarmed and disappointed by this comment because I try to encourage skills to create a love of learning in my classroom. It is very hard (as a teacher) though to teach without that constant worry of the upcoming tests nagging on my thoughts. One topic of conversation at my end of the year evaluation conference is the test scores of the students I taught that school year. If my scores were not 'up to par', I could be expected to create a plan to have better scores the next year. This saddens me because my students end up truly believing that school is only all about the tests as I continue working under the pressure of trying to ensure that all of my students 'meet the expectations' on a minimal level state mandated test.

Because of these discrepancies, I have been interested in exploring the idea of normalcy. What makes a person 'normal'? Since we all have unique qualities, is there possibly no normal human being? Lennard Davis' work on normalcy will be used to help explain this concept. Davis (1995) in *Enforcing normalcy: Disability, Deafness, and the Body* discusses the idea of creating norms.

> We live in a world of norms. Each of us endeavors to be normal or else deliberately tries to avoid the state. We consider what the average person does, thinks, earns, or consumes. We rank our intelligence, our cholesterol level, our weight, height, sex drive, bodily

> dimensions along some conceptual line from subnormal to above-average. We consume a minimum daily balance of vitamins and nutrients based on what an average human should consume. Our children are ranked in school and tested to determine where they fit into a normal curve of learning, of intelligence. Doctors measure and weigh them to see if they are above or below average on the height and weight curves. There is probably no area of contemporary life in which some idea of a norm, mean, or average has not been calculated (Davis, 1995, p. 23).

Davis describes how norms are constructed by 'experts' in the field. It is the patients/students/humans that fall close to the cut score that have always concerned me. Within the norms, there are ranges that would be considered normal. So, a person would not have to have exactly a 100 IQ to be considered normal/average. A person with an average IQ could range from 85 to 114. Therefore, a person who scores 84, just one point below 85, would not be considered to have average intelligence. Because a student with a score of 85 is considered to be average (even though it is low average), would you expect him to perform better on class work than a student who scores and 84 (which is considered below average)? On a better day or in a better testing environment, the student who scored an 84 might actually score higher. Is it fair that so much emphasis is placed on an IQ score when tests could be believed to be flawed with racist, classist, and sexist history? Originally when IQ tests were created, society was accepting of them because they seemed to reinforce the belief that the descendants of the English and Germans were a superior race. Spring (2001) points out that "the popularity of the new intelligence tests among some Americans was that they seemed to confirm the racial superiority of the English and Germans. Also they seemed to confirm to Anglo-Americans that Native Americans and African Americans were inferior races" (p. 297).

Not only did the tests seem to define a superior race, but they also helped promote the notion that people should be directed to a certain path in life based on intelligence determined on a test. This path was further emphasized in schools as students were routed into programs based on ability. "In the eyes of the leaders of the measurement movement, the role of the school was to build correct social attitudes, select individuals for their places in society, and educate them for those places" (Spring, 2001, p. 302). Even though these practices existed earlier in education's history of IQ testing, current practice still allows a student's IQ to determine whether or not he is appropriate or not for school programs and careers. Since these tests seem to be culturally and gender biased, how fair is it to base a child's educational placement and life path on a test score

Not only are decisions made about a child's placement based on test scores, but some teachers are developing preconceived notions of a child's ability *before* s/he even steps foot in the classroom when looking at test scores from a previous school year. I wonder if teachers would treat students differently if they started the year *without* all of the information from testing and previous teachers. Too often, opinions are formed related to a child's abilities based on data from previous schools/teachers. Normally children perform up to the expectations set forth before them. If the expectations are low because of a label, the child will possibly perform at that level. They become complacent when assigned tasks that represent minimal expectations.

The reality is we live in a society bound by norms, and we try to make students fit the mold of public education. Some teachers boast about teaching the individual child and differentiating instruction, but when the classroom door shuts, most teach a single lesson to a whole group of students because that is what is easier. Teachers tend to teach to the middle, or average student. At the end of the lesson, the teachers will move around the classroom looking

for students who need help. This seems to serve the needs of most of the students in the class. Often, in a class such as the one described, slow students will probably either not participate or misbehave. The misbehavior serves as a shield for the student, and his classmates will probably not know that he cannot do the work.

With norms come quantifiable numbers to use to diagnose mental "disorders" as well as medically diagnosed illness such as high blood pressure, high cholesterol and extremes in height and weight, average daily caloric intake, and many others. A behavior/human characteristic that causes one to fall out of the normal range of expected levels would increase the chances of that person receiving a label. At some point, experts in the field had to determine the numbers that would exemplify normal ranges for the disorder/disease being explored. Porter (1995) states that,

> Mapping the mathematics onto the world is always difficult and problematical. Critics of quantification in the natural sciences as well as in social and humanistic fields have often felt that reliance on numbers simply evades the deep and important issues (p. 5).

One problem with relying on numbers to diagnose is that you can make numbers say whatever you want. If more students need to pass a standardized test than did a year earlier to demonstrate improvement in a program, a new cut score can be determined to allow more students to make the mark. Does this mean more students are doing better? Possibly not. It may mean that the passing score was not as high, but the innocent observers on the outside would not know any better and would assume improvement. "By now, a vast array of quantitative methods is available to scientists. These have become extraordinarily flexible, so that almost any issue can be formulated in this language" (Porter, 1995, p. 5). Normally, numbers do not lie…it is the variable way the numbers are used that can possibly cause the truth to appear stretched.

After the rigorous qualifying process is complete – whether medical or educational – the label is assigned. No label comes without consequences… with high blood pressure comes higher insurance rates, with a high IQ comes a gifted label and all of the opportunities associated with being gifted, and an average IQ with other mental discrepancies can prompt an SLD (specific learning disability) label. This is, of course, not a conclusive list. More associations in our society can be named. Some diagnoses are lifesaving changes. For instance, if a person is diagnosed with diabetes, he would have abnormal insulin levels. Medication can be given to control the abnormal levels so that he can live a normal life. With modern technology, many diagnosed disorders are treatable within the realm of the medical community. Davis (2002) notes that the medical community has now moved beyond just making sick people health and treating individuals with enhancements so much that "the body is increasingly becoming a module onto which various technological additions can be attached. The by-now routine glasses, contact lenses, and hearing aids are supplemented by birth-control implants, breast implants, penile implants, pacemakers, insulin regulators, monitors, and the like" (Davis, 2002, p. 27).

This concept that Davis describes seems to give credence to the tremendous impact that society has on our cultural beliefs. Individuals seem to be so interested in appearing 'normal' that they are willing to seek medical help for enhancements that are not required to sustain life but provide an opportunity for a more socially acceptable image. These changes to our bodies have become a huge business in this country. Since so much emphasis is placed on being normal, businesses have profited by developing products that will make our bodies appear and perform in what is expected to be the normal range. Davis (2002) addresses the profitable side of this new disability industry and the possible ethical consequences when large amounts of money are at stake.

> There are obviously huge economic advantages to the creation and maintenance of the disability industry. It is important to recall that since huge financial commitments are being made to the abnormal body, the ethics involved in the distribution of resources and the shaping of the industry is a major part of our approach to an ethical society (Davis, 2002, p. 28).

In comparison, the decisions regarding the best plan for the students with disabilities and the distribution of the available resources requires ethical decision making as well since the decisions are made by educators, most of who are not disabled themselves. It is very difficult to understand fully the impact a disability has on a person unless that person has the same disability. Many educators spend a great deal of time trying to 'fix' the children in their classes who do not behave or perform within a "normal" range. Davis points out that "…disability disturbs people who think of themselves as nondisabled. While most liberals and progressives would charitably toss a moral coin in the direction of the lame, the blind, or the halt, few have thought about the oppression committed in the name of upholding the concept of being 'normal'" (Davis, 2002, p. 38). It seems to be human nature to attempt to fix whatever is 'wrong' with an individual that would make him different from everyone else.

Creating norms in our society has impacted America's students and our society has influenced the beliefs regarding normalcy through culturally impacted decisions such as the criteria and qualifications for labeling a child with ADHD. Not only have the norms put in place by society impacted education, but they have also impacted the medicalization of the disorder. The next section will address this research.

ADHD AND SOCIAL MEDICALIZATION

Socially constructed illnesses become medicalized so that treatment for the disorder can involve a medication prescribed by a doctor. ADHD has become one such disorder. Davis (2002) points out that "fidgety children were not considered to have impairments until ADD began. Is the impairment bred into the bone, or can it be a creation of a medical-technology pharmaceutical complex" (p. 23)?

To answer these questions, research related to medicalization will be explored. "Most medicalization studies focus on how nonmedical problems become defined as medical problems, usually as illnesses or disorders" (Conrad, 1992, p. 559). When a student is suspected of having ADHD, he is taken to a medical doctor for diagnosis. I always found this to be odd, since there is no medical test to check for ADHD. With diabetes, for example, the insulin level can be checked from a sample of blood and this gives the doctor enough information to diagnose the illness. There is no such test for ADHD. The physician has to rely on rating scales with subjective answers by teachers and parents. ADHD is not the only "disorder" that has been "medicalized" or fallen under the care of a medical doctor. Conrad (1992) gives examples of additional disorders that are considered medicalized deviances: " madness, alcoholism, homosexuality, opiate addiction, hyperactivity and learning disabilities in children, eating problems from overeating (obesity) to under eating (anorexia), child abuse, compulsive gambling, infertility, and transexualism, among others" (p. 213). The common factor with all of these disorders is the lack of a definitive medical test that can be done to prove whether or not a patient has the disorder. The medicalization of the disorder has occurred because many times the expected treatment is medication. This belief seems to have been reinforced by society and

our cultural beliefs. The only way a patient can achieve this is to visit a medical doctor capable of writing a prescription.

There are two types of ADHD medications used at this time. The most common type is a stimulant such as Ritalin, Concerta, and Adderall. This group of drugs revs up the body. It seems as if this would be the last thing that children with ADHD would need, but it has been found that stimulants have the opposite effect on people with this "disorder". Antidepressants are also used to treat ADHD. Currently Strattera is the drug in this class that is used for children. When taking Strattera, the levels of norepinephrine are elevated in the brain. This is done by keeping the proteins that carry norepinephrine from absorbing any of the neurotransmitter (Sheen, 2009, p. 37). This drug was marketed stating the child would have fewer side effects which sounded better to many parents.

Medicating for treatment has become a controversial issue related to the medicalization of ADHD and other "disorders". The use of medication to treat ADHD has increased in this country during the last decade. "Recent studies have shown that 7 – 10% or more of America's school-age children are being prescribed stimulant drugs to control their behavior, and the actual figures may be higher" (Breggin, 2001, p. 3). This leads to a question regarding the use of stimulants in children: Which came first, the condition or the medication to treat it? To receive the medication, a prescription is necessary since most of the drugs used to treat these "disorders" are considered to be narcotics and not sold over the counter. To get a prescription, a person has to see a doctor. To see a doctor, the ailment must meet the qualifications of a medical condition; therefore leading to (or supporting) the medicalization of the "disorder".

Medicalization of mental "disorders" such as ADHD has created a whole new market for pediatricians. Patients are visiting pediatricians for treatment of mental illnesses – not just physical ailments. This new area of medicine for pediatricians is described by Conrad (1992). He explains that "the new 'behavioral pediatrics' enabled pediatricians to maintain and enhance their medical dominance by expanding their medical territory" (Conrad, 1992. P. 215). This new market for pediatricians has increased business in an economy where the bottom line is important and every patient contributes to the money the doctor earns. It definitely helps business when a patient cannot get a prescription drug without visiting his doctor.

With stimulant pharmaceuticals used as treatment the majority of the time, patients are not hesitating to make the necessary appointments to receive them. Also, because the drugs are narcotics, refills cannot be issued on a prescription. This means that the patient has to return to the doctor every thirty days to be evaluated in order to receive a new prescription. Most of the time, nothing has changed and the appointment is a formality necessary to receive the new prescription.

ADHD AND GENETICS

The increased exposure in the medical field has led to current brain research and genetic studies. Two important findings are consistent in the research: smaller brain size in patients with ADHD and lower levels of dopamine released in the brains of patients with ADHD. One such study was conducted by the National Institute of Mental Health. This study was completed over the course of ten years from 1992 to the year 2002. MRI (magnetic resonance imaging) of the brain was done on 152 children with ADHD and compared to 139 children of the same gender and age who did not have ADHD. Over the course of the study, the children had their brains scanned two to four times. Researchers found 3 to 4 percent differences in the sizes of the brains

of the children with ADHD. All regions of the brain were explored and the size differences were consistent across brain regions. Children with ADHD also had a lower volume of white matter in their brains than the children without ADHD (Sheen, 2009, p. 18). White matter in the brain consists of the tissue between the areas of gray matter through which messages pass. It is like the computer networking system of the brain with the gray matter being the actual computers. It appears to be white because of the myelin that surrounds the axons.

Can one actually determine a person's likelihood of having ADHD by looking at brain size? Has enough research been done in this are to determine conclusive results? At this time, I would have to disagree with this study. Even though this study is inconclusive at best, it is encouraging that researchers are looking for biological answers to the ADHD question of diagnosis which could lead to a more trusted method of diagnosing ADHD. Current diagnosis relies on the opinions of the adults working with the child: his parents, his teachers, or other adults in his life.

An additional study in brain research was conducted on nineteen adults with ADHD. Their brains were compared to scans performed on twenty-four adults without the "disorder". The scientists found that less dopamine was released into the brain pathways of the adults with ADHD. Dopamine is a catecholamine neurotransmitter that helps with the synapses in the brain. In the body, epinephrine and norepinephrine are in the catecholamine family. These hormones help control our response to situations and control stress. It is believed that the reduced dopamine levels hinder the person's ability to stay focused and perform tasks that require additional focus. Findings from studies such as this have been used to support the need for drug therapy for ADHD. Stimulants are the main drugs of choice for treatment of ADHD. These stimulants are believed to increase the neuron activity in the brain which allows the individual to

focus or to maintain focus. Additional research is being conducted to find out if certain medications work better on different people based on genetic make-up. These studies will be very informative in the future when deciding the best treatment for individuals suffering from ADHD. It has been difficult to find conclusive results because other factors can influence whether or not a person has (or will develop) ADHD symptoms. For example, mothers who smoke or drink during pregnancy will give birth to babies that are two-and-a-half times as likely to develop ADHD. Even with staggering statistics such as these, mothers continue to engage in activities dangerous for their infants (Sheen, 2009, p. 19).

The current research conducted is done in an attempt to answer some of the difficult ADHD questions such as what are the root causes and what is the best treatment. Now, studies are being done to see whether or not there are genetic differences evident in a person's DNA that could conclusively allow a doctor to pinpoint the cause of ADHD in an individual leading to a more accurate diagnosis. Early studies began by looking at families with children diagnosed with ADHD. One such study was conducted at Massachusetts General Hospital in 1991. This study compared families who had children with ADHD to families of children without the "disorder". Results showed that children with close family members (immediate family – such as birth parents and siblings) have a five-time greater chance of having ADHD than children who have no close relatives with ADHD (Sheen, 2009, p. 29).

With such a study, the findings were informative but still could not rule out other factors. Socio-economic status, severe illnesses, head injuries, familial relationships, and single parent homes could also cause a child to exhibit ADHD symptoms. Even though there may seem to be a correlation between ADHD characteristics, genetics, and some of the factors just mentioned, there cannot be a conclusive causality relationship established. A cause and effect relationship

would describe a situation in which one occurrence would be directly related to a previous action. For example, even though some students live in single parent homes, they may or may not have ADHD characteristics. If they do, one could not conclusively say that the reason for the ADHD characteristics is because the child lives in a single parent home.

With other factors influencing symptoms, can one establish a definitive genetic connection to an ADHD diagnosis? A recent study has shown that when one parent has ADHD, the child's chance of having ADHD is between 30 and 50 percent. This percentage rises to above 50 percent if both parents have ADHD. Also, the child's chances of having the "disorder" is between 32 and 41 percent if a sibling has the "disorder" compared to an 82 percent chance if the sibling is an identical twin (Sheen, 2009, p. 29). These statistics suggest genetic connections, and further research will continue to be done. In addition, adoption studies have been conducted with results showing that the relationship runs more strongly in genetic families than in adopted families. These findings still do not conclusively determine that ADHD is genetically predetermined. If genetics were the sole reason for ADHD symptoms to exist, monozygotic twins would be 100 percent, like other physical characteristics such as hair and eye color. It does mean, however, that there may be a predisposition in the wiring of the brain that is a result of the genetic blueprint which causes the symptoms and actions that lead to an ADHD label (Livingston, 1997, p. 6).

Genetic research in ADHD diagnosis and treatment has become global. This "disorder" is not unique to the United States even though medication for treatment is much more prevalent in this country. To take the research a step further, scientists have started looking at DNA for similarities and differences among family members in an attempt to isolate a DNA strand that can be linked to ADHD symptoms and diagnosis. Researchers in Europe, South America, Asia,

and North America are participating in an ongoing study known as the IMAGE Project with hopes to identify genes that are common to individuals with ADHD. The scientists participating in this study are analyzing DNA taken from fourteen hundred families. These families must have at least two children between the ages of seven and eighteen, and at least one of the two children must have an ADHD diagnosis. Family members carry many common genes, so the scientists are looking for gene variants or mutations that members of the families with ADHD carry that the other family members do not. They are also exploring the genes of the other children to determine whether these gene variants are evident in their DNA (Sheen, 2009, pp. 74-75).

This project is still in the research phase. It will be interesting to view the findings once they are available. If it is possible to find a common DNA strand responsible for ADHD symptoms, physicians and parents will be able to identify and treat the "disorder" more easily. Since the findings have not proven to be conclusive, theories are being formed regarding the presence or absence of certain genes and the connection these genes have with ADHD symptoms. At this point, four genes variants have been identified in people with ADHD. The genes are DAT1 (the dopamine transporter gene) and SNAP 25, DRD4, and DRD5 (all dopamine receptor genes). These genes are involved in the production and release of dopamine. Scientists have not found one gene variant that is the same in every child with ADHD. Also some family members without ADHD exhibit one or another of these genes. This has led scientists to believe that it is not any one of these genes alone that causes ADHD. They have theorized that an individual having one of these genes may be more susceptible to having the "disorder". The likelihood of having ADHD is believed to increase as the number of variant genes increases (Sheen, 2009, p. 75).

This test will not definitively predict whether or not a child will have ADHD but could reveal that a child may have a predisposition toward the "disorder". Parents could take this knowledge and implement strategies that would minimize the intensity of the "disorder" before severe symptoms develop. Such activities could include, but not limited to, behavioral therapy techniques, physical exercise, and child structuring strategies (Sheen, 2009, pp. 75-76). The knowledge of a predisposition should be managed though. A predisposition is not going to conclusively determine that the child will develop the disorder. The notion of predisposition is used more readily in the medical field today. Tests are conducted in the doctor's office that are supposed to be able to tell whether or not a patient has the likelihood of developing diseases later in life such as cancer. Drastic stories are told of female patients having complete mastectomies when tests reveal a likelihood of breast cancer later in life even though they cannot be completely sure they will develop the disease. It is understood that ADHD is not as serious as cancer, but using the notion of predisposition for any disease/disorder could lead to possibly unnecessary treatments.

EXPOSURE TO MEDIA/TELEVISION

Hayles (2007) and Stiegler (2010) have another theory to help explain why we are experiencing a larger number of children today with attention problems. According to the two scholars, how long a child is able to attend to a task has diminished because of the amount of time very young children are exposed to television in our society. Culturally, television seems to have become infused into our family structure. Some would describe television as a 'baby-sitter' for busy parents while at home. Stiegler (2010) states that "in the United States, at the age of three months 40% of babies regularly watch television, DVDs, or videos. The percentage passes 90% for two year olds" (Stiegler, 2010, p. 56). He also describes a study that was conducted in

2007 by Frederic Zimmerman and Dimitri Christak. This study revealed a heightened risk of developing attention deficit disorder before the age of seven if a child between the ages of one and three has increased exposure to television (Stiegler, 2010, p. 56).

Stiegler relies on the research of Hayles (2007) to help explain this phenomenon. Hayles states that

> the brain's plasticity is an inherent biological trait; human beings are born with their nervous systems ready to be reconfigured in response to the environment. While the number of neurons in the brain remains more or less constant throughout a lifetime, the number of synapses – the connections that neurons form to communicate with other neurons – is greatest at birth. Through a process known as synaptogenesis, a newborn infant undergoes a pruning process whereby the neural connections in the brain that are used strengthen and grow, while those that are not decay and disappear (Hayles, 2007, p. 193).

Hayles agrees that there is evidence that ADHD has genetic causes that are related to the brain's ability (or inability) to transport dopamine, but she also states that this genetic predisposition can express itself differently depending upon the environmental factors that have influenced the brain development. She also states that children who grow up in media-rich environments have brains that are wired differently from those of people who did not grow up under these same conditions. (Hayles, 2007, p. 192 - 193).

With the impact that television has demonstrated on the development of the brain, it is unsettling that so many infants and children and watching 4 – 5 hours of television a day. Stiegler also describes the impact that increased television watching has on adults and little that anyone can do about the amount of television that most people watch.

> …television is of course present in every corner of the globe, and the psychosocial state of the world is equally ubiquitously – in the United States, Europe, China, India, and so on – being overtaken by a colossal deficit of attention, an immense neglect in the form of a global attention deficit disorder, stemming directly from the proliferation of psychotechnologies that no political power can now control. Perhaps worse, this situation has been transferred to the professional adult world as the cognitive overflow syndrome, the cause of a regression of intelligence, and proliferation of modes of consumption that are increasingly destructive to the planet's future (Stiegler, 2010, p. 57).

There does not seem to be any way to change the amount of television that people watch, so – assuming this research to be true - educators must realize that children are going to continue to come to school with brains that have been wired differently. Increased exposure to television makes children better at attending to multiple, fast paced activities. They are going to less likely to attend to activities that require deep attention. Hayles refers to this type of attention as hyper attention. Jobs such as air traffic controllers would benefit from a person who has the ability to exhibit hyper attention. These people can attend to multiple tasks at one time (Hayles, 2007, p. 187). The research conducted by Hayles and Stiegler is yet another explanation to the attention deficit phenomenon in this country.

Stiegler (2010) addresses an additional societal component that he believes is resulting in children who are unable to sustain attention. He refers to this notion as adult infantilization and explains that children are encouraged and expected to act more adult-like with many mature responsibilities before they are ready. Could it be that we are pushing our children to be too mature and act like adults too soon? Culturally, many children are placed in very adult-like roles due to economic situations forcing one (or both) parents out of the home attending to jobs for the

majority of the time that the children are home. While the children are at home, the older children often have to take care of younger siblings. This may include cooking dinner, helping the younger siblings with homework, and making sure they get a bath and go to bed on time. Stiegler (2010) states that "…adult infantilization, systematically pursued by today's cultural industries results in the premature maturation of children and adolescents whose psychic apparatus has purely and simply been destroyed by the psychotechnical system of those same cultural industries…" (p. 23). To state this another way, our society seems to encourage and applaud children who are 'mature' for their age. This same society is fighting a generation of children who cannot seem to pay attention in school, in the home, or in other social settings.

If it is true that we are expecting our children to grow up too fast, could this be yet another cultural explanation for the generation of children who have attention problems? To combat the problem of immature adults, Stiegler (2010) describes the interaction that adults should have with the children they are empowered to raise. He believes that '*play'* can help mold the child and develop his ability to attend to necessary tasks when he answers his question: "What does it mean to play with one's daughter or grandson" (p. 14)? His answer:

> It means to laugh and to 'forget about time' with them – to give them one's time, and to give it not merely to their brains but to the formation of their nascent attention by concentrating one's adult attention on their juvenility – as imagination (p. 14).

Steigler's (2010) comment about '*play'* truly makes me think about my role as a classroom teacher. Now that my school day is planned out for me from the time I walk in the door until the time the children leave, I do not seem to have the time to 'enjoy' the children and develop positive relationships with them. Everything seems to be about business. I have often stated to my colleagues that it seems as if many teachers forget that they are teaching children. We

(educators/administrators) expect so much of the young people in our school academically and socially. Many of the twelve and thirteen year old students in my class are taller than me…making it easy to forget that they *ARE* just children. Stiegler's (2010) research regarding adult infantilization and his notion of play provides an interesting perspective for the ADHD conversation.

The purpose of this chapter was to explore cultural influences on the ADHD diagnosis process to further the notion that ADHD is a social construct. Within the microsystem and the mesosystem, the child, the family, the teacher, and the school were looked at to explore the possible social links between these components and their impact on the diagnosis and belief system that encompass the ADHD phenomenon. Society seems to determine what socially acceptable behaviors are for children in schools in the United States. When a child deviates from these standards of behavior, he could be given a special education label or diagnosed ADHD if the deviations are attention or hyperactivity related. How have these standards become so culturally engrained that schools are able to decide who is normal and who is not? What gives them the authority to do this? Whose best interest is served, the school or the child? Who would be impacted the most should the labeling process come to an end?

Another aspect of this culturally impacted social institution involves the medical community which includes physicians, large pharmaceuticals, and insurance companies. This conversation could be described in terms of the monetary impact the formulation of this disorder has on the individuals in the medical field. Medication for treatment for ADHD has become almost habitual in our society. The purpose of chapter three is to explore the influence that the medical community and large pharmaceuticals have in our society on promoting the ADHD diagnosis.

CHAPTER THREE

DRUG CULTURE AND THE ADHD EXOSYSTEM

"Historically, individuals seek out drugs for three major reasons: pain relief, speed, escape."

- *John Weaver*

Drug use is not a new phenomenon in America, but the marketing of medications for disorder such as ADHD is new and a huge business. Promoting a disorder such as ADHD can reap a huge amount of revenue for doctors and drug companies. Has the promotion of this disorder been so financially beneficial that the impacts to the individual taking the medication disregarded? Has the use of drugs to treat ADHD become so commonplace in the United States that few people question this practice anymore?

Recommendations made to patients regarding treatment at doctor's visits, direct to consumer advertising on television, in doctor's office, and in magazines, and direct to physician advertising are examples of systems in place that impact the cultural beliefs related to the treatment of ADHD with stimulant medication. This process seems to have become as ordinary as taking an aspirin for a headache. These influences do not directly impact the core of the

ADHD phenomenon, the child, but seem to be indirectly influential to the ADHD phenomenon in the United States.

Bronfenbrenner (1977) refers to this level of influence as the exosystem in his description of the ecology of human development. He defines this system as:

> an extension of the mesosystem embracing other specific social structures, both formal and informal, that do not themselves contain the developing person but impinge upon or encompass the immediate settings in which that person is found, and thereby influence, delimit, or even determine what goes on there (p. 515).

The purpose of this chapter is to explore the components of the medical community (ADHD's exosystem) that have an indirect impact on the ADHD process. The doctors and large pharmaceuticals are not a part of the immediate world of an ADHD child like the parent(s) and teachers are, but they influence the decisions made by the school and the families which, as a result, impact the child. This chapter will explore the history of drugs to provide a foundation for discussing the impact that drug use has in our society and how our cultural beliefs regarding the use and acceptance of drugs have changed.

Throughout history, drugs have been used to help the sick become well and to enhance the lives of humans. This has remained constant over time. Sick people still seek out medical assistance when they are sick with the hope that there will be a medication that will help them feel better. Medication for enhancement has become an important reason for drug use as well. Recent drug use, though, has demonstrated the use of drugs to control who we are or to control others in our lives. Drug use for enhancement and control has become a common occurrence and

seem to be readily accepted in our society. Caffeine is such a drug, and its history will be discussed in the next section.

CAFFEINE

Since caffeine is accessible by people of all ages, its massive use is not surprising. Our society seems to have embraced its use, and products with caffeine are recognized and consumed by many in our culture. There are no laws limiting its use or providing age requirements. The health effects are evident, but that has not seemed to hinder the consumption by most users. Even still, it has become almost acceptable and expected. Over 100 billion doses of caffeine are consumed yearly by Americans. This translates to about 5000 tons every 12 months. It has been reported that 82% of the US population drinks coffee and 52% drinks tea. Nearly half of the coffee drinkers consume three to seven cups daily. Additional caffeine consumption comes from cola drinks, chocolate candy, hot chocolate, and over the counter drugs such as No-Doz. Our nation consumes a tremendous amount of this stimulant (Liska, 1994, p. 190).

One might ask how we became a nation indulging in caffeine. Boon (2002) offers a glimpse into caffeine's history and describes the acceptance of this stimulant by prominent writers as well. He portrays its use as a necessary part of existence in everyday life:

> During the nineteenth century, coffee ceased to be a drug worthy of discussion, even though its use for the purpose of mental stimulation became even more prevalent. We know that Marcel Proust drank large quantities of coffee, to rouse himself from barbiturate-induced sleep. In the twentieth century, F. Scott Fitzgerald wrote while drinking coffee, presumably before and after his alcohol binges. Sartre washed down his

> pep pills with coffee. And coffee accompanies the cigarette in many a writer's armament. But coffee has been so thoroughly absorbed into the structure of the modern workplace that it has become transparent, a tiny mechanical cog in the machinery of everyday life (175-176).

Productivity in our modern society has been contributed to the use of caffeine just as it seems to have been used in its earlier history. It is not surprising that caffeine use is compared to machinery in Boon's (2002) quote. This substance keeps the world moving and its members productive for extended periods of time. As modern workers are commuting to work, many are indulging in a morning cup of coffee which is followed by additional cups of coffee before the work day ends. This drug has entrenched itself in American society by becoming socially acceptable to the point that its use is commonplace and not questioned. This drug has gone beyond being an important ingredient in coffee to being used in everyday soft drinks. Since Caffeine is included in numerous mixtures, and the number of drinkers has become monstrous since its use is not limited to adults. Many children are users as well.

In the chapter on caffeine, Boon (2002) describes a caffeine encounter which resembles the way I believe that many people may feel about this mind altering drug as well as other stimulants.

> I am using a caffeine containing liquid, prepared by immersing the dried leaves of a tea bush in boiling water for several minutes, as I write these words. I believe that drinking this liquid is helping me to write – and yet I do not think of the resulting text as having anything to do with caffeine. This transparency is characteristic of our attitude to

stimulants, the most ubiquitous, yet the least understood, of the psychoactive drugs used in modern life (p. 170).

Boon's description of making tea and consuming the stimulant as he writes provides a glimpse into this socially acceptable practice for many people. He notes that even though the tea helps him write, he does not contribute the finished product, the written work, to its consumption. Describing the of stimulants as transparent helps paint a picture of how a drug can become so common in a culture that it is not even 'seen' as a problem, or that its use should even be questioned.

The use of caffeine seems to have become so 'normal' and necessary that its consumption is routine for many people. Why has the use of this stimulant grown to the point that its use could be considered commonplace? What happens in society to bring an occurrence to this level of acceptance? Has its use become institutionalized in our cultural belief system because of its routine use? Berger & Luckmann (1966) attest that the "reality of everyday life maintains itself by being embodied in routines, which is the essence of institutionalization" (p. 137). An institutionalized belief/understanding in a culture is one in which the members in the culture do not question. For some institutionalized beliefs, such as marriage, society has such strong feelings about its understanding that anger ensues when the components of the beliefs are questioned. Caffeine, a cultural institution has become an extension of who we are. This extension is helping us be more productive and seems to be norm in many workplaces while employees frequently visit the coffee station.

Boon (2002) examines a reason why caffeine use has become so important in our culture and its use a common part of our everyday lives. He states that "although the energy contained

in the body and mind is finite, excitants can change the speed at which energy is consumed and work is done" (Boon, 2002, p. 174). Our society is very fast paced, and caffeine could be viewed as the tool needed to extend and enhance our abilities and productivity. The current economy is tough and the job market is very competitive. Employers expect more from their workers sometimes for less money and in less time. Caffeine may help provide that competitive edge necessary to perform with productivity so that employment is secure.

ENERGY DRINKS

A recent, socially acceptable form of caffeine consumption occurs in the form of energy drinks. The sale of energy drinks has increased 465% from 1998 to 2003. In addition, the sale of these products generated $5 billion in 2006 with Red Bull being the market leader representing 49% of the sales. In addition, teens and young adults make up the largest portion of this market, and their sales account for nearly $2.3 billion (Clauson, et al, 2008, p. 56). What is alarming about all of this is the amount of caffeine found in these drinks. Most of the energy drinks on the market report 75 to 80 mg of caffeine per 8 – ounce serving even though some energy drinks contain as much as 300 mg per 8 – ounces. The problem with this is that 8 – ounces is not normally the product size. This discrepancy can lead to a misunderstanding about the amount of caffeine in the drink leading to the consumption of as much as 720 mg of caffeine in one drink. It is reported that the daily intake of caffeine and its effects vary for each individual, but for most people 300 mg or less a day is considered to be not harmful (Clauson, et al, 2008, pp. 59 – 60).

The use of this type of caffeinated product has been encouraged in our culture through the use of clever advertisements. Harmful practices, such as the consumption of energy drinks,

can be portrayed as beneficial and necessary by the advertisement leading to a possible misconception about its safety by the consumer. It is not uncommon for energy drinks to be promoted in conjunction with sports activities with popular sports figures boasting about the benefits of such beverages on their success in the game. The problem with this is that caffeine is a natural diuretic that can produce water losses estimated at 1.17 mL/1mg of caffeine. If a person participating in a sport is drinking energy drinks, he/she is increasing his/her risk of dehydration. He/she may believe that he/she is actually becoming hydrated when, in fact, the drink is producing the opposite effect. (Clauson, et al, 2008, p. 56).

ALCOHOL

One of the most widely used drugs of modern times is alcohol. In recent history, the advertising industry in the United States could possibly be a contributing factor in the wide use of alcohol. These advertisements portray consumers of alcohol at wonderful parties where everyone is good looking, happy, and having a good time. Large numbers of Americans drink alcohol regularly with some suffering major consequences for this action. "No other drug or substance is as critical in the lives of so many people as alcohol. Well over 100 million Americans are drinkers, and about 10% of that number are alcoholics or problem drinkers" (Liska, 1994, p. 218).

Exploring the history of alcohol reveals that societies have been creating drinks with alcohol and indulging in them for thousands of years. There is evidence of the first brewery developed by humans that dates back to 3700 BC in Egypt. Archaeological records have shown that beer and wine was prepared by fermentation of carbohydrates by some of the oldest civilizations. Therefore, alcohol has been considered the oldest substance synthesized by

humans. Early alcohol only contained 14% (by volume) alcohol. Later, around 500 years ago in Europe, distillation procedures were developed and the alcohol content went up to nearly 50% (Liska, 1994, p. 224).

The people of the early 1800s displayed differing attitudes about the consumption of alcohol. On the American frontier, corn 'likker' was cheap and strong. A man who could still hold himself upright after drinking was looked up to while Protestant churches taught lessons of sobriety and abstinence. The church members considered alcoholism a moral weakness. A pledge of abstinence from alcohol was signed by more than 35,000 ministries by 1835. Because of this movement by the churches, by 1849, the consumption of alcohol diminished by 75% compared to just 20 years earlier. (Knox, 1986, pp. 56 – 57). The desire to abstain from alcohol is still taught by many religions today.

In addition to the beliefs taught by the church, frontier women let their voices be heard on the topic of alcohol use. "Women argued that drinking destroyed the home in a number of ways. For them, a responsible, sober husband was an essential part of a healthy domestic life (Knox, 1986, p. 64). During the early 1800s, women joined together and demonstrated against the use of alcohol. Within six months of a demonstration by one hundred women at local saloons, over three thousand saloons were closed, at least temporarily (Knox, 1986, p. 64).

As time passed, history made it apparent that alcohol was a huge problem in the United States. "By 1920, fourteen states had adopted some form of prohibition. Then, at midnight on January 16, 1920, the Eighteenth (National Prohibition) Amendment went into effect" (Knox, 1986, p. 65). Unfortunately, officials quickly figured out that this amendment was going to be hard to enforce. People started making their own liquor or buying it from bootleggers. It

became obvious that Prohibition was not going to be successful, so "in December 1933, the Eighteenth Amendment was repealed, ending national prohibition and delighting the majority of Americans" (Knox, 1986, p. 76).

Even though Americans wanted the end of Prohibition, they did not want to see the return of the pre-Prohibition period excesses. To keep people from overusing alcohol, laws were put in place to regulate its use. Therefore, "under the new laws, liquor could be purchased only from licensed dealers, and in some states only state-managed stores could sell it. Every state imposed age restrictions – usually a minimum of 18 or 21 years – on those who purchased alcohol" (Knox, 1986, p. 77). Restrictions on age are still in place today to protect citizens and to regulate the use of alcohol by minors. Even with restrictions, alcohol has become a huge problem for Americans and according to Liska (1994) is "by far our biggest drug problem. More people are killed or disabled by it, become dependent on it, and become psychotic by abusing alcohol than all of the other drugs put together (excluding tobacco)" (pp. 218-219)

The pervasive nature of alcohol consumption in our culture could possibly because it is one of few legal, non-prescription drugs that allow its consumer to escape the harsh realities of life and its dullness with its only limiting purchasing factor being age. Huxley (1954) describes the desire to escape life's monotony in *A Brave New World*. In this novel, the drug of choice is Soma, and characters would take it when the stress of everyday life became too much to handle. Huxley (1954) portrayed the lives of the characters in the story when he wrote that

> Most men and women lead lives at the worst so painful, at the best so monotonous, poor and limited that the urge to escape, the longing to transcend themselves if only for a few moments, is and has always been one of the principal appetites of the soul (p. 62).

The drug allowed the person taking it to escape life and to go on a mental 'vacation'. Soma created an effect that is very much like the zombie effect educators see in some medicated children. When a child's medication is not regulated, or he/she is not taking the appropriate amount, he/she may appear to be in a zombie like state. This is very much like the effect Soma had on the people in Huxley's novel. The ones who partake of Soma looked forward to their escape, even if it was for a short period of time. With the urge to escape everyday life, it is not surprising that alcohol use has become such a problem even with the negative consequences associated with its use.

COCAINE

As the use of alcohol does not occur without consequences, there are numerous other drugs that have negative consequences in the United States as well. Cocaine is one such drug. There are no regulations on its production or use since the drug is illegal. Drug trafficking of cocaine has caused major problems for the United States and resulted in numerous deaths. This highly addictive drug has ruined families, caused individuals to lose their jobs, and some have even paid the ultimate price for its use: death.

Cocaine's history can be attributed to the technological advances of its time. "While politicians and middle-class women and men had debated the prohibition of alcohol at the end of the 19th century, coca and its derivative, cocaine, dominated the attention of physicians, artists, and intellectuals" (Knox, 1986, p. 67). This domination could be attributed to its ability to enhance normal everyday function since it is a stimulant. This drug was isolated in 1859 by Niemann from the active alkaloids in coca leaves and became known as a wonder drug by the 1880s. The popularity of the drug at this time can be attributed to the changing pace of life in

Europe and America. Life was speeding up and its people felt the need to speed up to keep up with the fast pace. New inventions, such as the automobile, the telephone, the subway systems, the motion picture, and the airplane contributed to this sense of urgency and quickness. People talked of fatigue and wanted a drug that would help banish their exhaustion (Boon, 2002, p. 179).

It was during the 1870s and 1880s that the excitement about coca and cocaine reached its height. In America, Parke-Davis, a well-known American drug company, and many physicians described cocaine as a cure the addictions to morphine, opium, and alcohol. Cocaine was sold by Parke-Davis in cigarette form. Also during this same time period, Coca-Cola was created by a Georgia pharmacist. Coca was the main ingredient of this very popular beverage. Coca-Cola was marketed as a drink that would reduce fatigue and met with huge success (Knox 1986, p. 68).

As each new drug became familiar, the ways in which it could be used were explored. "In 1884, Sigmund Freud, after hearing exciting reports about cocaine, investigated the actions of the drug on himself and on his psychiatric patients" (Liska, 1994, p. 173). Not only were people like Freud experimenting with its use, doctors were testing its usefulness in their practices. During this time, cocaine became useful as a topical anesthetic, and in 1899, "the invention of Novocain, a synthetic substitute without toxic side effects was introduced" (Knox, 1986, p 69). Novocain is still used today by dentists.

Even with the apparent legalized derivatives of cocaine being useful and safe, it became apparent that cocaine in its street form was dangerous and addictive. Therefore, the United States started passing laws to limit its use. In 1906, the Pure Food and Drug Act was passed. As a part of this law, food or soda water containing cocaine could not be shipped between states. As

a result Coca-Cola took out the small amount of coca and replaced it with caffeine so that its effects would be the same and the beverage would still sell (Knox, 1986, p. 71).

Unfortunately, cocaine has continued to be explored, used, and changed in our society and can be associated with differing cultures, especially along racial lines. It has been said that the different forms of cocaine can be associated with different classes/races of people and these divisions are typically stereotypical creating racial boundaries. According to Pinar, "crack is associated with the ghettos and powder with the white suburbs, although the division is blurred. Penalties for crack use tend to be harsher than for powder, indicating a racialization of drug penalties" (Pinar, 2006, p. 48). How can different forms of the drug warrant different consequences? Are penalties for drug use based on racial identities that are tied to a particular type of cocaine that is used?

The drug culture in the United States has created economic advantages for its illegal participants. A portion of the money earned could be attributed to the young children hired for trafficking. Drug dealers have figured out that the penalties are less steep for teenagers; therefore, they are used to help traffic illegal drugs. Also, the appealing idea of a great deal of cash is very enticing for young children from less fortunate homes. Pinar (2006) describes the interest in the use of teenagers in *Synoptic Text Today*:

> The 'cocaine kids' is the name Williams (1989) gave to teenagers who work in the trade. These teenagers, and their younger brothers and sisters, are drawn to the underground economy because opportunities exist there. The underground offers status and prestige as well as money: rewards the poor are unlikely to attain in the regular economy. The

underground economy is the only real economy for many young Americans (Pinar, 2006, p. 49).

It is very difficult for some impoverished families to keep a household functioning well with all the bills paid on time and sufficient food, clothing, and shelter provided for their children. These adult responsibilities are sometimes shared with the children in the family, especially in a struggling economy. The need to make the extra money makes it very enticing for children from poverty-stricken families to resort to working in the drug trade. Money is a huge motivator, and the children feel invincible. Money is a status symbol for them, and they are willing to do whatever it takes to acquire as much as possible. These temptations compound our drug issues in this country.

OPIUM AND HEROIN

America experiences great problems battling cocaine, but it is not the only illegal drug which haunts our society. Other psychoactive drugs which warrant attention are opium and heroin. The addictive nature of these drugs has become a reason for concern for society. The very harsh negative side effects have caused many people to lose their lives. Opium dates back thousands of years. "There is evidence that the effects of opium were known to the ancient Sumerians (4000 BC). The first undisputed reference to poppy juice was recorded by Theophrastus in the third century B.C." (Liska, 1994, p. 142). Opium was introduced into the United States by the unskilled Chinese laborers who came to this country to work on the railroads. They came to San Francisco addicted to opium, so "in 1875 California passed a narcotic control act to limit opium use. By 1909, the United States prohibited all imports of opium" (Knox, 1986, p. 59) because of its highly addictive qualities.

DeQuincey (1924) in *Confessions of an Opium-Eater* describes how opium affected his mental state when he used the drug:

> That my pains had vanished was now a trifle in my eyes: this negative effect was swallowed up in the immensity of those positive effects which had opened before me in the abyss of divine enjoyment thus suddenly revealed. Here was a panacea for all human woes; here was the secret of happiness about which philosophers had disputed for so many ages at once discovered; happiness might now be bought for a penny and carried in the waistcoat-pocket; portable ecstasies might be had corked up in a pint-bottle; and peace of mind could be sent down in gallons by the mail-coach (p. 22).

Part of opium's interest at this time was the price. For a very small amount of money, one could experience extreme joy at any time. It was not until later that the addictive qualities of the drug were revealed.

Compared to the immense length of time opium has been used, its changes medically have been relatively recent with the creation of drugs still used by the medical profession today. "Until 1800, all of the preparations of opium were crude – that is, they were dried preparations or extracts that contained dozens of chemicals. Morphine, the first active ingredient ever to be isolated from a plant, was obtained in pure form in 1803 by the German scientist Freidrich Sertuerner. Codeine was isolated from crude opium in 1837" (Liska, 1994, p. 142). Both of these drugs, which were developed from opium, have proven to be beneficial in the medical field. Morphine is highly used for the treatment of pain, and codeine exists in pain killers and cough suppressants.

Heroin, like opium, is another illegal street drug used by members of our society today. "Heroin is America's leading narcotic drug of abuse. It is widely available, easily transported, highly profitable to the pushers, and terribly addicting. It is big business, tax free" (Liska, 1994, p. 165). As noted by Liska (1994), heroin was first developed in Germany in 1874 by acetylation of the two hydroxyl groups in morphine. It became used as a drug in 1898 by Dr. Heinrich Dreser of the Bayer Company as a cough suppressant and pain reliever. Heroin was introduced into the United States as the use of opium was declining. "Derived from morphine in 1898, heroin was easy to administer and easy for drug dealers to conceal, because of its lack of strong odor" (Knox, 1986, p. 59). Unfortunately, the medical profession was not aware of its highly addictive qualities. Not until time passed and millions became addicted did doctors understand that heroin is one of the most dangerous of the addictive drugs.

BARBITURATES/PAIN KILLERS

The 1950s and 1960s brought about the use of barbiturates – especially by women. Valium and Librium, called minor tranquilizers, were developed by drug companies. These drugs entered the market without sufficient research because of the highly competitive industry. Even though these drugs were believed to be relatively harmless and not addicting, Darvon, a narcotic that was introduced in 1957 as a safe painkiller, was the leading cause of death in 1977 among legal drugs (Knox, 1986, p. 83). Drugs such as these are available by prescription today, but they are still involved in illegal drug use. Patients receive prescriptions for these drugs and sell them on the streets or trade them for other drugs such as cocaine and heroin.

MEDICATION FOR ENHANCEMENT: MIND ALTERING DRUGS

The above material offers a look at how drugs have become such an acceptable part of our culture and how these drugs have impacted our society. Medical technology has improved our lives, and we have come to the point that some could not imagine life without its remedies. From cell phones to personal computers, we exist in this mechanical world as extensions of technology. Most children come to school with a vast knowledge of computers and other electronic devices because of its widespread incorporation into our daily lives. Their world is very different than the world in which my generation grew up. Our society seems to have become desensitized to the use of drugs for enhancement such as better attention, increased productivity, or stimulant induced happiness. It seems that most adults giving medication to their children do not think twice about it. Even though many of the side effects are yet to be determined, parents continue to give the medications daily without regard. When the use of drugs is equated to "a tiny mechanical cog in the machinery of everyday life" (Boon, 2002, pp. 175-176), it shows the level of acceptance of chemicals to change the way we live. Our society seems to choose to use medicine to enhance our bodies while at the same time scientists can not exactly determine what the long – term effects are going to be. How are we so accepting of these types of enhancements that we do not question the ethics of their use?

America's school children have become a recent example of increased use of mind altering drugs. The symptoms of ADHD have been noted in the medical field for decades, but the name was not developed until recent times. As early as 1902, medical textbooks described symptoms of ADHD. The sufferers were considered to be mentally retarded, culturally disadvantaged or emotionally disturbed. Later research during the 1940s described these

hyperactive and impulsive children as suffering from Hyperkinetic disorder. It was not until the 1980s that the "disorder" was given the name we use today, Attention Deficit Hyperactivity disorder. (Willets, 2008, p. 1).

Now that the symptoms have been defined and a name for the "disorder" is recognized in the medical field, physicians have begun to treat this 'disorder' with stimulant medications in massive numbers. Children began visiting psychiatrists so that appropriate 'treatment' could be considered. These visits became a means for acquiring a prescription for Ritalin or other such drugs. Stimulant drug use for drugs like Ritalin skyrocketed in America in the early 1990s. "For both ideological and economic reasons, the practices of American child psychiatrists changed dramatically over the decade, so that by 2002 nine out of ten children treated by a child psychiatrist were taking one or more psychiatric drugs" (Diller, 2005, p. 28).

Amphetamines have become a popular class of drugs to treat children with attention problems. This class of drugs was created late in the 19th century. Benzedrine, which is a form of amphetamine, was sold as an inhaler for asthma and was created in 1927. It was not until 10 years later that the same drug was listed in the professional literature as a treatment for children with psychiatric disorders (Breggin, 2001, p. 29).

Ritalin, another common drug for the treatment of psychiatric disorders in children, has also been around for a long time. This drug was first created in the mid-1940s and was approved by the FDA in December of 1955. It was not until the 1960s that the drug became commonly used for behavioral control of children. The FDA includes a warning section on the label for Ritalin that contains a statement that "ritalin should not be used in children under six years, since

safety and efficacy for this age group have not been established" (Breggin, 2001, p. 29). This label appears on the packaging of the drug today.

How has our society become so complacent about the use of psychoactive drugs? As people continue to use these substances, there will be a need for new and more powerful psychoactive drugs to achieve the same results. Over time, the bodies of the people taking the drugs begin to become tolerant of the chemicals. These biochemical enhancements are very appealing to many people. All drugs are used to change the person taking them, but none are taken without side effects whether the side effects are positive or negative. "Whether they are organic or synthetic, old or new, stimulating, narcotic, or hallucinogenic, all these drugs have some specific psychoactive effect: they all shift perceptions, affect moods, change behavior, and alter states of mind" (Plant, 1999, p. 3). For today's consumers, decisions must be made about the drugs that are prescribed. If taking the drug is a matter of life or death, the side effects would be easier to justify, but when the drugs are taken to alter thinking or to enhance everyday functioning, one must truly consider what the drug will do to the body and mind. Morris (2008) points out that, "When medicines interfere with healthy parts of the body accompanying frustration makes everything worse. Then there is the fear that the negative effect of the medicine could damage the body. Sometimes the damage is irreversible" (p. 5). Will the medications given to children cause future side effects that are not apparent at this time? If so, are the negative side effects outweighed by the positive behavior results that the drugs claim to enhance?

Children are also prescribed mood altering medications for depression and other conditions that qualify as mental illnesses in our society. This phenomenon is not unique to

children and has become prevalent in the United States. Drugs, such as Prozac, have entered the market and the numbers of prescriptions for these medications have increased exponentially as well. This drug began to be sold in 1987. It became known as a wonder-drug and prescription sales skyrocketed. Lehman Brothers predicted that sales of Prozac would reach $4 billion a year by the year 2000. People who were suffering from depression or anxiety were prescribed this drug. It was believed that this drug had the ability to 'shift thinking' and 'transform its user' (Lewis, 2003, p. 50). This drug was prescribed to quickly fix emotional problems caused in today's society without addressing the source of the problem. "Why did Prozac become so popular? The answer, Peter Kramer tells us, is its capacity to alter personality" (Pinar, 2006, p. 56).

Our culture seems to have readily accepted drugs such as Prozac which has led to a belief that some doctors over-prescribe. Wurtzel (1994) describes how readily available a Prozac prescription is for patients:

> Many general practitioners give Prozac to patients without much thought. In a 1993 study, researchers at the Rand Corporation found that more than half of the physicians they surveyed got out their prescription pads after discussing depression with a patient for less than three minutes… Nowadays, Prozac seems to be a panacea available for the asking (p. 300).

Drugs such as Prozac are criticized for different reasons than the other mind altering legal and illegal drugs that are abused in this country. "People take street drugs every day to 'feel good'. For some, cocaine enhances energy and confidence. Uppers make some feel socially attractive, capable of being available… It is not clear, Kramer allows, how the use of

antidepressants for altering personality is distinguishable from the street use of amphetamines a way of overcoming inhibitions and inspiring zest" (Pinar, 2006, p. 56). Kramer, quoted in Pinar, continues to describe the differences between Prozac and other mind altering drugs. Many of these differences lead to the reasons why the over use of antidepressants has become a concern in this country. Kramer noted that Prozac "would appear to represent a third category of drugs, one neither 'consummatory' nor 'appetitive', but one which permits the user a heightened capacity for pleasure. If this is true, should the use of Prozac – and other drugs of this third type – be limited to those diagnosed as psychologically troubled? Could not everyone's capacity for pleasure be increased" (Pinar, 2006, p. 58)?

Wurtzel (1994) described this dilemma in *Prozac Nation*. Writing from the prospective of a severely depressed individual, she notes: "no matter how many chemicals I have ever used to bleach or sandblast my brain, I know by now, only too well, that you can never get away from yourself because you never go away" (p. 10). Medications such as Prozac may make a person feel better momentarily, but the root of the problem still exists when the medication wears off. In addition to the fact that the drugs are simply masking issues, drugs come with side effects. This is true of children with ADHD as well. They may become 'better students' on medication, but the medication does not cause the ADHD to go away permanently. The individual still has to deal with the attention issues after the medication wears off and could possibly benefit from also learning strategies to deal with the inattention.

SIDE EFFECTS

Patients and families must weigh the options if they decide to use medication as a treatment option. All medications are taken because of the results they promise. One has to make an educated decision regarding the negative side effects of taking the pill. Every drug on the market has a list of possible negative side effects. Some may be very minor and tolerable, while others may be life threatening. No drug is taken without the potential to damage its user. Derrida (1985) describes this relationship when he teases out the meaning of pharmakon in *The Ear of the Other*.

> Philosophical discourse cannot master a word meaning two things at the same time and which therefore cannot be translated without an essential loss. Whether one translates pharmakon as 'poison' or 'remedy,' whether one comes down on the side of sickness or health, life or death, the undecidability is going to be lost (Derrida, 1985, p.120).

When parents decide to medicate their children, they need to understand that these mind altering stimulants are creating other problems for the child. Sometimes the child is very young and the side effects are difficult to articulate. Are these drugs "poison" or "remedies"? Are we poisoning our children with good intentions? Are these drugs the answer to our problem or are our problems not yet revealed? I do not believe that parents who medicate their children do so with malicious intent. In some situations, they feel pressured to correct a problem that their child is having in the academic setting at school.

Very few parents intend to do anything to harm their child. Many times, the decisions to medicate are made without substantial knowledge to make an educated choice. Some children

who are extremely hyperactive with short attention spans benefit from the medication, but many other children only exhibit mild attention problem and could be successful in a class with a teacher who understands how to redirect the child's inattention and how to help the child maintain focus. What will be the consequences in the future for the children who have used these mind altering drugs while in school?

> The pharmakon must be remembered. When teachers think they are healing what ails young people in the classroom by encouraging their parents to see a doctor, teachers are also poisoning young people. When pharmaceuticals think they are acting responsibly in altering the neurons of young people, they are irresponsible to everyone. They poison the economy and humanity (Weaver, 2010, p. 61).

Educators probably do not see anything wrong with making the recommendation for the parents to consult a doctor regarding their child's behavior. This practice is strongly discouraged in public schools due to the negative consequences that are possible for the school system. Should something major happen to a child as a result of taking stimulants which were recommended by a teacher, the teacher, school, and school system could be subject to a law suit. Why do some teachers feel it alright to ask parents about taking the child to a doctor or asking children whether or not they have taken their medication? Are educators acting responsibly on behalf of the children they teach?

One of the side effects that is disconcerting is the possibility of subjecting the child to a future stimulant addiction. "Sometimes, they are misled into believing that they have a biochemical imbalance that requires Ritalin. When they discover that cocaine is simply a more potent stimulant, they are primed to use it habitually in young adulthood" (Breggin, 2001, pp.

12-13). Will the children begin to believe that they cannot function in society without taking a mind altering drug? The need for the drug will be enhanced by its continued use, and the children could discover opportunities to find dangerous drugs on the streets. This could increase the problems with drug addictions in our youth population. Jones (2004) in *Men of Tomorrow* states that "the children understood immediately that they would have to become entirely new beings in order to create and enter that tomorrow. And most of the tools for that transformation would be found not in the home or the shul or the American public school but in the street" (2004, p. 5). In a society like this, children feel powerless. To believe that the only way to survive in this world is to be medicated provides a melancholy approach to life. Children are expected to grow up so fast and many do not get a chance to experience the joys of childhood. For many children, their parent(s) are working two jobs, and the older children in the household are expected to take over many of the household responsibilities such as cooking, cleaning, and taking care of younger siblings. Regardless of the numerous reasons why a child may become addicted to stimulant medications, addiction is a real problem.

Some of the side effects are severe enough that doctors will prescribe additional drugs to help cope with the negative reactions. This idea is addressed in *Prozac Nation* as well. Wurtzel (1994) notes that this can lead to taking too many pills:

> Taking drugs breeds taking more drugs. And I can't believe looking at myself in the mirror, seeing what to all eyes must appear to be a young and healthy twenty-five-year-old with flushed skin and visible biceps – I can't believe anyone in his right mind would deny that these are just too damn many pills (p. 17).

With all of the controversy surrounding the use of Prozac, how do we decide which patients should be appropriate for the use of this drug? Should Prozac and drugs such as this be limited to the severely depressed? Should Prozac be allowed to be prescribed to patients who are not severely depressed in an effort to provide mood enhancements to a normal life?

> From a physician's point of view, Kramer (1993, 246) says, if the patient is not troubled, is more-or-less 'normal', and if they ask for Prozac they are requesting, according to our point of view, legitimate enhancement, legalized cocaine, or a neurochemical nose job. If Kramer is right, we are entering an era in which medication can be prescribed to enhance the functioning of the healthy mind (Pinar, 2006, p. 59).

How will these mood enhancement drugs impact the individual if the pills are taken but not truly needed? Will patients with insurance be able to claim such treatment with their insurance companies? Where will medical insurance companies draw the line on what is covered and what is not? Should a medicine not be deemed necessary by a physician, medical insurance companies could deny the claim to pay for the prescription. At that point, who will be deemed appropriate to make the decision as to whether a medication is necessary?

All of these new mind altering drugs that are marketed today can be credited to the new technoscience explosion in the pharmaceutical arena: "…the technoscience invasion of medicine has happened so fast, and is controlled by such dominant interests, that the standard medical literature has not caught up with the full complexities of technomedicine or even begun to develop a critical discourse of this phenomena" (Lewis, 2003, p. 52). Because of the invasion of technomedicine, many drugs are going beyond treating an illness and enhancing the well-being of individuals. People are taking drugs even when they are not sick. Prozac has been prescribed

to enhance the daily lives of the people taking it. "Prozac is one of the first of the new psychopharmaceuticals to sit comfortably between a treatment and an enhancement, between a medication and a mental cosmetic" (Kramer, 1997 in Lewis, 2003, p. 52).

Technology is continuing to invade every aspect of our lives. Research and development is not slowing down. There appears to continuously be new drugs advertised by drug companies on television. Many times, these new drugs are for new 'disorders'. Which came first, the disorder or the pill for it? As technology continues to improve, who knows where the technoscience invasion will stop. We are possibly far from truly experiencing all that pharmaceutical companies intend to sell in the future. This has become a very profitable business at society's expense. Modern medicine has seen drugs rapidly approved by the FDA and entering the drug market. Sometimes, adequate research is not done to ensure the safety of the drug's recipients. Advertising begins, patients begin requesting the medications, and record numbers of prescriptions are filled. After a drug is on the market for a while, negative side effects begin to surface. Even with drugs sometimes exhibiting side effects that some would consider severe, the marketing of the drug usually continues. It is usually not until a lawsuit has resulted in a ruling for the victim that questionable drugs are pulled from the market. How many people have to be hurt before the money earned by the large pharmaceuticals becomes unimportant? As with many drugs, Prozac results in millions of dollars spent annually on advertising and prescriptions.

With drugs all around children, in their schools, in their homes, and on the streets, our culture has contributed to our complacent attitude about the number of children who use prescription drugs. What will the future effects be for the children who take drugs to improve

school performance? Will they believe that they will only be a benefit to society while medicated? Do the children taking the medications while in school believe that taking drugs to enhance performance in life is acceptable and necessary? Will the use of drugs lead to possible addiction to a drug as a teenager or adult?

Technoscience has brought forth medical advancements that are saving lives. These medical advancements have proven to be necessary for some also. Is society to the point that all people will become enhanced individuals in some way in order to be more productive members of society? "If the pure, unadulterated body, born from a womb of a natural mother and untouched by science, still exists it is a mark of disadvantage. The manipulated body is a mark of privilege, longevity, and opportunity" (Weaver, 2010, p. 49). Society does not appear to be concerned about the consequences of changing our bodies and lives medically as long as the change improves their livelihood. This lack of concern could be what has led to our culture of complacency regarding the use of psychoactive medications.

Will we truly be able to see each other as individuals when each of us is taking mind altering drugs to change what we would normally be like? Will the changes be enough? Where will the need to change ourselves end? Drug use is a huge market in which large drug companies have the potential to make billions of dollars. As we begin to see more and more people around us taking drugs, the desire to take them as well grows. We see and hear our friends and family members describe how their lives have been affected positively. At what cost are these changes made? What will be the long term effects of taking the medications? Will the increased use of mind altering drugs change the genetic make-up of humans over time? This is a matter in which only time will tell.

MEDICAL INSURANCE

How have we arrived at this point in history where medication has become the answer to all of our problems? This question has led this chapter to another important component in the history of drugs: medical insurance and the birth of HMOs. Insurance is a big business in the United States, and managed health plans help medical costs become more affordable for consumers.

Historically, the development of medical insurance began as one of Roosevelt's program under The New Deal. In 1937, the Farm Security Administration was formed to help citizens overcome poverty in rural America. There were two facets of the early support given under the Farm Security Administration. Help was provided for families that had few resources to pay for the medical care that they needed and economic support was given to rural physicians during a time when their practices were hard to finance. The program paid great attention to the desires of the physicians. The physicians were allowed to choose whether they wanted to participate in the program and voluntarily participate. With the plans negotiated with the local and state medical associations, physicians were given substantial control over the operation of the medical care plan (Grey, 1999, p. 7).

As time passed, changes continued to occur for American's and their health coverage. Midcentury America brought about hospital and medical insurance plans that were controlled professionally and the birth of commercial indemnity plans. Voluntary health insurance was changing the financing of American medicine by the end of the 1940s. Most of these plans were tied to employment and mainly emphasized hospital insurance. Examples of such plans were

commercial indemnity insurance plans, Blue Cross hospital insurance plans, and physicians' service bureaus (Grey, 1999, p. 12).

These employer based hospitalization insurance companies became very important. One of the first to emerge was a group health insurance plan. In 1929, 1,200 Dallas school teachers were presented group hospitalization insurance by Baylor University Hospital. Eventually, this hospital insurance program came to be known as Blue Cross as the idea became readily accepted and the program expanded to other states. As many as six million members existed under thirty-nine Blue Cross plans by 1940, just eleven years later. Within another ten years, the total enrollment was over 31 million and the Blue Cross plan was available in every state. (Grey, 1999, pp. 12-13).

The insurance plans continued to evolve and grow. Today, most employers offer some kind of health insurance to full time employees. Without connections to employment, though, health insurance premiums are extremely expensive and not affordable to the majority of Americans. "In 2002 and 2003 nearly 82 million people – one out of every three Americans – went without health insurance for all of part of the two years. Most were average people in working families" (Quadagno, 2005, p. 3).

When working families cannot afford health insurance even at rates made as affordable as possible by employers, America's children are affected as well. Without proper health care, most children will not receive yearly physicals to catch problems that would be considered minor when caught early. With difficult economic times, the numbers of people choosing to drop health insurance so that they can pay for other necessities are increasing. This will continue to be a problem until insurance becomes more affordable for the average American family.

Today, the medical insurance companies play a huge role in the problems we are experiencing in medical care. In America, we value making money, and medical insurance companies are not different in this regard. Garson (2007) states that "we will make money doing virtually anything; we value capitalism and the power of economic markets. We define success in monetary terms and as 'the bottom line,' whether an organization is called 'for profit' or not-for-profit' (Garson, p. 132). In addition, with the desire to make money so large, we will continue to have insurance companies and drug manufacturers in the Fortune 500. Also, CEOs at the six largest non-profit, tax-exempt hospital systems all make more than 1.2 million per year (Garson, 2007, pp. 132-133).

With large amounts of capital, medical insurance companies are directly involved in some of the most powerful lobbyists groups in this country. "In 2004, almost $2 billion was spent on federal lobbying, with the health care sector spending more than any other - $325 million" (Garson, 2007, pp. 136 – 137). Large amounts of money such as this is spent to ensure that the laws and regulations created are in their best interest. With the bottom line being the most important aspect of the medical insurance industry, they must ensure that the regulations do not hinder their progress.

The medical insurance field was not the only thing changing in the United States. Medical consumers began to be bombarded with information about the latest pill on the market or the latest treatment for never before heard of illnesses. "Medical information was becoming available on the Internet, and the increasing media coverage of the latest breakthroughs in medical science further heightened public enthusiasm about the latest development" (Abramson, 2004, p. 79).

Pharmaceutical companies were aware of the amount of money that could be made by advertising drugs and influencing the users. The amount of money spent in this country by pharmaceutical companies for the purposing of advertising has grown exponentially. Specific dollar amounts spent by large drug companies will be revealed in chapter four when the comparison of the amount of money spent by drug companies to other large non-drug companies will be made. With the aspect of advertising such a mammoth component of the most recent history of drugs, an entire chapter will be devoted to this topic. Most American's feel that they can purchase anything that they need or want in our capitalist society. Many people are driven by the desire the make more money and obtain material possessions. Even if it means that the task is completed by partaking in drugs to enhance who they are, many Americans are willing to risk the side effects. "We are, it can be argued, an over – the – counter and prescription – drug culture and we learn, from the many advertisements and commercials we are exposed to, that if there is a problem, there is always a drug to solve that problem, as if by magic" (Berger, 2004, p. 163). Chapter four will address the tactics and implications of marketing by large pharmaceutical companies today.

CHAPTER FOUR

ADVERTISING CULTURE AND THE ADHD MACROSYSTEM

"This care of the body involves the purchase of a vast number of products for personal care and grooming, products necessary to having a body in our society. Although we are seen as self-completing, the contemporary body can only be completed by means of consumption"

- *Lennard J. Davis*

"Media, including TV, popular literature, and now the Internet, spread the word quickly about illnesses and treatment. This popularization of symptoms and diagnoses can create new 'markets' for disorders and empower previously unidentified sufferers to seek treatment as new or expanded medical explanations become popularly available."

- *Peter Conrad*

American culture seems to measure wealth by how many material possessions one has as well as the level of assets one can accumulate. Pinar (2004) reminds us that, "From the inception of the nation, Americans have been obsessed with 'the practical cash value' not only of experience, but of practically everything" (p. 17). Due to the obsession with wealth and material possessions in this capitalist society, marketing and advertising have become big business. Ads can be seen on television, in magazines, on billboards, on the sides of trucks, buses, and trains,

and in schools just to mention a few locations. Unless you stay home with the television, computer, and radio off, you cannot free yourself of the constant persuasion by marketers to sell their products. Now with modern technology, spending trends are tracked which gives marketers a chance to send consumers advertisements and coupons in the mail specific to their possible future spending.

The enormity of advertising touches every possible market and every possible product for sale. The drugs prescribed for ADHD are no exception. It is not unusual to see a commercial for an ADHD drug during prime time television shows, and one cannot flip through a family oriented magazine without encountering a print ad for ADHD medications. Drug advertising has entered our culture and seems to have become readily accepted and a normal occurrence. Exploring the growth of advertising in our culture can help develop an understanding of the influence that advertising culture has on developing norms associated with ADHD in our society.

Bronfenbrenner (1977) refers to this level of societal influence as the macrosystem. He defines this system as

> the overarching institutional patterns of the culture or subculture, such as the economic, social, educational, legal, and political systems, of which micro-, meso-, and exo-, systems are the concrete manifestations. Macrosystems are conceived and examined not only in structural terms but as carriers of information and ideology that, both explicitly and implicitly, endow meaning and motivation to particular agencies, social networks, roles, activities, and their interrelations (p. 515).

In the United States, advertising has intertwined itself in our culture to the point of being ordinary. Very few people question the persuasive tactics by advertisers that influence consumers to accept and desire a particular product. It just seems to be the way things are. As Bronfenbrenner (1977) stated in his definition, components of a macrosystem become 'carriers of information and ideology'. In our culture, advertising has become that vehicle. The 'carrier', advertising, can be compared to a 'carrier' of disease such as a virus. Like viruses that are contagious and can spiral out of control, advertising impacts society in a similar fashion. A new product seen on television, such as the latest I phone, will be marketed for weeks before its arrival in stores causing the demand to soar and people willing to line up to buy it hours before the store opens. Is advertising, like viruses, making consumers 'sick'? Is it 'sick' to wait for hours or fight with another consumer over a highly anticipated product that is almost sold out? Advertising promotes images that seem to cause consumers to react in a way that could be considered abnormal at best.

It is not unusual for new trends in fashion and areas of culturally acceptable actions to be introduced through commercial advertisements whether these ideologies are viewed as an explicit statement or an implied suggestion. Weaver (2005) points out that, "People who are able to attach meaning to textual and visual images will have the skill, power, and insight to name reality and control meaning" (p. 16) while at the same time, "those who revel in the joy of popular culture without constructing their own meanings of the images are destined to be manipulated by those who construct meaning for them" (Weaver, 2005, p. 16). Currently, we live in a society that is saturated with images on television, in magazines, and on the internet that portray lives enhanced by a particular product being marketed. One would be hard pressed to

argue against the impact these images have on the construction of culture. Kincheloe & McLaren (1994) state that, "These (images) have had a profound effect on constructing the cultural narrative that shape our identities (p. 142).

Drug advertising is no different. Consumers viewing these types of advertisements could possibly be led to believe that the drug alternative is the best alternative for the treatment of the illness that the drug is conveyed to treat. This influence could be associated with the increase in drug sales in the United States and for an awareness of new "disorders" that many people may not have realized they had leading to a desire to seek medical treatment.

Our society has witnessed an increase in the amount of drug commercials on television. This practice is referred to as direct to consumer advertising and has become a popular way to reach consumers because most American families have more than one television in their homes. Each family member could possibly be receiving different advertising for different products based on the channels that are viewed. The youngest children watching children's shows will see advertisements targeted directly at this age group while the adults watching their favorite shows during prime time will receive an entirely different set of commercials targeted for that age group.

Over the last few years, television advertising has changed. Large pharmaceutical companies have begun to market their costly prescription and non-prescription drugs on television. Direct to consumer advertising has increased society's awareness of the drugs available and of the diseases for which they might need them. This chapter will address this controversial issue.

Companies spend billions of dollars each year on advertising and marketing their products. These marketers have become excellent in the art of persuasion. When you believe that you need a particular product that is advertised, then the commercial has done its job. In this chapter, I will explore the history of advertising with an emphasis on the progression of advertising in America, look at the effects of living in a capitalist society, and investigate the controversial issue of pharmaceutical ads.

HISTORY OF ADVERTISING

History has shown a change in purpose of advertising over time. "For many historians, regardless of when they were writing, 'earlier' advertising functioned simply to 'inform', but did not generally attempt to persuade people of the desirability of what was on offer" (McFall, 2004, p. 153). Early advertisements were used to announce jobs, sell land, announce missing slaves, etc. McFall (2004) offers a definition of the word advertise and describes how its meaning has changed over time:

> The term 'advertise' is from the French, meaning to inform, warn, or announce, but its specific association with commercial promotional activity appears to have been a gradual process. In the 1600s 'advertisement' – as evidenced by the publication of numerous notices of absconding servants, missing spouses and stolen property under the title 'advertisement' – was roughly synonymous with 'announcement' or 'notice' (McFall, 2004, pp. 154-155).

The success of printed advertisements did not come until the invention of the movable-type printing press by German printer Johannes Gutenberg in about 1450. Not only was the

printing press an important part of the growth of advertising in America, but the increasing number of people learning to read and write had an impact as well. As literacy increased, the use of different forms of advertising spread quickly. Americans began to see "handbills, posters, and trade cards – and the first mass medium – newspapers" (Sivulka, 1998, p. 5). The *Boston News-Letter* was one of the first newspapers in America to print advertisements. The first known paid advertisements in America were found in the third issue of this paper. The ads (which were three announcements) were found on the back page of the document (Sivulka, 1998, p. 9).

Later, in 1728, Benjamin Franklin founded the Pennsylvania Gazette. In this newspaper, he became the first American known to use pictures in ads. This paper became very popular very quickly due to its simple writing and numerous pictures. Because it became so popular, it attracted large numbers of advertisements. He also started putting ads on the front of the paper when traditionally ads were limited to the last column on the back of the paper. As time passed, ads began to appear on every page next to the news. (Sivulka, 1998, p. 9 - 12). The images presented helped the ads, but were not as advanced as the images of today. Taking a look through periodicals and newspapers published during the eighteenth and nineteenth centuries shows that images were not well-developed elements of press advertising. Even as late as the early twentieth century, displays were limited and illustrations were with nonexistent or small and crudely drawn. (McFall, 2004, p. 158).

By the late 1800s, industrial innovations enabled manufacturers to produce products in large quantities which created a greater need for producers to seek out and persuade more consumers. Now, it cost people less to buy a product than to make it themselves, and customer

demand began to increase (Sivulka, 1998, p. 14). This change in the business environment led to national advertising of branded goods from soap to canned foods to cigarettes.

The Civil War was another important event in America's history that had an impact on our consumer economy. When the men went to war, the women had to work in the fields and in the factories. They earned money and stopped in stores or purchased goods from peddlers. Also, the jobs led to less time for household tasks. Therefore, women started buying clothes, canned goods, bakery items, and soap. All of these items would have been made at home prior to the war. Women became consumers and had to make the decision of what to buy and how much to buy (Sivulka, 1998, p. 19).

During the Civil War and during the time leading up to the turn of the century, a large majority of advertisements were unconvincing health remedies, get-rich-quick schemes, and other outrageous fakery. With no regulations on advertisements, these ads filled the pages of magazines and newspapers. Because these ads were so successful, patent medicine manufacturers began to explore new techniques for marketing their brand named packaged goods. This type of advertising has "established the foundations for today's multimillion-dollar health industry with their promotion of over-the-counter medicine, mail order remedies, and 'cure-all' aspirins" (Sivulka, 1998, p. 36).

As the growth of brand-name products continued to swell, advertising of these products increased along with it. As noted by Sivulka, "tobacco was tobacco and flour was flour until manufacturers started promoting brand names to customers" (Sivulka, 1998, p. 48). One important aspect of advertising brand-names for the manufacturers was the hope that the ads would inspire confidence in the product that is advertised. This confidence was thought to give

the consumer a reason to choose an item with a particular brand name instead of an item with a competing brand name.

A changing society was another contributing factor to the changing advertising market during the early 1900s. "Wages increased, and more married women entered the workplace, so that families had extra money to spend on 'wants' rather than 'needs', as well as more time to spend it" (Sivulka, 1998, p. 142). Advertisers began to market more than products. They began to market images. The ads displayed a need for better personal hygiene, dress, lifestyle changes, and new technology. They promoted the desire to buy things that contributed to what was considered to be better lifestyles, everyday comforts, and increasing conveniences. Items such as washing machines, canned soup, and laundry detergent became huge sellers due to the above mentioned lifestyle changes (Sivulka, 1998, p. 172).

With this change, advertisers shifted their focus from a desire to inform to a desire to persuade. Because of the implications associated with persuasion, advertising became controversial. Are people choosing to buy products simply based on the information in the ad? If so, is all of the information true? Due to the controversial nature of some advertising today, advertisers have to defend the information that they state in ads. Interestingly,

> …advertising agencies are forced to talk out of both sides of their mouths at the same time. They have to convince clients that advertising is really effective – in generating sales, holding on to the customers a company already has, or attracting new customers. But when governmental agencies or consumer groups ask advertising agencies about what they do when it comes to advertising products such as cigarettes and alcohol, for

instance, the advertising agencies argue that they have very little impact on people (Berger, 2004, p. 1).

Whether you are exposed to an ad for car insurance or an ad for an over the counter drug, the ad hopes to persuade you that the product is just what you need to help make you a better person. Advertisers have to make everyone believe that the beer and cigarettes ads are not causing people to buy beer and cigarettes because these products tend to be hazardous to one's health. These ads are very influential though. They show happy people with great bodies having a great time while using a specific product. Even though alcohol is limited to adult consumption, commercials cannot be controlled so that only adults see them. They are shown at later times and during shows not typically viewed by children, but children are still exposed to them.

As a parent, I am concerned about the types of ads on television due to the amount of time children watch television. Small kids tend to believe everything they hear on television even when the ads do not present completely truthful situations. A great example of this for children is toys. Toy commercials demonstrate toys that do wonderful things. Once the toy is purchased and brought home, the child is usually disappointed about the attributes of the toys. The toys never seem to do at home what the commercials show the toy doing on television.

My twelve year old son is an avid television watcher. He will often tell me about products he is interested in buying based on a well thought out commercial that he saw on television. These messages were very influential to him when he was younger. Fortunately, now that he is getting older, he does not watch commercials very often. He would be lost without the remote control. I have noticed that he will watch a show until a commercial is playing. If the

commercial does not immediately catch his attention, he turns the channel and watches a different show until he thinks the commercials are over. Then he will turn the channel back to what he was watching originally. I would often ask him how he is able to concentrate on one show and its plot when he keeps turning the channel every time he sees a commercial. Steigler (2010) addresses a similar problem with today's youth that was addressed by a study completed under the direction of The Kaiser Foundation in which the habits of young Americans who were connected with more than one medium (radio, television, internet…) at the time were explored. It was noted that the children seemed to experience "cases of informational consumerism rather than configuration of distributed attention: they result in a loss of attention, that is, of individuation, an often hyperactive attentional deficit and, in the end, a desymbolization" (p. 81). I believe that in the case of my son, who was not watching multiple mediums at one time but multiple channels at one time, was experiencing a similar phenomenon. How could he possibly be paying attention to several different shows at once? Was his 'channel surfing' creating a level of inattention that even he was unaware of? The commercials that he did watch were interesting enough to him to hold his attention and keep him from changing the channel. Many of these, obviously, were intended for children his age. Advertising companies know what this age group is interested in and choose to spend money on commercials suitable for this target audience.

An example of targeting a particular group for persuasion occurred by the American Tobacco Company. Bernays was hired by the American Tobacco Company in 1929 and asked to create a way to convince women to smoke. At this time, smoking by women was viewed as unfeminine and socially unacceptable. To do this, Bernays decided to use this negative view of smoking by society on women to their advantage. They helped establish cigarette smoking by

women as a symbol of women's liberation. To do this, ten New York debutantes marched in the 1929 Easter parade. They defiantly smoked cigarettes to protest women's inequality. This was referred to as the 'torches of liberty brigade'. After this incident, women began smoking in huge numbers. A Broadway theater began to allow women to enter its men's only smoking room. (Rampton & Stauber, 2001, pp. 19 – 20).

TODAY'S CONSUMER

Jenkins describes the idea of the changing consumer in a time of changing technological advances in *Convergence Culture: Where Old and New Media Collide*. He notes that "the decreasing value of the thirty-second commercial in an age of TiVos and VCRs is forcing Madison Avenue to rethink its interface with the consuming public" (2006, p. 20). Due to the changes in technology, today's consumers are changing as well. "If old consumers were assumed to be passive, the new consumers were active. If old consumers were predictable and stayed where you told them to stay, then new consumers are migratory, showing a declining loyalty to networks or media" (Jenkins, 2006, p. 18). Advertising agencies cannot be sure that the commercials are reaching the intended target because modern technology allows the consumer to record shows so that they can fast-forward through the commercials. Due to this type of modern technology in our culture, the ways that advertisements reach the consumer may have to be reconsidered.

Marketers will continue to employ creative tactics to enhance the products they are trying to sell and to reach the intended markets. Billions of dollars are spent each year in advertising and marketing research to ensure that the commercials and advertisements are successful. For example, " commercials broadcast during the 1998 Super Bowl cost approximately $1.3 million

for thirty seconds, and the cost of commercials during the 2000 Super Bowl was around $2 million for a thirty-second spot" (Berger, 2004, p. 1). Enormous amounts of money are spent on advertising. The following demonstrates how the expense breaks down by looking at the top ten companies for 2010 and the top ten categories for the same time period.

Top Ten Companies

Company	$$ spent advertising
Procter & Gamble	2.2527 billion
AT&T Inc	1.5107 billion
General Mills Corp	1.4805 billion
Verizon Communications	1.4068 billion
News Corp	984.8 million
Johnson & Johnson	950.4 million
Pfizer Inc	895.7 million
Time Warner Inc	863.3 million
General Electric Co	793.2 million
Walt Disney Co	776.9 million

Top Ten Categories

Category	Dollars spent advertising
Automotive	9.1515 billion
Telecom	6.3694 billion
Local Services	5.9328 billion
Financial Services	5.6046 billion
Miscellaneous Retail	5.1088 billion
Food & Candy	4.9617 billion
Direct Response	4.5499 billion
Personal Care Products	4,4467 billion
Restaurants	4.2674 billion
Pharmaceutical	3.1609 billion

*Data reported Jan – Sept 2010

Source: www.businesswire.com

The data provides evidence to support how huge the advertising industry has become. This chart displays the billions of dollars spent during the nine months span for which the data was collected. In addition, this chart shows the importance of drug advertising in this country, and how much money is spent in this category. Pharmaceuticals made the top ten with 3.1609 billion in the first three quarters of 2010. With the significant amount of money spent by the pharmaceutical industry, one might question the motives. Are the drug companies only concerned with the money they can make? Is the welfare of the consumer considered during the

research and development process so that there are not problems with the product that could be considered a health risk?

How does the United States compare to other industrialized nations in their marketing practices? Berger (2004) discusses advertising costs spent in 1998. Even though this is 12 years ago, the information provides a relevant picture of how significant advertising is in the United States. "It has been estimated that the United States spent $200.3 billion on all forms of advertising in 1998, and all other countries combined spent $218.4 billion" (Berger, 2004, p. 101). Of the $200.3 billion, $118 billion was spent on National advertising and $82.3 was spent on local adverting. Taking this further, with rough estimates, the United States spends approximately $800 per person compared to $40 per person in all other countries. (Berger, 2004, 102).

Not only are drug companies spending large amounts on advertising, they claim to be spending even larger amounts on research and development. It is believed that the companies are claiming to spend large amounts on research and development to justify the high prices they are charging for health products (Breggin, 2001, p. 222) and "because it looks better to have a large R & D budget than to have a large marketing budget" (Angell, 2004, p. 39). Could it be that pharmaceutical companies been more concerned with making money than with helping promote better health care?

As technology continues to change though, advertising will surely need to change as well. With huge amounts of money spent, advertisers are going to need to be sure that their ads reach the intended audiences. It will be interesting to see how advertising continues to survive

with DVR's and other future advances. Our capitalist society creates an environment in which companies will continue to advertise in hopes that revenues will continue to increase.

LIVING IN A CAPITALIST SOCIETY

Advertising today has changed to mirror our current society. We live in an era of consumerism where a person's worth could be defined by the amount of material possessions one has. Marketers spend millions of dollars researching what is going to make a good commercial that convinces the consumer to buy their product. According to McFall, "advertising is a peculiarly potent medium of communication with an unsurpassed capacity to capture, mold and transform pre-existing cultural symbols and ideas" (2000, p. 318). We are reminded that consumers are allowing advertising to influence their decisions, but at the same time, consumers' decisions are influencing how advertising is taking place. As these changing images are constructed, society is enabling new images to be constructed.

Companies want a 'symbol' that is easy to remember. A great example of this today is the Geico gecko. What is more fascinating than a talking gecko! People of all ages can tell you who this cute little lizard is. Another popular way animals are used to construct an image in our minds is the Aflac duck. Even though this duck makes an annoying noise in the commercials, it is very memorable.

Animals are not the only images used by advertisers today. One of my favorite uses of images in commercials is the current advertisements for the new show "Swamp People". This commercial shows numerous snap shots of people who live in the Deep South and harvest alligators for a living. One of the images is of two older gentlemen with very long white beards

holding lanterns. Every time I see this commercial, I think about what other people in the country must think about the people who live in the Deep South. These images suggest that the people of this area are hillbilly rednecks. These images and others are very important to advertisers because of the large number of commercials that we are exposed on a daily basis.

Remarkably, "the average American is exposed to at least three thousand ads every year and will spend three years of his or her life watching television commercials. Advertising makes up about 70 percent of our newspapers and 40 percent of our mail "(Kilbourne, 1999, pp. 58-59). Naturally, exposure to this immense amount of advertising will somehow affect most people eventually. I would not like to admit that I have allowed advertising to influence my decisions about what I purchase, but I am sure that I have listened more closely to some ads than others which has formed my opinion about some products. For example, I do not go to the store immediately after a particular product because of an ad I saw on television, but when I am at the store looking for a particular item, I will think back to what the ad for a certain brand promoted and probably be more likely to consider that brand.

We allow ourselves to believe that the products advertised will increase our standing in society. Whether looking better or feeling better is what we desire, there is a product advertised to help meet those needs. This new image gives us some new meaning in our lives and helps to sell the product. McFall (2000) addresses the importance of image and the way some people believe these images increase one's social standing and develop meaning for objects:

> Stable social norms and practices have disintegrated leaving space for advertising, as a code of social standing in consumer society, to capture pre-existing meaning for commercial promotion. This is the society of the commodity sign, where the autonomy

of the signifier is assured through the capacity of advertising to strip objects of their original meanings and install new ones (p. 321).

Even though the ultimate outcome of advertising is to sell a product, the marketing strategy considers how to get the product sold. People are interested in images today, from how they look to how they function in society. Kilbourne (1999) reinforces this statement in *Deadly Persuasion*: "advertising often sells a great deal more than products. It sells values, images, and concepts of love and sexuality, romance, success, and perhaps most important, normalcy. To a great extent it tells us who we are and who we should be" (1999, p. 74). We view commercials and the thirty second situations they present. We see wonderful people with wonderful lives because of the products that are promoted. In a desire to have a wonderful life too, we are influenced to buy the product because of the advertisement. Big PhRMA is no stranger to the concept of selling/promoting normalcy. Through chemicals, ordinary individuals can become extraordinary. A person with "attention problems" can medically enhance his/her mental capacity and stay focused longer. It is no surprise that large pharmaceutical companies promote their products through images of happy lives and normal individuals.

Our images of ourselves change according to societies views of what is normal. In society, we get to visualize what "normal" is on television. This idea of self and positioning ourselves in society was also addressed in *Stuart Hall: Critical Dialogues in Cultural Studies.* We often construct images of ourselves based on what we see around us. For many, it is the images we see on television and in magazines that we compare ourselves to. Living in a capitalist society where material possessions define our worth influences our images of ourselves as well. According to Hall, "the old 'sense of class' was breaking up, particularly under the

impact of consumerism: 'The worker knows himself more as a consumer than as a producer'" (Morley & Chen, eds, 1996, p. 77). Fortunately for marketers, we are consumers in this society. Also, members of society who are producers are inevitably consumers as well. No matter what they produce, they cannot produce everything; therefore, they too buy things for survival.

We allow ourselves to construct or not to construct certain images of ourselves based on images of others we see on television and what we see in other media. As we see current media as a site for image construction and popular culture, we can understand the immense impact that it has on our lives. Whether the constructed images are positive or not, the images are there and they shape our lives. "In popular culture, the public sphere becomes the site of distorted communication and social anxieties and prejudices" (McCarthy, 1998, p. 87). We see injustices and inequities due to class issues and the desires to be like someone else. Naturally advertisers want us to desire products because of the belief that the products will make us become something we are not or not able to become.

Advertisers have become aware of this power that advertising has on the individual. We see things on television and want to believe the things we see. It gives us a chance to dream of being something that we are not. Marketing takes advantage of these desires to sell their brands. According to Marks (2002) in *Touch*, "the screen is a space in which viewers can identify with an image that is not of them – the screen is not a mirror – but confirms their existence and reflects back on them" (p. 25). We can see ourselves being like the images presented on television. Some individuals may even have hopes and desires to become like the people they see on television one day. This helps sell the products in the advertisements.

Unfortunately, this type of desire to be something one is not can be taken too far. Advertisements can help a person identify their short-comings which helps to develop a negative self-image for some. For young girls in our society, magazines targeted toward this group display pretty, skinny girls who are full of life and having so much fun because of their looks. Unfortunately this is not a new occurrence. During the 1970s, the images displayed in girls and women's magazines were viewed by feminist as exemplifying oppression. The shiny advertisements were simply convincing readers of their inadequacies. At the same time the consumers were drawn into consumer culture with the belief that they could buy their way out of bodily dissatisfaction and low self-worth (McRobbie, 1999, p. 46).

Like the young girls in the 70's, today's young girls view the ads and wish to be like what they see in the advertisements. In addition, they are also viewed. Marketers know what young people desire due to the marketing research that they do. Miller (1992) addresses this issue of being read while also reading in *Illustration*:

> The doubleness may be located in a heterogeneity between media that is doubled by a duplicity within each sign or conglomeration of signs in any medium. It may be located as a failure of any sign to be self-identical or univocal. The doubleness may be defined as an irreducible residue of non-meaning or of materiality in any sign or collection of signs in any medium (p. 95).

These signs that are displayed are there because advertisers know that the images are desired, and the images are desired because they are in the media. So, it is sad to think that our young girls place so much emphasis on being like the girls they see in the ads when many of them will never be as pretty or as thin as the models hired to promote the products. Consumers

need to be careful about the way images presented on television are viewed and interpreted. They also need to be careful to monitor the images allowed to be displayed. I appreciate that there is very little that can be done about most advertising, but young people could be taught how to correctly form perceptions in regards to the things that they see on television and in magazines.

There is a great deal of controversy associated with advertisings effects on children. To gain a better understanding of the influence that commercials have on television, I read Linn's (2004) *Consuming Kids: The hostile takeover of childhood*. In this book, Linn describes the problems associated with the types of commercials that children are subjected to on television. For example, she discusses the amount of commercials for alcohol while watching sporting events. This was alarming to Linn because she watched baseball with her young son. I never noticed how prevalent this type of advertising was until this year. My family never watched sports on television. Things changed when we started attending our daughter's high school football games. Then that progressed to watching college football and NFL games. I was amazed at the number of alcohol commercials even during college games. I remember commenting to my husband that it was unbelievable how many beer commercials came on during college games since many college students are not even old enough to drink.

According to Linn, "the industry claims that advertising affects only brand choice, not the decision to drink. That seems to be true for adults, but for children it seems to affect both. Beer companies spending the most on advertising make the brands most favored by teenagers" (2004, p. 163). With a comment like this, I find it hard to accept the number of beer commercials that children are faced with just by watching professional and college sports with their families.

The advertising market is not going to go away. We live in a capitalist society which values possessions. In such a society, goods and services are marketed to help businesses remain in business and to promote their products. We could be more cautious consumers and use good judgment when we view ads and make consumer decisions. Most purchases will not adversely affect our bodies. Should a toilet paper commercial convince one to try a certain brand of toilet paper, this decision will not cause major problems for most people. On the other hand, should a drug advertisement convince someone to request a certain medication when going to the doctor, he might receive a drug that might cause unnecessary and uncomfortable side effects. Because of the controversial nature of drug advertising, I will address the issues related to the same in the next section.

Not surprisingly, pharmaceutical companies realized the value of marketing and became a huge part of the advertising industry. In the beginning of drug advertising, drug manufacturers mainly marketed directly to physicians. This type of marketing has received much criticism over the years.

DIRECT MARKETING TO PHYSICIANS

In 2002, the $12 billion that was spent annually on industry gifts and payments to physicians drew the attention of the Office of the Inspector General (OIG) of the U.S. Department of Health and Human Services (DHHS). Because of this attention, a large scale study of marketing practices was conducted. After the study was conducted, PhRMA issued a new voluntary code for the regulation of the industry (Katz, 2003. P. 36).

> The code continues to allow for the exchange of gifts valued less than $100 but puts 'items of minimal value' in their own category. Whereas gifts under $100 can be given only 'on occasion' and must primarily benefit patients, gifts of minimal value, including calendars and stress dolls, should benefit medical practice and can be given with any frequency. Snacks and modest meals are permissible so long as they are consumed while listening to the sales pitch of a company representative (Katz, 2003, p. 40).

The problem with the gifts is that the public believed that physician integrity was victimized by commercial influences in ways that would be costly to the healthcare system both financially and with public trust. For example, Katz (2003) notes that a gift or gesture tends to impose on the recipient a sense of indebtedness. The physician, whether he consciously acts or not, tends to feel obligated to return the good deed with his behavior of prescribing the drug marketed by the drug rep (Katz, 2003, pp. 39 – 41). Eisenberg (2010) describes a similar problem associated with small gifts arriving in a physician's office. He states that "patients could view their presence as a sign that the doctor and nurse have been influenced by the 'freebies' (p. 14).

This practice of gift giving by drug representatives does not stop with small items such as pens and tablets left in the office with drug names on them. Many continuing education courses in which physicians are educated on new drugs on the market and their benefits are in large sponsored by drug companies. Goldberg (2008) reports that 90 percent of the $1 billion spent in 2003 on continuing education was funded by pharmaceutical company sponsorship (p. 8). In addition, Morin (2003) reports that the pharmaceutical industry spends, on average, $8000 per year for each physician (p. 54).

It is truly hard to say how much influence the drug representative's gifts have on prescribing physicians even though the physicians report that the gifts do not impact their judgment when it comes to patient health.

> The practice of small gift-giving occurs in an environment where physicians interact heavily with industry sales representatives, have their continuing-education courses funded by industry, receive information from industry, receive information from industry-funded studies, are deluged with print advertising, and see patients targeted by direct-to-consumer advertising. In an environment in which industry plays such a prominent role, it might be difficult to determine, even with rigorous research methods, which industry tactics wield the most influence and impossible to say with confidence that if the practice of small gift-giving were to cease, prescribing practices would change (Katz, 2003, p. 44).

Drug companies also chose to participate in direct to consumer advertising as a source of marketing for prescription and non-prescription drugs to consumers. This type of advertising was first introduced in the United States in 1983, but the advertising was halted for a couple of years while the FDA analyzed the guidelines for this type of advertising. It was determined after looking at the guidelines that the existing rules provided an acceptable level of protection to general consumers when the advertising was directed at health care professionals and advertising resumed. Also, the FDA relaxed the guidelines for commercial advertisements in 1997. Under the new guidelines, drug companies did not have to be as detailed about the side effects of the medications they advertised. This caused a large increase in the number of drug ads on television, radio, and in magazines (Sokol, et al, 2010, p. 403).

Our health care system managed to survive decades before drugs began to be advertised. Just how far will drug advertising will go? Whose best interest is at stake with the promotion and use of drug advertisements? Interestingly, drug advertising strategies do not appear to be different from other products that are advertised. Companies look for clever ways to convince the consumer that their product is a necessary purchase for the consumer. To do this, corporations have formed relationships with nonprofit organizations and have paid them for the permission to use the organizations logos on their advertisements. A popular example of this was when Bristol-Myers Squibb paid $600,000 to the American Heart Association so that they would use the logo in advertisements for Pravachol, its cholesterol-lowering drug. Also, SmithKline Beecham paid $1 million dollars to the American Cancer Society for the right to use its logo in ads for NicoDerm CQ and Nicorette antismoking ads. These are not the only examples by manufacturers for similar deals. One such deal occurred between the Eskimo Pie Corporation and the American Diabetes Association. This was supposed to give the impression that the American Diabetes Association endorsed Eskimo's sugar free line of frozen desserts even though the desserts contained high levels of saturated fat which was not a good choice for patients suffering from diabetes. The non-profit organizations that took money from the corporations still deny that the use of their names and logos constitutes an endorsement of the product while the corporate sponsors understand the positive impact that the logos have on the labeling and advertising of their products. (Rampton & Stauber, 2001, p. 15).

Advertising is meant to persuade someone to buy a particular product, and actors and actresses are hired to promote the products even though they do not use the product advertised. This is very confusing to many consumers. Believing everything you see on television or in

print ads can lead to making poor purchasing decisions in some cases. If an actor endorses a product he should be describing actual results from genuine use. If the American Heart Association allows their label to be placed on a product, it should be because the association actually believes in that product. The endorsement should not be there as a result of a payoff by the company trying to sell the product.

Drugs have become a commodity for consumers to buy in America. According to Avron (2004), "more ominous is a larger issue: these ads and commercials are helping the medical care system form a professional enterprise focused on the health of people to just another marketplace, like those for fast food, cars, and pop music" (p. 290). Are the pharmaceutical companies keeping the well being of the patients in their best interest, or are they only interested in how much money they can make? Is it possible to do both? We are influenced by advertising to purchase medications that we may not need after all. "These changes in the way pharmaceuticals are permitted to function in the United States has created a consumer culture in which a healthy body is a commodity that people can choose to purchase or not" (Weaver, 2010, p. 69).

Fortunately for the companies who market the medications, televisions are readily available in most homes in America. Also many people believe most of what they see on televisions whether it is true or not. "Television is very close to us, it is increasingly widespread; but it is not, for all of its ubiquitousness, very well understood" (Weber, 1996, p. 112). The capabilities of television advertising are nearly unlimited, so consumers need to be careful about what they see. Many members of our society, adults and children, spend large amounts of time viewing television daily. This amount of time is increasing the amount of exposure to new

information in the world or new products that are available. Increased exposure could slowly change perceptions of one's place in society and cause a desire to change who s/he is. Kincheloe (1993) in Piner, et al (2004) notes that "the world is not brought into our homes by television, as much as television brings its viewers to a quai-fictional place – hyperreality, a place which celebrates the 'look'" (p. 472). Are consumers led to believe that they are not adequate? Are the images on television promoting a reality that most people cannot (or should not attempt to) attain? Questions like this are difficult to answer, but with this type of influence from commercials so prominent, regulations have been placed on commercials for the protection of the consumer.

For example, before 1997, the Food and Drug Administration (FDA) required drug companies to include full information about all side effects in their advertisements. This made it very difficult for drug companies to advertise on television. Most commercials have only thirty seconds, and filling the entire thirty seconds with side effects was considered to be counterproductive. Consumers would shy away from a drug after a long list of side effects was described in the ad. In 1997, though, the FDA changed the rules for television/radio ads. No longer did the drug companies have to give the entire list. They were required to only share the major ones and refer listener/viewers to a source of additional information such as a phone number. Once these changes were made, drug companies flooded the airwaves describing their latest drugs. Money spent on DTC ads on television increased from 25 to 64% of total advertising dollars. (Angell, 2004, pp. 123-124).

This type of new advertising for drugs has entered the marketplace with controversy. One such problem with drug advertising is the increased and unnecessary use of drugs.

Advertisements suggest to people through listing symptoms that a certain drug may be needed. Ads also show how the lives of individuals may improve with the use of the drug even when the person may not be sick. "Once a drug is approved for marketing, the pharmaceutical industry employs different strategies to increase sales. One strategy is to suggest that a drug might be used preventively even where no clear medical problem exists" (Valenstein, 1998, p. 171). With this type of advertising, drugs are marketed to supposedly keep people from getting sick. This is different from the traditional model of medicine where people who are sick are treated with medication. "IMS Health reported that one year after a DTC campaign for Fosamax, physician visits for osteoporosis evaluation nearly doubled" (Wilkes, et al, 2000, p. 122).

It is important to ask individuals what is making them sick. Could they change something about their lifestyles so that the medicine is not necessary? Critics of DTC advertising have suggested that DTC advertising should mention lifestyle changes or other nonpharmacological interventions. Very often, patients get angry when their doctor suggests discussing a low-fat diet, stress management, or allergen avoidance instead of a prescription for a drug. Some believe that DTC advertising is cultivating a belief among the public that there is a pill for every ill. This process has also contributed to the medicalization of minor disorders. All of these things could lead to an overmedicated society (Wilkes, et al, 2000, p. 121).

Advertisements may also lead to another type of dissention between a doctor and his patient. Current advertisements seem to encourage patients to pressure doctors into prescribing something that they may not really need. According to Angell, "there is no doubt in my mind that DTC ads mislead consumers far more than they inform them, and they pressure doctors to prescribe new, expensive, and often marginally helpful drugs, even when a more conservative

option (including no drug) might be better and safer" (Angell, 2004, p. 125). It becomes easier for a doctor to write a prescription than to help the patient understand why the drug is not necessary. Doctors do not want to make their patients mad. My appointment with my daughter created a very similar situation. Could the doctor held the opinion that the prescription was the only reason for my appointment? I never considered the fact that the doctor may have felt pressured to write the prescription with the belief that I was only there for the drugs. I believed that he was simply trying to save time so that he could see more patients and make more money. I did not make the appointment because of a drug ad I witnessed. I was there due to the pressure placed on me by the adults in my daughter's elementary school. Even though my opinion of the physician's behavior was negative and possibly not on the right track, I now understand how much influence ads have on the patients' demands as well as the physicians' reactions. DTC ads are prohibited in all other developed countries (except New Zealand) because of the controversy they create.

Angell is not the only scholar to address the problems created by advertising between the doctor and his patient. Wilkes notes that "DTC advertising promotes inappropriate prescribing and strains the patient/provider relationship, increases the costs of care, and contorts the physician's professional role" (Wilkes, et al, 2000, p. 120). Even though it has been noted that advertising can create problems between physicians and patients, a great deal of marketing research continues to be done to determine the most susceptible audience to target. Research suggests that women are more aware of the ads placed on television and in magazines than men. It is believed that "awareness of DTC advertisements was very much associated with having been diagnosed with a condition for which a given drug was advertised" (Wilkes, et al, 2000, p.

118). I also believe this to be true because it seems that women are more likely to go to the doctor than men. I realize this is a general statement that could be argued either way. I definitely find that I am more aware of my health concerns now that I have children that depend on me. I feel that it is important for my health to continue to be at its best so that I can be there for my children. That is not to say that a father would not feel the same way, but in my experience, the mother is usually viewed as the primary care giver for the children in the family.

As a result of the research I have read about the demographic focus of ads, I started thinking about the number of ads we see and how marketing tactics influence our decisions. Since I have been working on this dissertation, I have been overly conscious of ads on television and in magazines. I decided to look at magazines targeting different audiences so that I could draw educated conclusions about how the ads impact the consumer. To complete this task, I looked at several magazines with a variety of targeted audiences. The following chart displays the results from this experiment:

Name of Magazine	# of pages in magazine	# of Non-Drug Ads	# of Drug Ads
Good Housekeeping (primary audience: women)	257	61	21
Ladies' Home Journal (primary audience: women)	177	43	18
Seventeen (primary audience: teenage girls)	169	52	2
Cosmo Girl (primary audience: teenage girls)	157	34	5
People (non-gender specific audience)	81	9	1
Newsweek (non-gender specific audience)	69	11	4
Esquire (primary audience: men)	161	42	6*
GQ (primary audience: men)	253	78	13 **
Sports Illustrated (primary audience: men)	179	31	10 ***

Name of Magazine	# of pages in magazine	# of Non-Drug Ads	# of Drug Ads
Maxim (primary audience: men)	98	21	8****
Pathways to Family Wellness (non-gender specific audience)	63	9	2
Parents (non-gender specific audience)	197	70	16
American Journal of Nursing (audience: current and future nurses)	80	7	0
Nursing 2009 (audience: current and future nurses)	73	8	0
The Autism File: USA (non-gender specific audience)	179	11	5
Men's Health (primary audience: men)	137	34	11
Women's Health (primary audience: women)	155	42	6

**this number includes 5 ads for alcohol*
***this number includes 10 ads for alcohol*
****this number includes 7 ads for alcohol*
*****this number includes 5 ads for alcohol*
Ads for alcohol were unique in the magazines targeted at men. The drug ads for women were all for prescription or over-the-counter medications. Interestingly, there were no ads for medication in the magazines targeting nurses.

I felt that this experiment would show that drug advertising would be closer to equal in magazines targeted at women and magazines targeted at men. I expected to see different kinds of drugs advertised, but I did not expect to find such alarming differences between the amounts of drug ads in women's magazines as compared to the ones found in magazines targeted at men. I was amazed at the total number of pages devoted to total advertising in Good Housekeeping, Ladies' Home Journal, Esquire, GQ, Parents, Men's Health, and Women's Health. In many instances, the ads encompassed multiple pages, so the total number of pages devoted to advertising would have been higher than the number of ads I reported. I also learned that most drug ads were located on the right side of the magazine pages with the other side entirely devoted to disclosures about the medication.

This experiment seems to reinforce the previously mentioned research by Sivulka that women are more apt to do the shopping than men, and that women are more aware of specific

drug ads than men due to the marketing of the ads. Marketers are aware of this data and obviously target this population more heavily. In a recent study by Sokol, et al, (2010), the amount and types of pharmaceutical drug ads intended to be marketed to women also addressed this concern. Women make up an important group for DTC advertising in magazines. Annually, women spend more on health care and prescription medications than men do. They also have more doctor visits where a medication is prescribed. In addition, women make decisions about health care for others in their family. 80% of female parents (whether they are married or not) make the health care decisions for the children and 58% are responsible for the decisions about the family's health insurance. (Sokol, et al, 2010, p. 404).

Do women feel more vulnerable, or are they simply more concerned about their health? In my own experience, my concern about my health intensified once I became a parent. Most mothers feel the need to protect their health for a variety of reasons. One important concern is the need to be healthy so that they can raise their children. Even though, in most instances, a family member could assume the responsibility of the children, the bond between a mother and her children is so strong that she does not want to think about the children in another's care.

There were a limited number of drug ads in nursing magazines. Based on the research on DTC advertising, most of the drug advertising is geared toward the physicians that make the ultimate decisions about prescribing drugs. A nurse is not usually involved in this role; therefore, promotion of products to this group would be less beneficial to the company.

In the future, I will probably never look at a magazine the same way again. Even before I completed the experiment, I was amazed at the number of ads in a typical magazine. I wonder how many people who read magazines regularly think about the number of pages devoted to

advertising. No matter where we look, we are exposed to advertisements…magazines are not exception.

This experiment reinforces the notion that millions of dollars are spent on marketing research to find out what appeals to different people (whether they are looking at age, gender, race, etc). Definitely apparent in magazines targeted at men are ads promoting the sale of alcohol. I found this to be interesting because most of the drug ads in men's magazines were for alcohol, and the strategy that seemed to be the most popular was using sex appeal with gorgeous girls smiling happily with the alcohol in hand. According to Linn, ads such as those promoting alcohol tend to use individuals that barely look old enough to consume alcohol legally. She notes that the ads are

> populated by ever-so-slightly-older beautiful people (when compared to a younger target audience), these ads offer the promise of an ever-so-fun-filled life brimming with sex, lack of bothersome inhibition, and raucous parties, all centered around alcohol …All your loneliness, insecurities, or awkwardness will disappear, these ads promise, with a Bud, or a Coors Light, or a Heineken (Linn, 2004, p. 158-159).

Regardless of the marketing strategy, marketing agencies will continue to do whatever it takes to influence our decision to buy certain items. Many times, consumers are not even aware of the magnitude that the ads influence them. When ads have been effective, they have persuaded a purchase without the individual feeling influenced to make the decision. "Influencing choice while creating the illusion that our choices are not being influenced is the whole purpose of advertising" (Linn, 2004, p. 180). Wagner (1997) in *New Temperance* also discusses the power or persuasion through advertising and links successful advertising to

America's capitalism: "The genius of American capitalism has been to tie success to pleasure, largely through advertising that leads us on a continual search for new pleasurable products" (p. 105).

Demographically, older viewers seem to be more accepting of DTC advertising than younger viewers. "In another survey of consumer's receptivity to DTC advertising, Louis Morris and colleagues found that older patients were more accepting of such advertising than younger respondents were. They suggested that older patients may view taking of prescription drugs as a sign of health, whereas younger ones may consider taking such drugs to be a sign of illness" (Wilkes, et al, 2000, p. 118). When I try to make sense of data like this, I have to think about where I am in my life as a young adult approaching 40 years of age. I am not on medications that are considered as maintenance drugs such as blood pressure or cholesterol medicines. I could understand how patients, like my elderly grandparents approaching 90 years of age, view these drugs as life maintaining. With this said, I suppose that advertising that introduces new products for maintenance issues with fewer side effects would be very appealing to them.

Regardless of the targeted audience or the product that is advertised, consumers are faced with decisions about purchases on a daily basis. Whether someone is deciding where to eat for lunch or the kind of automobile to purchase, many times ads influence the decision. Consumers are interested in products that are pleasurable, and many consumers would argue that they deserve such products because they are hard-working Americans. The idea of promoting for pleasure is not new in America. "Beginning in the post – World War II period of prosperity, but becoming particularly prominent in recent decades, a successful mass marketing of all sorts of

good to the public has occurred along with constant promotion of pleasure" (Wagner, 1997, p. 56).

Due to mass marketing of drugs ads showing happy healthy individuals experiencing pleasurable lives, people are beginning to enter their physician's offices demanding a certain drug for specific symptoms even though they may not be aware of the side effects or the possible negative interactions with other medicines they take. "Using a well-established definition, a prescription is appropriate when the health benefits of the drug so outweigh the health risks that the drug is worth taking" (Wilkes, et al, 2000, p. 120). For people who self-prescribe and take over the counter medications, this can present a problem. Drug-drug interactions and problems with such are not normally divulged in DTC ads. This can put the patient at risk of personal injury.

There is another side to the DTC advertising controversy. There are those who believe that the advertisements may be doing some good by educating the public about the medicines. The information provided in the ads could help the patients have better and more informed conversations with their physicians. This process could lead to enhanced care by the doctor and an eventual improvement in public health (Avron, 2004, p. 288). Knowledge is a good thing. Should the advertisements increase a patient's knowledge of medicines and possible side effects, then the ad has also provided a positive influence. Even still, patients need to listen to the physician because he has been trained to understand the side effects and negative effects of using medicines together. Diller addresses the DTC advertising controversy in *Fallout from the Pharma Scandals: The loss of doctor's credibility?* "…direct-to-consumer advertising should be curtailed. The drug industry's claims that DTC advertising serves the goal of patient education

ring as hypocritical as those about doctors' CME. The United States is only one of two countries in the industrialized world to permit this practice" (p. 29)

Drug advertising has increased tremendously on television. The number of commercials reaching the airwaves today has increased drastically. Sometimes it seems every other commercial is for a prescription or non-prescription drug. As always, beautiful people demonstrate wonderful lives that are a result of the drug being advertised. How many people call their physicians and demand a drug they saw on television? Advertising has increased by pharmaceutical companies because of the amount of money that could be made by advertising drugs and influencing users. There has proven to be a positive result for pharmaceutical companies who advertise. "DTCA (Direct to Consumer Advertising) offers a significant return on investment for pharmaceutical companies. One study found that every $1 spent on DTCA in 2000 translated into an additional $4.20 in drug sales" (Sokol, et al, 2010, p. 402).

Because the drug industry is such a lucrative business, drug companies need to have new drugs approved by the FDA rapidly. Since the FDA was strapped for cash, drug companies began to help fund the operation of the FDA. This may seem like a conflict of interest on the part of the drug companies. One would have to ask how this relationship influences the approval of dangerous prescription drugs in modern times. "How unbiased can CDER (Center for Drug Evaluation and Research) be when half its budget comes from the drug companies themselves" (Abramson, 2004, p. 85)?

This causes drugs to be rushed through the system and approved that possibly should not. In 1988, an anonymous survey was conducted which suggested that FDA officers believed that the standards had decreased when approving new drugs causing 27 new drugs to be approved

during the previous three years that they felt should not have been (Abramson, 2004, p. 86). Because of these rushed approvals, drugs do not get properly tested and checked. The number of drugs that were approved by the FDA and later removed from the market increased from 1.6 percent of the drugs approved between 1993 and 1996 to 5.3 percent of the drugs approved between 1997 and 2000. In addition, seven of the drugs that were withdrawn from the market were pulled due to serious health risks. It had been reported that these drugs were suspected of having caused more than 1000 deaths. Since a dead person cannot report negative side effects to the FDA, the family or the physician would have to assume this responsibility. No one can assume that this process actually takes place. Therefore, the number may have actually been higher because the reporting of adverse drug events to the FDA is voluntary (Abramson, 2004, p. 86).

As noted previously in this chapter, general advertisements offer a positive image with beautiful people being used to help sell a product. It is evident that drug advertisements are not different in this regard, and the need to promote drugs is not a new endeavor even though DTC advertising has grown tremendously. Ads for drugs were the only colorful ads in the early newspapers in this country. Our society seems to have always been looking for a quick fix to what ails its individuals. We desperately want to be well and normal (when compared to others around us). We seem to want to believe that medications are the solution to these problems because they are easy to take and, for many, the results are seen immediately.

Drug companies will continue to spend millions of dollars advertising even though technology is causing a shift in the advertising industry. With DVRs readily used in numerous American homes, consumers are able to eliminate commercials from their favorite shows. Not

only will this save time when watching television, but the aggravating commercials will be non-existent. There will have to be new and clever ways to reach consumers such as "clever jingles, attracted by a celebrity spokesperson" (Alperstein, no date given, p. 210). They may use mailings and the internet to promote their brands when television advertising becomes less prevalent. Advertising will probably never be able to be avoided entirely, and it will be interesting to see how advertising changes in the future. With internet purchasing becoming so popular, marketers could use this media to promote their products and enhance consumerism.

Since the pharmaceutical industry is so powerful, drug advertising is perhaps here to stay unless consumers do something about it. The FDA could increasingly regulate the advertising that is directed to the consumer, but will that happen? "In particular, the FDA needs additional staff to ensure a level playing field and to monitor many of the new forms of media, most notably the Internet and other forms of electronic production" (Wilkes, et al, 2000, p. 124). According to Wilkes, et al, advertising is not going anywhere. "The political power of the industry, the desire of consumers to have access to health information, and technological developments (namely, the internet) make it impossible for the nation to reverse course" (Wilkes, et al, 2000, p. 123).

Since advertising is perhaps here to stay, consumers may need to learn to view ads with an open mind and question the reliability of the information in the advertisement. Patients tend to trust physicians when it comes to prescribed medications. After all, we need to believe that someone is looking out for our well-being, and our safety is not being jeopardized. I feel fortunate to live in modern times with overwhelming technological advances. Without modern technology, doctors would not be able to diagnose patients' problems as confidently. I need to

believe that I can visit a doctor and find answers to questions I may have regarding my health. I need to also understand that, as consumers, we cannot always rely on doctors because they learn about new medications by pharmaceutical companies promoting their products. Modern medicine brings about modern problems never experienced before. We are at the beginnings of new advancements in medicine, and who knows what tomorrow has in store for us.

Because of the developments in modern medicine, advertising, and pressure to be as young as possible for as long as possible, Americans need to be careful, educated consumers. We have to be sure that we are using all of the knowledge available to make the best choices on our behalf. A quote from Abramson (2004) summarizes this section well:

> we have all been pulled into this enormous and complex system by our hopes and fears, our myths and ideologies, our dedication and pursuit of knowledge, and our personal and institutional aspirations. As the interests and energies of all these elements keep emerging into an even larger and more powerful system, a perfect storm is gathering that is producing enormously expensive and disturbingly ineffective health care, American style (pp. 76-77).

Consumerism in the United States seems to be here to stay in our culture, and advertising plays an important role in that process. Advertising is a multi-million dollar industry that hopes to promote a product's effectiveness and convince the consumer to buy the item. In many instances, our decisions are influenced by what we see and hear in our world, whether it appears in an advertisement or from others that we meet. This is true for drug advertising as well. Like other forms of advertising, drug advertising, unfortunately, is here to stay. The increase in the number of students diagnosed with ADHD and treated with medication may, in part, be

influenced by the advertising industry and its impact on the ‘disorders’ cultural construction. Chapter five will address issues related to using drugs for the treatment of ADHD in children and alternatives to medication.

CHAPTER FIVE

WHAT NOW?

"When the only tool you have is a hammer, every problem begins to resemble a nail"

- *Maslow*

"It is family members and teachers who more often notice, the child performing suboptimally, and ask, 'Did you take your pill today?' The question expresses an underlying message to the child about the drug's important contribution to performance and behavior, and, ultimately this message may undermine the child's confidence."

- *Lawrence Diller*

"The teachers have control, the parents peace of mind that their child's inability to sit in an uncomfortable chair for 6 hours with a minimum of breaks is a neurological problem not a school or parental issue, the pharmaceuticals have maximum profit margins, and the docile bodies, formally referred to as young people, have the minimum credentials to become consumers ready to do their patriotic duty and buy as much stuff as their over charged credit cards will allow. Everyone wins. Everyone lives the American dream one pill at a time."

- *John Weaver*

As a Curriculum Studies student at Georgia Southern University, I was asked to read, explore, and think about numerous social issues that impacted the schools where we teach and the environments in which the students are asked to learn. At the end of this writing process, I realize that this program has provided a new lens for me to explore a very controversial issue in

schools today while at the same time giving me an opportunity to provide a voice for the teachers, parents, and possibly children impacted by the ADHD diagnosis. One could state that my beliefs related to ADHD are very different from most educators, but I am not willing to ignore the passion that I have for this subject. I am thrilled that I could tell my story from the viewpoint of an educator and a mother who is impacted by the ADHD diagnosed even though my opinions do not sit well with many people. Morris (2009) reminds me that the writing process can possibly help free me from the burden of a differing opinion in my school and in my society when she states, "Let this be a lesson to all of us who are imprisoned metaphorically be the schoolhouse or university. We can smuggle out our dissenting counter-cultural thoughts through writing" (p. 217).

This dissertation was never intended to be written for the purposes of proving that ADHD and its symptoms do not truly exist. I would be untruthful to myself and others if I sent that message. I did, though, wish to explore the idea that the prevalence of the diagnosis and the widespread use of stimulant medications is impacted by socially constructed beliefs in our society. The numerous systems that are in place such as the family, school, medical community, and advertising agencies provide different levels of information to impact families that could have possibly led to a diagnosis for a child and medication for treatment. Has our society become so accepting of this label that the diagnosis is too commonplace? Are children being diagnosed that should not be? Should the current educational system be evaluated a little more closely so that the differing needs of the children are met in the classrooms? Socially constructed beliefs tend to become so accepted that questioning of the beliefs no longer happen. It is my hope that the work in this dissertation provides a voice that troubled parents and teachers

may be searching for as they attempt to understand an ADHD diagnosis. Where do we go from here? If ADHD is a social construction, what will be the next excuse the school systems will accept when the children continue to under-perform compared to other industrialized nations?

Teachers and administrators are under tremendous pressure to perform according to the standards set forth by the federal government under the No Child Left Behind legislation. Because of the intensity of the situation, "when it is difficult or inconvenient to change the environment, we don't think twice about changing the brain of the person who has to live in it" (Livingston, 1997, pp. 17-18). Do educators reflect on best teaching practices when the children are not performing up to expectations set forth by the school and the state? It seems that the opposite actually takes place. So much pressure is placed on educators that some seem to forget that the main focus is supposed to be on teaching the children in the classroom. Pinar (1994) points out that, "Behavioral objectives, instruction interaction analyses, and standardized forms of evaluation have contributed to the 'deskilling' and 'dis-empowerment' of educators and to the deterioration of American public education" (p. 231). How far is this going to go? Who has the power to stand up for and contribute to change in America's schools?

Since the current state of affairs is so frustrating for educators, it becomes easy to start looking for blame in others. Normally, when children are not doing well, the blame is placed on the child, the home environment, the socio-economic status of the child… Teachers find it difficult to think that part of the problem might be the boring lessons she planned or classroom management issues. Human nature makes it difficult to accept any responsibility for situations such as this. Veteran teachers will quickly tell you that they do not need to change how they teach because the teaching methods employed in their classes have 'always worked'. These

teachers who have taught for 25 plus years are seeing a population of students who are very different than the students they taught at the beginning of their careers.

One still has to ask if medication is the best alternative. "Is changing the child's brain chemistry, by prescribing Ritalin – like drugs, really the most appropriate response to the child who doesn't perform well in the modern school environment (Livingston, 1997, p. 18)? Even with the best case scenario and the best drug for the child prescribed, no drug is taken without side effects. Common side effects for ADHD medications include headaches, loss of appetite, weight loss, mood swings, nervousness, insomnia, nausea, dizziness, and addiction.

ADDICTION

The Poison

O wine can clothe in luxury
The ale-house foul and low,
And build a golden portico
With its red alchemy…
Like cloudy sunset in the evening glow.

And opium dreams can roam and rove
Past that which has no bourne,
Can plumb eternity, and mourn
The emptiness of love
And satiate the soul with joys forlorn.

All this is nothing to the bane
That trickles from your eyes,
True mirrors of my miseries…
Green lakes where dreams in vain
Would quench in bitter gulfs their agonies.

Ah, nothing to the monstrous flow
That mingles with your breath,
That brings oblivion beneath
Its waves of vertigo,
And bears me fainting to the brink of Death!

(Baudelaire, 1963, p. 62)

This poem by Baudelaire describes complicated issues for people who chose to take mind altering drugs. Even though most people who partake of such substances will tell you that they do so because of how it makes them feel, the side effects of most of these mind altering substances outweigh the limited amount of pleasure associated with them. It is in fact this limited pleasure that causes some people to continue to take drugs and drink alcohol without regard for the detrimental effects to their bodies. This strong desire to experience the feeling that the alcohol gives causes people to become addicted over time. Addiction is not something that happens overnight.

Once people get to the point that they rely on medication to survive, they become addicted. Because legal and illegal drugs are so powerful, they have the ability to enter someone's life and change it. Big PhRMA may not seek to addict people, but they do not seem to care if people get addicted. After all, addicted people spend more money on drugs…Corporations seem to receive all of the profits and political benefits without regard for any of the responsibility. They are amoral at best. I do not believe that any drug manufacturer created a medication with hopes that the drug would cause anyone to become addicted, but for some, that is exactly what happens. Now that drugs have become so popular, legally and illegally, one must wonder why so many people would get to the point that they cannot live without the substance. Obviously, it does not make sense to believe that anyone intends to become an addict. So, why does this happen? Burroughs (1977) addressed this topic in *Junky*.

> The question is frequently asked: Why does a man become a drug addict? The answer is that he usually does not intend to become an addict. You don't wake up one morning and

> decide to be a drug addict. It takes at least three months' shooting twice a day to get any habit at all. And you don't really know what junk sickness is until you have had several habits. It took me almost six months to get my first habit, and then the withdrawal symptoms were mild. I think it no exaggeration to say it takes about a year and several hundred injections to make an addict (1977, p. xv).

So what is an addict? What constitutes a habit; how long does someone need to use a drug to be considered an addict?

> "Drug addiction, according to this committee (United Nations Commission on Narcotics), is a state of periodic or chronic intoxication, detrimental to the individual and to society. Its characteristics include an overpowering desire or need to continue taking the drug and to obtain it by any means; a tendency to increase the dose; a psychic and sometimes a physical dependence of the effects" (Davenport-Hines, 2002, p. 300).

Addiction does not pay attention to race, gender, age, or socio-economic status. No one is immune. Even legal stimulants such as caffeine are highly addictive. It would appear that this drug is not harming the individual, but long term repeated use can cause problems with the heart and blood pressure. Our society continues to use drugs that cause bodily harm even though the detrimental effects are apparent. Even though one may know that a drug may lead to problems later in life, s/he may continue to use the drug anyway.

> The very fact of having risked one's health, the balance of one's mind, and one's relationship, as well as having had to suffer in order to give up the habit, should surely dissuade anyone from starting again. It is precisely here, in our opinion, that the great

> mystery of addiction lies: in the selective incapacity to learn from certain experiences (Margaron, 1997, p. 1425).

Even with this stated, millions of people every day take drugs to change who they are or to help them cope with life. I wonder what will be the long term effects of taking these mind altering drugs for ADHD beyond addiction. Will there be detrimental effects to the bodies? What happens when a person truly feels that they cannot go on without the medication? Long term effects of stimulant drug use could include, but not limited to, increased need for additional medications to achieve the same results, birth defects for the user's future children (or delivering a baby addicted to drugs), trying more serious drugs, such as cocaine, to get an increased effect when the current medication stops working as well, health problems such as heart issues or high blood pressure, or even death. No one can be sure exactly what will be the long terms effects yet. Only time will tell. Are we doing our children a disservice by subjecting them to mind-altering simulants? Will the long term effects be regretted later? What kind of message is our society sending to our young people when we tell them they must be medicated to be able to function in school? Because there are so many possible long term effects, looking for other non-medication options could be a possible solution.

Are there alternatives to medication for people suffering from "disorders" of the mind? Frattaroli (2001) addresses these issues in *Healing the Soul in the Age of the Brain: Becoming Conscious in an Unconscious World* when he states that medications are commonly used to mask problems such as children taking medication on a daily basis to increase attention and reduce hyperactivity in American's schools. Some of the children use the drug as an excuse. When the child does not take the medication, he will tell the teacher that he did not have his medication;

therefore, he will not be able to sit still or complete the assignment. This excuse may get some out of the work of the day with some teachers, but children need to learn to do the best they can even without the medication. It has been suggested that the addictive qualities of the drugs used on small children could lead to addictions to other drugs later in life such as cocaine and marijuana. Some children may explore the more powerful drugs when they stop getting the desired effect from the stimulants that they take even though they are illegal and highly addictive.

Children using mind altering drugs in school can be compared to the use of Prozac in adults as described by Frattaroli (2001). He addresses the use of Prozac and describes this drug as a quick fix that many people are willing to try.

> I would describe my purpose in the book very differently. It is to convey the great enthusiasm I feel about the inward journey, about the awakening of consciousness that can occur in the experiencing of anxiety, and the subsequent unfolding of the hidden possibilities inherent in our human condition. It is to impart a vivid sense of how this unfolding happens through a simple but powerful act of inward attention – listening to the soul – within the context of a healing psychotherapeutic relationship. At the same time, it is to sound a warning about the dehumanizing effects of a quick-fix philosophy – not only in psychiatry but in our society as a whole – that encourages us to mediate away our anxiety, suppress our inner calling to the quest and ignore the deepest needs of the soul, in pursuit of superficial swimming-pool goals that we all know in our heart of hearts to be meaningless (2001, p. 363).

Frattaroli is exploring the issue from a different perspective when he describes the need to look inside of who we are and what is causing our problems. When taking medications for mind altering purposes, why not explore what is causing the problems to begin with instead? If these issues are not addressed, the problems will still remain even after the medication wears off. When one continues the use of the medication, his body will need additional medication to ensure the same effect. Therefore, increasing the need to take the medication and possibly even leading to addiction. Obviously as with any problem, there are two sides to the story. One could argue that we should be grateful that something as small as a pill can make a depressed person feel normal again. Modern science has done so much for our society. Technology is amazing. In our fast paced society, we do not allow ourselves to slow down and work on issues in our lives. We tend to look for quick fixes because we want everything to be done immediately.

The alternative to medication for depression and other brain related "disorders", therapy, can be very time consuming and costly. Many people are not willing to put that much effort in to correcting the problem. "Why would people want to endure the hardship or the expense of long-term psychotherapy if they believed Kramer's promise that they can get to the same place – even be transformed – simply by swallowing a pill?" (Frattaroli, 2001, pp. 364-365). Frattaroli is quoting Peter Kramer who wrote *Listening to Prozac* in 1993 and is describing an argument that is tough to debate. Therapy is a long process, and many American's simply would not be willing to dedicate the time necessary to ensure its success when taking a pill could create an immediate solution. We live in a very fast-paced society, and time is a resource of which we do not seem to have enough. My question still remains, what are going to be the long term effects of the use of these mind altering medications? Will the human race as we know it be the same? People are

masking who they really are when they take such medications. For many, it is the desire for sameness and normalcy that causes us to use mind altering drugs.

As noted by Kramer in Frattaroli (2001),

> it is all very well for drugs to do small things, to induce sleep, to allay anxiety, to ameliorate a well-recognized syndrome. But for a drug's effects to be so global – to extend to social popularity, business acumen, self-image, energy, flexibility, sexual appeal – touches too closely on fantasies… that medication will take over in a way that cannot be reversed, that drugs will obliterate the self… When faced with a medication that does transform, even in this friendly way, I became aware of my own irrational discomfort, my sense that for a drug to have such a pronounced effect is inherently unnatural, unsafe, uncanny (p. 366).

Kramer's describes his fear of what could happen with continued drug use. He is describing a world that cannot function without its medications for enhancement. Part of the reason I explored the topic of ADHD as a social construct is because I wondered why so many schools and parents were willing to accept medication as a mode of treatment for these children. How long will it be before every school child is medicated for enhancement? It is believed that even students who do not suffer from "attention problems" can focus better on medication. As mentioned earlier, medicating everyone could be very dangerous. No medication is taken without side effects. The stimulants used for ADHD are no exception. Should children be changed to be able to attend to boring traditional lessons, or should lessons be changed to captivate the interest of our changing student population? Children are naturally inquisitive.

Teachers that plan lessons that are able to increase and withstand attention could possibly experience success with their students with or without medication.

When Kramer in Frattaroli (2001) mentions that drugs could take over in a way that cannot be reversed, is he referring to the long-term effects of taking medications? Will our species change as we know it? The evolution of a species occurs over a long period of time due to stimulus in the environment. Could these mind altering drugs be the stimulus that will be required to cause a species to change? Not all people take these drugs, so will the ones who are drug free become the fittest in this society? These questions must go unanswered at this time. There will be no way to know now. We will have to wait and see generations later.

What I can conclude, though, is that the notion of giving children stimulant medication has become socially acceptable whether it is right or wrong. Pressure/suggestions to medicate come from other parents, the institution of school, doctors, and pharmaceutical companies. Bronfenbrenner's (1977) ecological model of human development was used to provide a means of distinguishing between the different and interwoven systems that are in place in society that have influenced the development of ADHD as a socially acceptable disorder. The beginning of the process begins at a very minor level with the child and the family. Bronfenbrenner refers to this level as the microsystem. As the ripple effect continues, the impact gets more influential and includes the medical community. Bronfenbrenner (1977) refers to this level as the exosystem. At this level of influence, the impact on the child occurs indirectly. The next level is the macrosystem. I used this level to describe the impact that advertising has on ADHD. Advertising is the overarching institution that impacts the culture of ADHD. At this level, doctors, teachers, and families are influenced by the decision to medicate for treatment of

ADHD. At each level in Bronfenbrenner's system, there is evidence to conclude that ADHD could possibly a socially constructed disorder. With all of the influences in place that impact the vitality of the belief in a disorder called ADHD, educators could benefit from understanding the inspirations that keep this label alive.

Curriculum Studies should include the study of the controversial aspects of diagnosis and treatment which includes the use of drugs to control young people in schools. This study intended to promote an increased awareness of the ways in which ADHD is socially influenced and possibly how it is socially constructed. Through research, I found that there is a gap in the literature describing the experiences of a teacher and a mother who was impacted by the ADHD diagnosis. It is my hope that this dissertation will fill this void in scholarly literature and add to the complicated conversation surrounding the ADHD diagnosis. An increased awareness will allow educators to make more informed decisions about the choices they make regarding children in the classroom on a daily basis. Teachers are expected to teach children, meet their needs, and ensure success with state mandated standards. An increased understanding of the children in their rooms could possibly help make these tasks easier to accomplish.

Plant (1999) in *Writing on Drugs*, "when drugs change their users, they change everything" (p. 3). Most American's believe that any problem can be fixed with a pill. Obviously not all problems medically are the same, but psychological problems seem to be treated more often with drugs than with anything else. We have become a society where drugs are our only tool for correcting our ills. After the drug wears off, the problems still exist. Could we explore the root of the problem and attempt to correct it so that we may alleviate the need for the drug?

Americans have been bombarded with the need to quickly finish any task. From fast food to DSL, everything that we do can be done faster than the same thing could be done just a few short years ago. Someone can get photos processed in one hour at the store or even print them in seconds from home. It is not surprising that the same approach has spilled over to the need to quickly "fix" our emotional/psychological problems as well. This idea is why so much effort has been placed in manufacturing and advertising mind altering drugs today. Pharmaceutical companies have been spending millions of dollars each year researching new products that may make our lives easier and more productive while at the same time making Americans happier emotionally. "Technologies begin to limit the way we respond to problems and to the world. If we are not careful, we begin to see only technical solutions. Other possibilities are obscured and closed off to us" (Trueit, et al, 2003, p. 58). Some teachers have reached this point in their classrooms, and they readily accept medicated children rather than exploring other options such as diverse teaching strategies.

Today's educators have many tools at their disposal that they could use to promote engagement in the classroom. Children enter the classroom leaving a technologically stimulating environment at home. Cells phones, televisions, computers, and the internet put information and experiences at their fingertips immediately. Teachers compete with this technology as they attempt to acquire and keep a student's interest on the lesson. With active boards and computers, teachers can incorporate technology in order to promote the level of engagement in the lesson needed to ensure attention and learning. Other diverse teaching strategies such as cooperative groups, student choice on assignments, literacy circles, and critical thinking projects can also promote engagement in the classroom. These types of lessons can require a great deal of

preparation which can discourage their use. Additionally, it is sometimes easier to blame the inattentive children that it is to change the way one plans lessons. This could the reason why so many teachers are willing to accept medication to help students pay attention to their lessons.

At first glance, one might say, "why not". After all, taking just one pill can change someone's mood and make them a happier person. A student can take a pill and focus better in class. Unfortunately, the one pill generally leads to taking more pills. When parents notice side effects and discuss the problems with the doctor, more drugs are prescribed to reduce the symptoms of the side effects. For example, some children first experience trouble sleeping. In order to help with sleeping, the doctor will prescribe a sleep aide. With two drugs now in their system, they could possibly experience a loss of appetite, and the doctor will prescribe something for that. The three drugs together could possibly cause the children to experience mood swings which leads to a fourth pill to be prescribed. How can the parents and the doctor not question the combination of drugs that the child is taking? Could the mixing of the chemicals cause a reaction to the drug that would not be listed on the drug's label? Weaver (2010) notes that this is often referred to as the cocktail effect. This is potentially a "deadly mixture that should be referred to as the Molotov cocktail effect because many young people are ready to explode psychologically and physically" (p. 61). But what is going to be the outcome in the future of taking these pills? The original problems which necessitated the need to take the pill are just masked. Once the pill wears off, the problems are still there. How does one decide when the pill is absolutely necessary? "This paradox still confounds the way we think about ourselves. A man overwhelmed by depression goes to the doctor, who tells him that the depression is a physical disorder, one that he can see for himself on a scan of his brain." (Zimmer, 2004, 265).

This information would be a relief for the man because he would believe the depression is not his fault. It simply is a disease that needs to be treated like any other disease he could have. Therefore, all he needs to do is take a pill which will correct all of his problems (Zimmer, 2004, p. 265).

Is the doctor doing what is best to help this man? It seems that this same man may benefit from exploring why he is depressed and working through the issues associated with this problem. This process could take a long time and that is why this is not appealing to most people. Why work on correcting what is the source of the depression when its symptoms can quickly be masked when taking a pill? These issues are why the use of mind altering drugs has become so popular today. There seems to be no end to the different drugs available and the amount of money drugs companies can make.

Even with the problems associated with taking medication, culturally the process has become commonplace and accepted. Our society has taken the decision to medicate or not to the extreme and sometimes out of the hands of the parents. There have been occasions in public schools where a child's behavior is unacceptable and the parents were told that the child could not come back to school unless the child comes medicated. Ultimately, this should be a decision that the parent makes. Parents have even been taken to court by the school system. "In one case, a court threatened parents with being forced to medicate their child with stimulants, and the parents gave in. In the other case, allegations of medical neglect were brought against parents who refused to drug their child" (Breggin, 2001, p. 6). Even though one child cannot be too disruptive to the learning environment at the detriment of the other students, parents should have the final say as to whether or not their child will take medication for attention/behavior. Instead

of this resulting in a court case, the school could suggest alternative placement for the child or other options available according to the school system's offerings.

These cases have grown in popularity because schools are arguing that parents are acting neglectfully. Parents have been taken to court because of neglect related to immunizations, clothing, feeding, and receiving treatment for other disorders such as diabetes or asthma. Therefore, the use of stimulants for social control is confused with providing basic needs for the child. There is a difference between children receiving basic needs and being drugged into conformity and submission at school (Breggin, 2001, pp. 6-7). What does this say about our society? Schools are suggesting that kids need to be drugged so that they can sit still and be better test takers. (Weaver, 2010, p. 10). What will be the future effects of a culture so willing to fix problems with drugs?

EVOLUTION

The idea of evolution may not seem an appropriate topic to include when discussing ADHD and medication, but scientists cannot yet describe the long term effects of medicating a society. Children already have experienced the short term effects that these drugs have to offer. From sleeplessness, loss of appetite, weight loss, irritability, mood swings, to more serious issues like high blood pressure, drug addicted babies, and other mental disorders such as depression the mind altering stimulants are not taken without risk. With so many short term effects notable and obvious, it would seem expected that long term effects would be observed. Just how far could this go? Will our species as we know it change? "Understanding the evolutionary process empowers humans to control it, he (Darwin) explained, and by doing so they could avoid the fate of such previously dominant species as the dinosaurs" (Larson, 2004, p. 249). I am not implying

that humans are going to end up like the dinosaur, but I wonder what will happen to the human race if the use of drugs becomes too readily accepted culturally. Many medications have highly addictive qualities. There are many people who believe that they cannot function daily without taking something to cope, to perform, or to stay awake.

One can read and find people who believe strongly in evolution. This argument is hard to disagree with for scientists in the field. There is evidence in history to prove the evolutionary process that certain species go through. "The earth was not created: It evolved. So did all the animals and plants that inhabit it, including our humanselves, mind and soul as well as brain and body" (Larson, 2004, p. 249). Depending on a person's religious beliefs, the idea of evolution can be very disturbing, but science and history has demonstrated the existence of evolution on many animals in the world. One of the most famous is Charles Darwin. His work was referenced in Watson's (2003) book: *DNA: The Secret of Life*.

> The publication of Darwin's Origin of Species in 1859 brought these issues into sharp focus. Although Darwin carefully omitted to mention human evolution, fearing that to do so would only further inflame an already raging controversy, it required no great leap of imagination to apply his idea of natural selection to humans. Natural selection is the force that determines the fate of all genetic variations in nature – mutations like the one Morgan found in the fruit fly eye-color gene, but also perhaps differences in the abilities of human individuals to fend for themselves (p. 15)

In 1859 when Darwin's book was published, people were not ready to believe that humans experienced an evolutionary process like scientist observed and documented in animals. It is believed that humans evolved along with other species and became separate from them over

time. This is a very controversial topic to discuss in schools, and in recent history, the theory of evolution was taken out of school text books. I can remember learning the theory of evolution in Biology in high school, but I was in high school in the 80's. This would not have been tolerated in an earlier time. I would ask though, if other species evolve, why not humans? What makes us different from other animals? If the theory of evolution is true and species are capable of changing over time based on their environment, will the frequent use of drugs to change who we are contribute to new and different changes for our people? If nothing else, humans will begin to believe that they will not live a happy fulfilled life without the enhancements that the medications can provide. Nothing in this life occurs without a cost. Things that seem too good to be true generally are. Success in life comes from hard work, dedication, and perseverance.

As part of the theory of evolution, Darwin states that only the fittest in a species will survive. This idea is also easy to demonstrate in the animal kingdom. When any type of animal in a herd is attacked by a predator, it will be the slowest, smallest, possibly sickest animal that gets caught and killed. The ones who are more likely to survive will do so because they are stronger and faster and will get away. I wonder whether the fittest in the human race will be the one taking the medication to have a better more productive life, or the one that functions without the use of any mind altering drugs. How can we determine who the 'strongest' will be? Will it be the drug-enhanced human who can function better and faster on a daily basis, or will it be the human who does not take drugs which chemically changes the body? In the animal world, the 'strongest' is not always the one that is physically strongest. It may be the one that is the smallest and the smartest…the one that can fit into small places to hide from its predators.

Whatever the case, the animal most able to adapt to its surroundings in an attempt to protect itself will outlast the others.

There is already evidence today of people living longer. The life expectancy continues to rise. Modern science has allowed us to do so much more than we could do in the past. A transplanted organ to save a life is miraculous. Medicine that would have seemed science fiction in the past is reality today. Sadly, most of the people able to take full advantage of the new benefits of modern medicine are the ones who are financially sound. Without enough money to pay for doctor and hospital bills, one could not experience the benefits of today's technological advancements in the medical field. Will these changes afforded by the wealthy help ensure the survival of the fittest, or will the enhancements make them weaker in the long run due to the side effects of taking the medications? Since environmental changes cause species to evolve, I cannot help but believe that the continuous use of mind altering drugs over time will have a detrimental effect on the human race.

The topics I discussed in this dissertation are very troubling for some. Americans are bombarded with drug advertisements every time they turn on the television. Without fail, every station will have a commercial for a new drug on the market. It seems like every other commercial is advertising some substance that is going to make your life better. Advertising laws could change. Large pharmaceuticals should not be allowed to provide doctors/physicians with "gifts" to influence the decisions the doctors make about prescribing (or not prescribing) certain medications. Patients need to consult doctors about their ailments or problems and discuss with the doctors/physicians the best treatment for the individual. With the constant push to medicate in our society, students' continuous use of mind altering drugs can lead to increased

numbers of people in our society becoming addicted to legal and illegal drugs. It is not unusual for people to develop a need for stronger and stronger medications over time because constant use creates a lessened effect. This even causes some people to explore illegal drugs which have stronger and more pronounced effects.

If the use of medication becomes second nature for humans, will the use of mind altering drugs cause the human race to change over time? One cannot predict that the change will be negative, but the effects could be detrimental to society since history has documented many negative effects of using drugs in the past. I do not want the reader to think that I am against the use of all drugs. I am not. There are drugs that are necessary to survival such as medication for a diabetic, but the constant use of mind altering drugs to change ourselves is questioned. Individuals could explore alternatives to medication when possible. Adults are making the decisions to medicate their children. The children are not old enough to make these decisions for themselves, and we are not sure what the long term outcome will be. There are commercials on television asking people who had taken Zoloft or Prozac during pregnancy to call so that information about legal action could be shared with the individual. Of course this was an ad for an attorney looking for a law suit, but it was noted that taking these drugs during pregnancy could have been the reason for numerous possible complications for the infant. With all of the above mentioned issues related to medicating children for ADHD, one might ask why schools are readily suggesting to parents that their child may need to see a doctor. One reason why is to help with accountability in the schools.

TESTING AND ACCOUNTABILITY

The latest buzzword – accountability – can help, in part, explain the medication phenomenon in schools. There is so much pressure on schools to make AYP (adequate yearly progress) as determined by the No Child Left Behind legislation that administrators and teachers look for all possible ways to ensure that each child reaches his full potential. It has been argued that teachers see medication as the quickest and easiest fix for the moderate to severe problems in the classroom. If one child is causing major problems, that child is not learning while keeping the other children in the classroom from learning as well. There is nothing wrong with wanting a child to reach his highest potential, but at what cost? Is medication the only tool to ensure this high level of performance that is expected according to the state standards?

Many thoughts go through a teacher's mind just before a new school year begins. In the county I am employed as a middle school math teacher, students are tested repeatedly throughout the year with county designed assessments so that teachers and administrators can keep track of what the students know and to find out where they still need to be remediated. The students are tested so often, that they are sick of taking tests by the time the mandated state tests are given in the spring. It seems that the focus of the entire school year, day by grueling day, is to get students ready for the BIG test. It becomes very difficult for teachers to plan creative lessons that engage the students while at the same time ensuring that the students will be prepared for the tests. "Today students are being asked to stop learning almost completely so they can take, yet again, another battery of examinations. Learning has stopped being the purpose of schooling while test taking has replaced it" (Weaver, 2010, p. 43).

Assessments have their place in schools but only when used appropriately. Teachers do need to know what the kids know so that instruction can be adjusted to meet the needs of the students. Unfortunately, students are tested to see how ready they are for the forthcoming tests with very little impact on instruction. Individuals in society will continue to be tested for numerous reasons. A person has to pass a test to receive a driver's license and may have to pass a test for employment. When testing becomes the sole purpose for children to learn in school, the learning process loses much of its appeal. Students comment often that learning is not fun. Instead of teaching kids to love learning while in schools, we are teaching them that the purpose for school each year is so that they can pass the state mandated test for their grade level. Many students fail to see any reason for learning the state standards beyond that.

With so much pressure, teachers and parents turn to medication for their children, and "tests and pills eliminate risks; they exterminate life. Life in schools means there will be noise and moments of uncontrolled chaos" (Weaver, 2010, p. 71). Noisy classrooms are viewed as unmanaged and it is assumed that no learning is taking place. Just the opposite can be true. Children and adults, when learning, need to verbalize what is taught so that the knowledge can become embedded in long term memory. Schools and teachers have a very difficult job today. Children are not the same learners that they were even a decade ago. Our country has attempted to solve this problem with medication. This practice seems to have become socially acceptable. Do we need to take a close look at the structure of schools instead? Schools seem to have become miniature businesses only concerned with the finished product. In an industrialized atmosphere, efficiency is one of the most important components of the process. School leaders spend a great deal of their time planning the best ways for teachers to ensure the success of the

students in the school. In America's schools today, testing has become the way to "check" to see if the students are making progress. A great deal of money in education is spent creating and administering extensive tests for this purpose. When a child is not meeting standards according to the state requirements, the school looks at test scores to determine strengths and weaknesses of the child. Most of the time, very little emphasis is placed on the type of instruction the child is receiving. If attention problems exist, school employees will assume medication will fix the problem. This is done on a daily basis in many of America's classrooms. Are schools spending enough time trying to truly evaluate the problems in our schools and look for creative ways to reach the youth of today, or are educators too ready to suggest the quick fix available in chemical enhancements regardless of the detrimental effects it may have on the child's adult life?

There are still many unanswered questions related to ADHD in America's schools. Hopefully future studies and continued research will bring the knowledge necessary to solve the education problem and the ADHD phenomenon.

EPILOGUE

After I completed this dissertation, I decided to treat myself to a movie. My daughter and I went down to the local Red Box and rented "Limitless". This movie was originally released in theaters in the spring of 2011. I knew that the movie was about a drug that enabled the user to increase the effectiveness of his brain. I would not have thought to include this story in this dissertation, but this movie made me think of other science fiction stories that society has seen come true. Science fiction of today becomes the reality of tomorrow. This lead me to establish a connection between the science of drugging children in schools to enhance performance with the drug (NZT) in this movie that allowed the user to use 100% of his brain. The maker of the drug in the movie told Eddie Morra, the main character, that a typical human only uses 20% of his brain.

Eddie Morra was a writer in New York City that was having trouble finishing his book that he needed to finish and turn in to his publisher. On the day that he was dumped by his girlfriend, he bumped into the brother of his first wife. Vernon told Eddie that he looked terrible, and he had just what he needed. He proceeded to give him a small clear tablet. Eddie hesitated at first, but Vernon insisted that Eddie take the pill with him. On the way home, Eddie decided to take the pill. He was hooked immediately. Everything seemed so clear to him, and he was able to finish his book very quickly. His publisher was amazed that the book was finished and that the book was actually good.

Of course, anything that seems this great does not come without consequences. Eddie found out later in the movie that if he stopped using the pills, he would die. He only had a

limited supply because Vernon was murdered and would no longer be his supplier, so he used the capital earned from his new job in stocks to pay someone to duplicate the medication.

This story seemed to emphasize to me that many Americans are willing to take a pill to make life easier. Who knows, in the future pills such as NZT may not only be accepted but expected. Someone refusing to use such a pill when everyone else around him is would be at a great disadvantage in the job market. We seem to be slowly getting to this point in our schools. Children are medicated to perform, and most educators and parents do not seem to be concerned. How far will the use of mind altering drugs take us? Only time will tell… we are only limited by what we are able to imagine.

APPENDIX A

DSM-IV Criteria for ADHD

I. Either A or B:

A. Six or more of the following symptoms of inattention have been present for at least 6 months to a point that is inappropriate for developmental level:

Inattention

1. Often does not give close attention to details or makes careless mistakes in schoolwork, work, or other activities.
2. Often has trouble keeping attention on tasks or play activities.
3. Often does not seem to listen when spoken to directly.
4. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions).
5. Often has trouble organizing activities.
6. Often avoids, dislikes, or doesn't want to do things that take a lot of mental effort for a long period of time (such as schoolwork or homework).
7. Often loses things needed for tasks and activities (e.g. toys, school assignments, pencils, books, or tools).
8. Is often easily distracted.
9. Is often forgetful in daily activities.

B. Six or more of the following symptoms of hyperactivity-impulsivity have been present for at least 6 months to an extent that is disruptive and inappropriate for developmental level:

Hyperactivity

1. Often fidgets with hands or feet or squirms in seat when sitting still is expected.
2. Often gets up from seat when remaining in seat is expected.
3. Often excessively runs about or climbs when and where it is not appropriate (adolescents or adults may feel very restless).
4. Often has trouble playing or doing leisure activities quietly.
5. Is often "on the go" or often acts as if "driven by a motor".
6. Often talks excessively.

Impulsivity

7. Often blurts out answers before questions have been finished.
8. Often has trouble waiting one's turn.
9. Often interrupts or intrudes on others (e.g., butts into conversations or games).

II. Some symptoms that cause impairment were present before age 7 years.

III. Some impairment from the symptoms is present in two or more settings (e.g. at school/work and at home).

IV. There must be clear evidence of clinically significant impairment in social, school, or work functioning.

V. The symptoms do not happen only during the course of a Pervasive Developmental disorder, Schizophrenia, or other Psychotic disorder. The symptoms are not better accounted for by another mental disorder (e.g. Mood "disorder", Anxiety "disorder", Dissociative disorder, or a Personality disorder).

Based on these criteria, three types of ADHD are identified:

IA. ADHD, *Combined Type*: if both criteria IA and IB are met for the past 6 months

IB. ADHD, *Predominantly Inattentive Type*: if criterion IA is met but criterion IB is not met for the past six months

IC. ADHD, *Predominantly Hyperactive-Impulsive Type*: if Criterion IB is met but Criterion IA is not met for the past six months.

(American Psychiatric Association, 2000, p. 83-84)

APPENDIX B

Vanderbilt ADHD Diagnostic Teacher Rating Scale

Name: _____Grade: _____

Date of Birth: _____ Teacher:_____ School: _____

Each rating should be considered in the context of what is appropriate for the age of the children you are rating.

Frequency Code: 0 = Never; 1 = Occasionally; 2 = Often; 3 = Very Often

1. Fails to give attention to details or makes careless mistakes in schoolwork	0	1	2	3
2. Has difficulty sustaining attention to tasks or activities	0	1	2	3
3. Does not seem to listen when spoken to directly	0	1	2	3
4. Does not follow through on instruction and fails to finish schoolwork (not due to oppositional behavior or failure to understand)	0	1	2	3
5. Has difficulty organizing tasks and activities	0	1	2	3
6. Avoids, dislikes, or is reluctant to engage in tasks that require sustaining mental effort	0	1	2	3
7. Loses things necessary for tasks or activities (school assignments, pencils, or books)	0	1	2	3
8. Is easily distracted by extraneous stimuli	0	1	2	3
9. Is forgetful in daily activities	0	1	2	3
10. Fidgets with hands or feet or squirms in seat	0	1	2	3
11. Leaves seat in classroom or in other situations in which remaining seated is expected	0	1	2	3
12. Runs about or climbs excessively in situations in which remaining seated is expected	0	1	2	3
13. Has difficulty playing or engaging in leisure activities quietly	0	1	2	3
14. Is “on the go” or often acts as if “driven by a motor”	0	1	2	3
15. Talks excessively	0	1	2	3
16. Blurts out answers before questions have been completed 0 1 2 3				
17. Has difficulty waiting in line	0	1	2	3
18. Interrupts or intrudes on others (e.g., butts into conversations or games)	0	1	2	3
19. Loses temper	0	1	2	3
20. Actively defies or refuses to comply with adults’ requests or rules	0	1	2	3
21. Is angry or resentful	0	1	2	3
22. Is spiteful and vindictive	0	1	2	3
23. Bullies, threatens, or intimidates others	0	1	2	3
24. Initiates physical fights	0	1	2	3
25. Lies to obtain goods for favors or to avoid obligations (i.e., “cons” others)	0	1	2	3

Vanderbilt ADHD Diagnostic Teacher Rating Scale (continued)

Frequency Code: 0 = Never; 1 = Occasionally; 2 = Often; 3 = Very Often

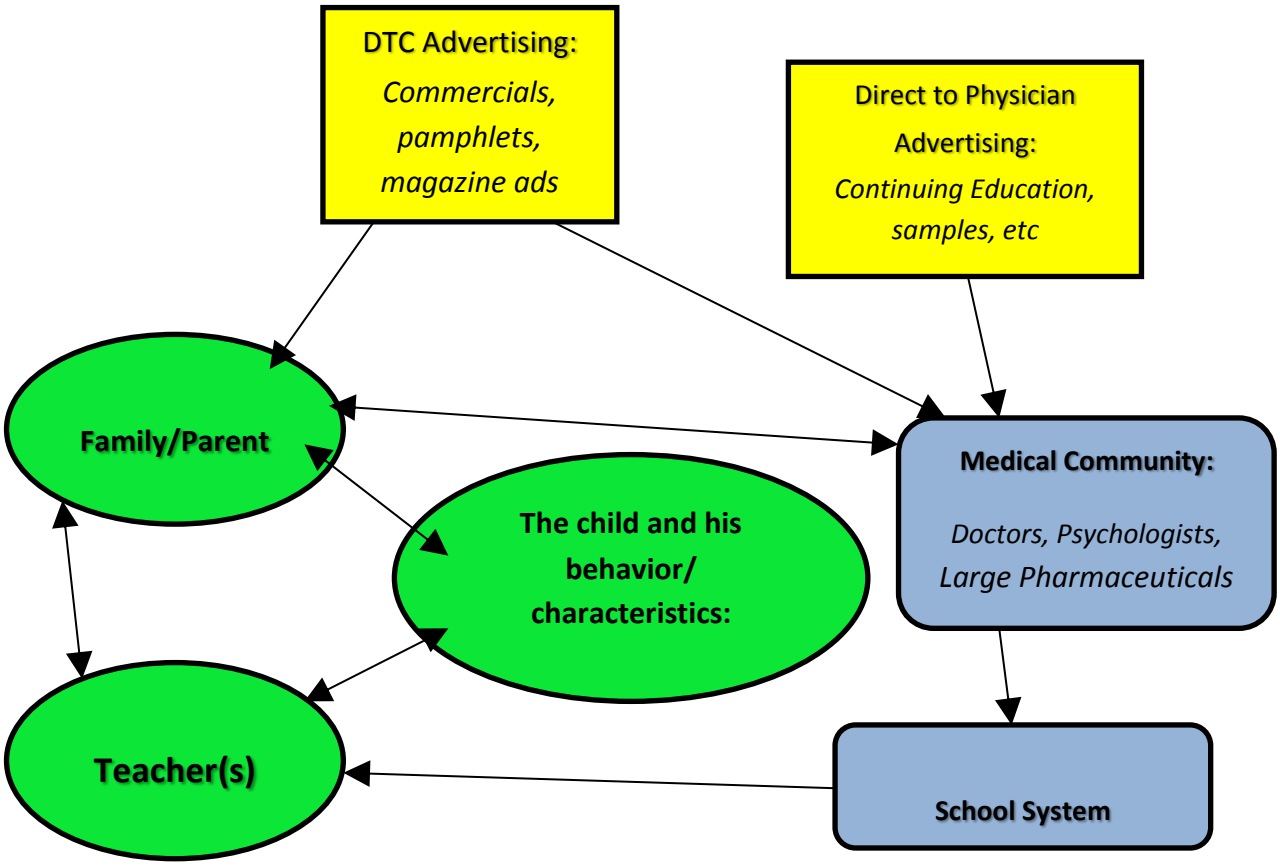
26. Is physically cruel to people	0	1	2	3
27. Has stolen items of nontrivial value	0	1	2	3
28. Deliberately destroys others' property	0	1	2	3
29. Is fearful, anxious, or worried	0	1	2	3
30. Is self-conscious or easily embarrassed	0	1	2	3
31. Is afraid to try new things for fear of making mistakes	0	1	2	3
32. Feels worthless or inferior	0	1	2	3
33. Blames self for problems, feels guilty	0	1	2	3
34. Feels lonely, unwanted, or unloved; complains that "no one loves him/her"	0	1	2	3
35. Is sad, unhappy, or depressed	0	1	2	3

PERFORMANCE

	Problematic		Average		Above Average
Academic Performance					
1. Reading	1	2	3	4	5
2. Mathematics	1	2	3	4	5
3. Written expression	1	2	3	4	5
Classroom Behavioral Performance					
1. Relationships with peers	1	2	3	4	5
2. Following directions/rules	1	2	3	4	5
3. Disrupting class	1	2	3	4	5
4. Assignment completion	1	2	3	4	5
5. Organizational skills	1	2	3	4	5

Appendix C

Social Construction of ADHD: Using A Systems Approach



The arrows represent the impact that one part of the system may have on another part of the system.
Double arrows represent a situation where both systems may impact each other.

KEY

Bronfenbrenner's Microsystem/Mesosystem Chapter Two

Bronfenbrenner's Exosystem Chapter Three

Bronfenbrenner's Macrosystem Chapter Four

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