Cultural Implications in the Diagnosis, Treatment, and Perception of Attention Deficit Hyperactivity Disorder in East Asian Cultures

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ABSTRACT

Attention Deficit Hyperactivity Disorder (ADHD) has been commonly understood as a disorder, targeting misbehaving boys of the Western world. While the ADHD diagnosis has been established in the West since the beginning of the 1990s, the ever-changing diagnostic criteria are evidence of the lack of understanding medicine has of ADHD and have cast a doubt on the factors affecting the syndrome. Nevertheless, today ADHD has tuned into a global phenomenon affecting nearly every country in the world. Cultures, whose definition of "child misbehavior" and "proper conduct" are dramatically different from the views in the West, are using ADHD diagnoses to medicalize the behavior of children. This phenomenon is seen in virtually every culture and it is easiest to observe within the culture of East Asian countries. The East Asian Confucian driven tradition teaches about the proper expectations of childhood behavior, which expectations can clash with the Western diagnosing criteria of ADHD. These cultural factors affect the diagnosing process of ADHD in East Asia, the therapy treatment options, and the consistency of pharmaceutical medications used from the population. Childhood ADHD in East Asia often times remains mismanaged or untreated, and, as a result, the academic performance, familial socialization and management of the disorder suffer. In this work, I discuss the history, diagnosis, and treatment development of ADHD, and reflect how these aspects of the disease are affected by the cultural differences of East Asia. I discuss the role of Confucianism and the healthcare differences in East Asia in comparison to the culture and medical treatment of the Western world. Furthermore, I extend my work towards the familial relationships, socialization, and school expectations of ADHD children in East Asia. I attempt to take a holistic perspective on medicalization, by discussing the globalization of ADHD and deepen my analysis by looking at the lack of academic accommodations and the insufficient medical and psychological

treatment options, available for families with ADHD children in East Asia. I try to develop a critical view of the Western influence on East Asian behavioral views, while I discuss the negative aspects of the insufficient accommodations, provided after the recognition of the ADHD diagnosis. I conclude by discussing the need of proper accommodation for ADHD patients within the academic, social, and clinical setting in East Asian countries. This study focuses on literature and research data review, with a focus on primary sources and limited reference to popular or non-scientific articles.

RÉSUMÉ

Le Trouble du Déficit de l'Attention avec Hyperactivité (TDAH) a été compris comme un trouble affectant particulièrement les garçons turbulents de l'Occident. Même si le diagnostic du TDAH est établi en Occident depuis le début des années 1990, l'évolution constante des critères de ce diagnostic montre un manque évident de compréhension de ce syndrome et des facteurs ayant une influence sur ce dernier. Malgré tout, le TDAH est aujourd'hui devenu un phénomène global touchant presque tous les pays du monde. Plusieurs cultures, malgré une définition « d'enfant perturbateur » et « d'une conduite correcte » différente de l'occident, utilisent aussi le TDAH pour médicaliser le comportement des enfants. Ce phénomène est constaté dans toutes les cultures et est plus facilement observé dans les pays d'Asie orientale. Le Confucianisme de l'Asie orientale recommande certains standards et attentes du comportement de l'enfant. Ces attentes peuvent être différentes, voir s'opposer aux critères du diagnostic du TDAH provenant de l'Occident. Ces facteurs culturels affectent le processus de diagnostic du TDAH dans la région de l'Asie orientale, les options de thérapie de traitement et la régularité ainsi que l'homogénéité des recommandations pharmaceutiques utilisées pour la population. Le TDAH chez l'enfant en Asie Orientale connaît la plupart du temps des problèmes de gestion et de traitements et, par conséquent, des impacts sur les performances académiques, les relations sociales avec la famille et la gestion de la souffrance reliée au syndrome. Dans ce projet, j'ai examiné les diagnostics et traitements pour le TDAH développés durant l'histoire et j'ai montré comment ces aspects de ce syndrome sont affectés par les différences culturelles de l'Asie orientale. J'ai aussi comparé le rôle du Confucianisme et des services de santé en Asie orientale à la culture et aux soins médicaux de l'Occident. De plus, j'ai poursuivi ma recherche vers les relations familiales, la socialisation et les attentes académiques des enfants diagnostiqués du

TDAH en Asie orientale. J'ai tenté de prendre un point de vue holistique sur la médicalisation en discutant de la globalisation du TDAH et d'approfondir mon analyse sur le manque d'accommodations académiques et l'insuffisance des choix de traitements médicaux et psychologiques offerts aux familles souffrant de TDAH. J'ai développé une vision critique de l'influence occidentale sur l'Asie orientale sur la vision du comportement. J'ai aussi discuté des aspects négatifs du manque d'accommodation pour les patients après un diagnostic du TDAH. J'ai conclu en démontrant le besoin d'accommodations adaptées pour les patients atteints de TDAH dans l'environnement académique, social et clinique d'Asie orientale. Cette étude se concentre sur de la documentation et des données de recherche en priorisant les sources primaires et en limitant les références à des articles populaires et non-scientifiques.

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INTRODUCTION

Deemed a "psychological abnormality" since the beginning of the 1900s, hyperactivity in children has been attributed to many different factors, from a neurobiological deficiency to a disease of the human will (Lakoff, 2000). Contemporary hyperactivity in children, and sometimes adults, can be an indication of the widespread and globally recognized Attention Deficit Hyperactivity Disorder (ADHD). ADHD has been historically seen as a psychological deficiency with a high prevalence in boys (Lakoff, 2000). Today, the Diagnostic Statistical Manual (DSM), which has been established as the primary diagnostic manual for mental disorders in North America since its first edition in the 1950s, lists ADHD as a commonly found behavioral disorder. The DSM, furthermore, establishes diagnostic criteria for ADHD, based on the recognition of symptoms of misdemeanor in children. Yet, these symptoms have shown to be impossible to detect through empirical testing and appear open to interpretation with great degree of cultural, social, and personal factors playing a role in the diagnosing process. Nevertheless, the DSM has avoided taking into account many of these external factors, which have played a role in the behavioral development of children. In this work I hope to look at how traditional views on "appropriate" child behavior affect the cultural perception of ADHD in the East Asian region. I will explore this point by examining the standards for appropriate childhood behavior in the West versus contemporary culturally Chinese nations (with a focus on Hong Kong, Mainland China, and Taiwan)[1]. I target Asiatic cultures, since the current cultural influence of the West in the region creates a distinct phenomenon of westernization in parallel to the traditional familial dynamic (Slote & DeVos, 1998). Furthermore, I aim to explore how those cultural differences

[1] While Taiwan has been a sovereign state since the early 1970s (Roberge & Lee, 2009), it is still part of the Republic of China and shares many aspects of Chinese culture, including written and conversational Chinese, Confucianism as a historical theological philosophy, and the familial hierarchy with the mothers as primary care givers (Leung et al., 1996).

are reflected in the familial management styles (FMSs) of East Asian families and how the two different cultures are able, or unable, to accommodate the ADHD child's needs within the household. I will further look at the diagnosing criteria of the disease and discuss how they have shifted and how has this clinical shift affected the spread and interpretation of the syndrome. I follow through the contemporary effects of Westernization and medicalization of ADHD and note the lack of accommodations for ADHD patients in East Asia. I call for the extension of cultural accommodations in the form of physician guided behavioral therapies and parental workshops with hope to increase understanding of the disorder and provide appropriate treatment.

The current diagnostic criteria for ADHD, revised in 2013, have been shown to be fluid and imprecise. In the most recent edition of the DSM, the recognized symptoms of ADHD were grouped into two distinct categories: (1) inattention and (2) hyperactivity and impulsivity (DSM-5, 2013). These symptoms and disease classifications have extended to most countries in the Western world and even beyond. According to the DSM-5, some of the behaviors that are recognized as symptoms for ADHD include: "Often fails to give close attention to details…often does not seem to listen when spoken to directly…is often easily distracted…often blurts out an answer before a question has been completed…often runs about or climbs in situations where it is not appropriate" (DSM-5, 2013). However, the recognition of an ADHD *diagnosis* requires at least "six (or more) of the […] symptoms [that] have persisted for at least 6 months to a degree that is inconsistent with developmental level" (DSM-5, 2013). This evaluation of standard "developmental level" differs dramatically between cultures. Furthermore, the recognition and perception of these symptoms are strictly based on the propriety of behavior according to Western social standards to which we adhere today (Timimi & Leo, 2009). Such social norms bring great cross-cultural conflict and furthermore encourage medicalization alongside the

westernization of cultures abroad. Cultural behavioral standards in nations of Chinese ancestry, for example, differ dramatically from the views of the Western World (Slote & DeVos, 1998). Contemporary Chinese culture, while heavily westernized, is still influenced by the Confucius tradition. From that it follows that East Asian cultures subscribe to very different perceptions of proper childhood conduct and academic performance; the interpretation and understanding of the DSM-5 symptoms of ADHD in East Asia may, therefore, be very different (Timimi, 2005). Exploring the cultural views on ADHD, the newly adapted treatment methods, and the social and familial responses to the disorder in East Asia throughout this work would lend valuable insight to how different cultures perceive this psychological disorder. This study would further discuss the difficulty in creating culturally sensitive diagnostic and testing criteria across Western countries and culturally Chinese nations and would explore the benefits to having culturally influenced treatment and therapy options (Alban-Metcalfe et al., 2002).

I will start my discussion of this issue with a brief look back at the history and development of ADHD as a diagnosis and the new available treatments, followed by a discussion on the modern medicalization of the human condition. I will explore the globalization of the disorder and the clash that has occurred between the westernization of psychiatry and the cultural differences between the different populations. In Chapter 2, I will dig deeper into the cultural differences in the perception of "appropriate" child behavior and the difficulties patients experience in accommodations due to the culturally insensitive ADHD diagnosis and the lack of societal understanding for the disorder. Furthermore, in Chapter 3 I will explore the different factors influencing the familial management styles (FMSs) of parents and extended families from Chinese cultures versus those from the Western world, where children have been diagnosed with ADHD and have received, or refused, treatment (Kendall & Shelton, 2003). I will look into the

parental perception of ADHD and of ADHD management, measured through survey data, quantifying these issues (Kendall & Shelton, 2003). With these and more observed differences, I hope to show a significant need for culturally-specific research on ADHD and, furthermore, a need for the expansion of work on the cultural aspects that may affect the way childhood behavior is perceived, medicated and treated. I also hope to increase awareness on the need of development and implementation of culturally sensitive psychosocial therapies, targeting both patients and their parents in an attempt to raise greater understanding of how ADHD should be approached within East Asian cultures.

CHAPTER 1: THE GLOBALIZATION OF ADHD: HISTORY, CAUSES AND CUTURAL CLASHES

I. Introduction

The starting point of the ADHD "epidemic" has deep historical roots that pave the contemporary views and interpretations of the disease. From the initial discovery of hyperkinesis and the following research, to the current market for ADHD drugs and the development of an ADHD-support system, the diagnosis of ADHD has nevertheless remained malleable and fluid. The expanding nature of ADHD has brought for criticism and misinterpretation in our society, and, furthermore, within international medical systems. Cultural differences, as well as the medical developments in the West, have shaped the way ADHD is treated and approached globally and have, furthermore, continuously influenced the societal perception of "appropriate" child behavior. These social and medical phenomena extend their affect globally and play a major role in the psychiatric field around the world. In this chapter, I look at the historical development of behavioral disturbances as disease, rather than personality flaws. I look at the effect Western views have had on the shifting academic

demands and childhood expectations of East Asian societies. I analyze the contemporary westernization that has entered countries of Chinese traditions and look at the influences Western habits have had with regard to the behavior expectations of children. I start by analyzing the historical shift in cultural expectations of children in the West and continue on to superimpose this shift over the current cultural westernization of East Asia. I explore ADHD since the initial studies of the disorder, dating since the early 1900s, and extending until today. I look at the different views, both positive and negative, expressed in regard to the social effects of the ADHD diagnosis. I try to interpret how the different cultural views of "normal" behavior have shaped the different perceptions of ADHD. Furthermore, I discuss different theories behind the increasing number of ADHD cases today. I also extend beyond the medical diagnosis and into the realm of social and economic factors, which are affected by or are affecting the ADHD rates worldwide. I discuss the role of new technological developments, such as the Internet and international access to medical research, in order to understand the importance of cultural westernization in societies outside the Western world. I work to create a foundational understanding of the historical patterns in the recognition, diagnosing, globalization and medicalization of ADHD and what has shaped this disease today. I conclude this chapter by noting the lack of cultural sensibility of the ADHD diagnosis and question the adaptability of the currently established diagnostic criteria. I relate these aspects to the lack of cultural acceptance of the ADHD diagnosis and the discrepancy of treatment methods even within one nation.

II. History and previous research

ADHD has come a long way as a widespread medical diagnosis since its initial exploration as child behavioral hyperactivity back in the 1900s. The disorder has been

recognized in the last three editions of the DSM, as well as in several other psychiatric manuals (i.e. International Classification of Disorders, or ICD-10) (Remschmidt, 2005). ADHD, however, has often been in the center of critical debates as a pathology, which made "temperament and behavior a matter of health" (Lakoff, 2000, p. 166). The increasing rates of child diagnoses since the 1970s, especially labeled in young boys, has driven the discussion about the factors which may play a role in the development of ADHD pathology. Furthermore, the common diagnosis has led to a discussion about the role of pharmaceutical medicaments, commonly prescribed in the form of stimulant drugs, for the management of symptoms of ADHD in children as young as 6 years old. The last edition of the DSM states modified, and somewhat open to interpretation, diagnostic criteria. Furthermore, the diagnosis cannot be determined with a clinical screen or test. This allows for the increase in the diagnoses based on personal perception of physicians or parents of misbehaving children and the increased number of pharmaceutical medication prescriptions to treat the symptoms of the disease. The phenomenon of "hyperactivity" has become wholly pathological and is currently entering new scales as ADHD expands internationally.

Hyperactivity is a behavioral impairment often recognized in disobedient and restless children, especially young boys, who underperform academically or do not follow the established rules at home and at school (Lakoff, 2000). This lack of self-control has historically been regarded as a disease of morality: "A disorder of the will…volitional inhibition was the cornerstone of civilized behavior a prerequisite to becoming a moral adult" (Lakoff, 2000, p. 156). As diseases of the will, hyperactivity and lack of self-control were initially diagnosed in less educated circles of society. Observations of badly behaved children in the early 1900s attributed these anomalies to social status and claimed that such misbehavior was typically

exemplified in the lower classes of society. This claim indirectly led to the idea of social Darwinism, where conditions such as hyperkinesis was seen as a natural "weakness" that would and should prevent certain individuals from rising up the social ladder (Mayes & Rafalovich, 2007). The lack of "volition control," as defined at the time, was viewed as a factor related to the class separation, which supposedly scientifically explained the inability of persons born in the lower classes to excel in society. Scientists at the time saw this as parallel to the "superiority" and "inferiority" of certain species during evolution: "moral ineptitude showed 'a special liability to loss or failure in development that is quite in accordance with the phenomenon of evolution'" (Mayes & Rafalovich, 2007, p. 437).

Not until the 1920s was hyperactivity recognized in all economic layers without disproportionate concentration within the lower classes. In the 1950s, the symptoms of hyperactivity were categorized into the diagnosis of Minimal Brain Disorder (MBD) and were treated as a medical condition. The initial diagnosis of MBD suggests a physical impairment of a region of the brain. The diencephalon, as recognized by Dr. Maurice Laufer, "functions as an inhibitor of irrelevant stimuli, keeping them from 'flooding' the cortex. If the diencephalon is not functioning properly, the cortex can become overwhelmed by more stimuli than it can adequately deal with" (Mayes & Rafalovich, 2007, p.444). For the first time, hyperactivity was regarded as part of a biological impairment beyond the influence of social class of the patient or parents. The perception of hyperactive children as having a biological deficit marked the beginning of the medical discourse on hyperactivity and further separated the behavior from the moral character of the patients. This allowed for the relief of victim blaming that may have been targeted towards hyperactive children or their parents and furthermore the establishment of different self-identification and support for those affected.

The belief that hyperactivity is a biological phenomenon furthermore relieved patients from accusation for personality insufficiency. In one example, Andrew Lakoff quotes an article from *The New Yorker* magazine from the 1990s: "The child with ADHD… cannot apply himself because he cannot regulate his behavior in a consistent manner. He is at the mercy of the temptations and distractions in his immediate environment" (Gladwell, 1999, p. 80). As with any other pathology, ADHD was now seen as an ailment, which is independent of the patient's character, and therefore could be treated by medical practitioners. This idea can logically be related to the research and development of methylphenidate (MPH) as a remedy for the cognitive burden of ADHD in patients since the 1970s. Today, MPH-based pharmaceutical drugs are promoted as standard of care for hyperactive children and adults and are the only established standard practice treatment methods of ADHD. The establishment of oral cognitive medications as standard treatment method for ADHD has been a key business strategy for the pharmaceutical marketing of drugs, such as Adderall and Ritalin. Furthermore, the increase in the numbers of those diagnosed has created a broader pool of patients, different than the one identified through previous diagnostic criteria. The expansion of the diagnostic pool and the growth of pharmaceutical markets have reached international levels. The Western psychiatric standards of care have been established overseas repeatedly (Conrad & Bergey, 2014). It could be said that as the Western perception of proper etiquette of behavior changes, the diagnoses have further appropriated the behavior of young children to the Western standard of conduct (Lakoff, 2000). The ever-changing symptomology and diagnosis of ADHD worldwide has brought up questions regarding the proper prescription and effects of these medications (Singh et al., 2013). The symptoms of ADHD have been fluid and evolving since the first time the disorder was recognized in the DSM: the levels of hyperactivity, impulsivity, and inattention needed for a

proper diagnosis are often measured based on the physician's perception (as discussed in Sec. IV). This has created questions about the proper use and prescription of MPH drugs, especially to young children (Conrad & Potter, 2000).

III. ADHD and medicalization: treatment and suggested causes

The shifting criteria of ADHD diagnosis have often been looked upon as proof of the contemporary increase in global medicalization of human experiences. Furthermore, with the widespread prescription of treatments for ADHD many critics have deemed this "bad medicalization": "the assumption that the phenomenon under observation [ADHD] is a *medical* phenomenon that requires medical treatment is wrong and has harmful consequences" (Singh et al., 2013, p. 384). Furthermore, many believe that modern economic and lifestyle factors (i.e. the heavy reliance on drugs for providing a comfortable lifestyle, the role pharmaceutical companies play in the healthcare system) could have led to the expansion of the ADHD category towards the pharmaceuticalization of human experiences (Conrad & Bergey, 2014). These factors have often been interpreted as "distinct approaches taken by mental health professionals towards understanding human troubles as psychiatric conditions" (Conrad & Potter, 2000, p. 562). The wide expansion of ADHD diagnoses has surpassed the search for causes of the disease and has now focused on "symptoms, rather than etiology…" (Conrad & Potter, 2000, p. 562). Thus far, science has not been able to identify specific biological and environmental causes behind ADHD.[2] This lack of scientific clarity behind the ADHD pathology has led to attempts to treat the experiences of discomfort and to resolve the exemplified ADHD symptoms, rather than to focus greater efforts on the recognition of causes of the disease.

[2] While there are no shown environmental factors causing ADHD, specific environmental conditions (as discussed in Ch. 3) influence the *severity* of ADHD symptoms. Adversities in the exosystem (e.g., parent marital status, socioeconomic status) (Atzaba-Poria et al., 2004) could be seen as common factors affecting ADHD symptoms. Nevertheless, these factors are not shown to *cause* ADHD, but rather to influence the severity of symptoms.

The increased treatment of symptoms and the expansion of diagnosing criteria (discussed in Section IV) for ADHD have been driving factors for further prescription of ADHD drugs. Some of the most popular drugs, Ritalin and Adderall [methylphenidate], have been widely prescribed as a way to manage the symptoms for ADHD, however they have shown little therapeutic benefit in treating ADHD long term (Singh et al., 2013). Current research shows "significant effects of methylphenidate on long-term memory consolidation but no effects were found on attention, mood or executive functions" (Singh et al., 2013, p. 380). These findings show little concrete evidence in favor of pharmaceutical treatment of ADHD symptoms but a large positive effect on overall memory performance. This suggests that MPH medications could potentially affect the cognitive performance of people regardless of the ADHD diagnosis.

This effect of MPH drugs on "healthy" individuals has been commonly linked to drug utilization beyond medical prescription, especially in circles of increased pressure for high academic performance. Singh et al. refers to data, which indicates "students also feign symptoms of ADHD in order to obtain a prescription. Research suggests that none of the currently used symptoms checklists, neurocognitive tests and symptom validity tests have proven effective in discerning feigners from those who have the disorder" (2013, p. 385). While MPH medications are used to treat hyperactivity, they have also shown effects on "healthy" individuals who do not have attention disorders. Healthy students often take MPH drugs in order to increase productivity before exams and to boost their memory. The faulty prescription of drugs for cognitive enhancement purposes has been a growing phenomenon within American higher education institutions, and with the increasing demand for improved academic performance it will only continue growing in numbers.

Furthermore, with the widespread diagnosis of ADHD, many critics claim that the medication of this disorder is completely in synchrony with the Western view of "a pill for life's problems": "ADHD is thus ideally placed as a convenient diagnostic 'dumping ground' allowing all of us (parents, teachers, doctors, politicians) to avoid the messy business of understanding human relationships and institutions and their difficulties and our common responsibility for nurturing and raising well-behaved children" (Timimi & Radcliffe, 2005, p.66). The relatively comfortable lifestyle adopted in the Western world has led many critics to believe that the society strongly seeks an easy solution to all hardships through out life. The critical approach, as cited by Timimi and Radcliffe, blames the lack of determination in parents and teachers to put more effort in the upbringing of different children, who may exhibit somewhat of a more difficult behavior. According to Timimi and Radcliffe, many adults seek medical diagnoses in order to control children's behavior more easily. While this argument has been expressed from many different stakeholders (i.e. medical practitioners, parents, sociologists), many individuals feel compelled to defend the ADHD diagnosis and find consolation in self-identifying with the disorder.

The patient's self-identification with an ADHD diagnosis has often brought comfort to those burdened with the disorder. In one instance, Conrad and Potter (2000) look at the phenomenon of adult ADHD and discuss how, instead of feeling discouraged by the greater social stigma that comes with receiving a diagnosis of a psychological disease, more and more patients seek medical intervention for the disorder. As Ellison states in her *New York Times* article: "In many parts of the world, parents of children with ADHD say they feel stigmatized, no matter how they try to cope with the disorder" (2015). Nevertheless, the experienced stigma thus far has not reduced the number of diagnosed cases within either adults or children; rather we see

an overall increase of ADHD globally. Conrad states that: "…the diagnosis is embraced and promoted by the people who receive it. This suggests that this may be a different kind of psychiatric diagnosis from those sociologists typically study; one that is sought out by the very people to whom it is to be applied. In this case, medication treatment may be seen as much as an enhancement, as it can be deemed a form of 'social control'" (Conrad & Potter, 2000, p. 575). By "social control," Conrad refers to the "feedback loop" among the professionals, claims makers, media, and the general public. With the new media, Internet, and television, it is easy for the patients to self-diagnose themselves and to simply recognize their behavior habits within the popularization of symptoms. Furthermore, while many skeptics may criticizes the ADHD diagnosis and stigmatize the affected individuals, many patients self-identify with the diagnosis and commonly encounter general understanding from society for their "unacceptable" behavior. Disease recognition can explain and alleviate the burden of blame for lack of productivity or for hyperactive behavior in unacceptable situations. With this relief as an option, many individuals prefer being medicated, rather than reprimanded, for their actions. With the gradual increase of ADHD diagnoses since the discovery and popularization of the disease, it is speculated that the public acceptance of medical treatment has only aided the diagnostic spread.

Nevertheless, the increasing number of ADHD diagnoses has hardly been solely attributed to the desire of individuals to receive leniency for their hyperactivity. The growing numbers of ADHD patients has led researchers to ask what other factors could explain this medical and social phenomenon. Timimi (2009) attempts to resolve this dilemma by presenting three possible solutions to the increase of ADHD diagnoses. These proposed reasons behind the increase of diagnoses are:

> …first that ADHD has always existed but it is only recently that we have begun to realize this and so diagnose and treat it; secondly that there has been a real

> increase in ADHD-type behaviors in children; and thirdly that there has not been a real increase in ADHD-type behaviors among young people but there has been a change in the way we think about, classify and deal with children's behavior…(Timimi, 2009, p. 154).

The extensive historical documentation of ADHD, stretching since the beginning of the 1900s, could be explained by the first reason quoted. The first explanation also defines the contemporary increase in the number of diagnoses: that it has been previously un- or under-diagnosed. If ADHD indeed was present throughout the existence of human civilization, however, it should be expected that there are common biological or environmental factors affecting people, which would cause the abnormality. The possibility of the existence of undiagnosed ADHD throughout the years is contingent on the idea that historically there were similar factors, which contribute to the making of ADHD "patients" (Timimi, 2009). Thus far, neurological research has failed to recognize a biochemical imbalance, which may account for the ADHD behavior in individuals and the hyperactivity they exhibit (Furman, 2009). The same can be said for the search of an ADHD gene. The lack of scientific discovery of causal environmental factors, which can lead to the development of ADHD symptoms, has also pointed to the unlikely possibility that ADHD has always been present, yet undiagnosed (Timimi, 2009, p. 133). While science can continue exploring the possibility of a universal root cause of hyperactive behavior, it is near impossible to draw any conclusions based on our current knowledge.

The second possible explanation, that there is a real contemporary increase of ADHD-type behavior in children, is contingent on the proof that a common shift in the environment globally has resulted in the increase of demonstrated hyperactivity. This suggested explanation for the rise in ADHD diagnoses could be analyzed further through an exploration of how

modern-day lifestyle has shifted across cultures. The inability to match the demands of the environment has often times been attributed to the stereotypically fast-paced lifestyle most of the Western world prefers (Timimi, 2009). The shift in lifestyle factors such as diet and nutrition, family structure and family lifestyle changes, shift in the academic expectations of children and the education system structure are probable factors that might have influenced the amount of ADHD diagnoses (Timimi, 2009) (see Chapter 2). These factors, however, are not uniform across societies and cultures, nor can they account for the variation in rates of diagnoses across countries (Timimi, 2009). For example, in the case of France, the society is naturally undergoing similar environmental modernization to the one seen in the rest of the Western world. Yet, France has much lower rates of ADHD diagnoses (Lecendreux et al., 2011). Thus far, this is the most obvious example of ADHD diagnoses rate discrepancy and, therefore, it can be argued that the French society is an outlier in the environmental shift in the Western world. However, this begs the question how the rest of the world is experiencing these changes in neurobiological development and behavioral disease increase? The experiences of modernization cross-culturally seem to correlate with the increase of ADHD diagnoses, yet it is not shown that shifts in environmental factors is the cause of the disorder.

The last possible explanation, proposed by Timimi, is the shift in perceptions of appropriate behavior of children in today's society. This viewpoint will be further discussed in Chapter 2 in a broader analysis of how the view of contemporary childhood in the West has changed and how this shift has influenced today's Chinese cultures.

IV. Medicalization in East Asia: westernization, media, and the Internet

ADHD was first studied, and furthermore recognized, in East Asia in the 1970s alongside the initial diagnoses in the West. Over the last 20 years, ADHD prevalence in East Asian nations

has grown such that it is now in accord with levels in North America (Faraone et al., 2003, p. 110)**.** While East Asian nations continue abiding by their traditional cultural and social customs to some degree, some contemporary Western influences have entered the daily lifestyle of these societies. This cultural Westernization could have played a role in the increase of ADHD diagnoses and the globalization of the disease. Some recognized Western influences include the pharmaceutical industry expansion, the shift towards the Western (specifically DSM vs. ICD) diagnostic criteria, access to the Internet and the rise of patient support groups in the East. These are only a few of several examples that could have indirectly and directly contributed to the increase of ADHD cases outside of North America and Europe (Conrad & Bergey, 2014). These factors have been recognized as partial reasons for the globalization of ADHD in regions where great Westernization of cultural habits has been seen, while the traditional culture of the nation is distinctly different from the Western world. Common lifestyle factors (i.e. similar diet, upbringing, social status ect.), which could tentatively play a role in the development of ADHD, have not been recognized between the West and the East. Despite global Westernization, the environmental conditions in East Asia do not reflect the lifestyle in the West and furthermore the Chinese societal organization does not resemble the societal organization and familial environment of that in the West (Conrad & Bergey, 2014). Nevertheless, contemporary East Asian societies are still strongly influenced by traditional cultural views and are only partially receptive to Western habits.

Because of this cultural discrepancy, the international diagnostic criteria of ADHD presented today can seem overarching and insufficient. One of the biggest problems with recognizing ADHD symptoms globally is the "one size fits all" approach for measuring the condition (Timimi & Maitra, 2009). The criteria for diagnosing ADHD are based on the North

American DSM-5 and thus do not attempt to account for cultural differences reflected. Cultural differences and traditional practices can account for the socially influenced recognition of certain psychiatric conditions or the different standard medical practices of different places. Therefore, this so-called "psychiatric ethnocentrism", shown with ADHD diagnosing and treatment, can be detrimental to the medical practices in certain cultures (Timimi & Maitra, 2009). In light of this phenomenon it can be said: "in critiquing the assumption of universalism it can be noted some conditions may descriptively resemble current psychiatric categories but may not be disorders at all in some cultures" (Timimi & Maitra, 2009, p. 204). The broader difference between ADHD symptomology perceptions in Western countries and that of Eastern cultures will be further analyzed in Chapter. 2. Yet, it is worth mentioning that with the expansion of ADHD diagnostic criteria, it has become more difficult to incorporate cultural influences in the disorder's treatment and recognition.

The expansion of diagnostic criteria, in conjunction with the westernization of East Asian cultures, has been marked by several key events in recent medical history, which have aided the medicalization of Eastern cultures. The first of which is the shift from one standard of diagnostic criteria to another. Greater westernization inspired the shift from the World Health Organization's International Classification of Diseases' (ICD) symptoms to the DSM criteria as the global diagnostic standard. This further expanded the diagnostic boundaries for ADHD, since historically ICD's diagnosis had required the recognition of *more* behavioral symptoms, such as the simultaneous experience of all three inattentive, impulsive, and overactive behaviors, before the prescription of treatment. The DSM-4, on the other hand, required only two dimensions of these behaviors. Further, the ICD required that these behaviors appear in two settings (i.e. home and school) while the DSM allows a diagnosis based on a single setting (i.e. school) (Conrad &

Bergey, 2014). This westernization and the shift towards the hegemonic use of the DSM has allowed for the increased numbers of ADHD diagnoses in East Asia and has provided for this different culture to identify with behavioral expectations set in the West. Yet, this cultural difference has not been reflected in the diagnostic methods, therapeutic standards, and the local cultural psychiatry.

The next factor, commonly stated as a reason for the fast globalization of ADHD in East Asia, is the widespread access to the Internet. The Internet has turned into a primary source of health information and has allowed patients to not only question their physicians' opinions, but also to discover and identify with conditions which might remain overlooked in the doctor's office (Conrad & Bergey, 2014). The international access to assessment checklists and screening surveys (i.e. Conners Rating Scale for Hyperactivity) have allowed for self-diagnosis and has further made space for a Western reference point to enter into a dramatically different cultural context. The global access to scientific research and publications (often via the Internet) has further publicized Western research and criteria for ADHD. Support groups such as Children and Adults with AD/HD (CHADD) have been responsible for disseminating many self-assessment tests and have organized ways for parents and children to seek support in overcoming ADHD symptoms: "These support group sites appear in the native language of the country of origin, but with translation programs like 'Google Translate' most information on the internet is potentially accessible to people who speak different languages" (Conrad & Bergey, 2014, p. 38-39). Pharmaceutical companies are often involved in sponsoring these informational websites and creating Internet advertisements. With these factors playing a major role in the diagnostic process and the spread of information about ADHD symptoms, it is not difficult to understand

how international access to the Internet has allowed for the globalization of medical conditions despite any cultural barriers.

Another reason for the popularity of ADHD and the further medical treatment required comes with the influence of medical advertisement on people's decisions and self-recognition. Through direct–to-consumer advertisements in the United States and accessible, industry-sponsored variety of "online science educational materials" (Conrad & Bergey, 2014, p. 36) and support group sponsorship, the Western pharmaceutical industry has played a major role in the online spread of information around the globe. Yet, their influence extends far beyond the Internet. The increasing number of ADHD cases in the West has brought very large revenue for pharmaceutical companies responsible for the development and distribution of drugs for the disorder (Conrad & Bergey, 2014). However, countries outside of the West present a new opportunity for market expansion, which could benefit the pharmaceutical industry much further due to rising incomes among consumers in emerging markets like China, India, and Brazil (Thomas, 2012). The first step towards expanding pharmaceutical markets would be to encourage the widespread awareness of diseases, which encourage prescription drug treatments. The market expansion now extends further than direct-to-consumer advertising and also includes online training tutorials, which target schoolteachers and encourage them to become "disease spotters" and "sickness treatment brokers" (Conrad & Bergey, 2014, p. 36). Pharmaceutical sponsorship of support groups' websites and direct outreach to doctors in different countries is just another way to increase awareness of ADHD and encourage diagnosis. Awareness of the condition is the driving force behind the "disease brokers" (i.e. teachers and physicians) to recommend treatment to children who seem to fit the diagnosing criteria and also may serve to improve the teachers' work life and their ability to control a classroom. Nevertheless, little

cultural influence has been considered when providing information and describing symptomology of ADHD. East Asian cultural influences on education, teaching, and expectations of child behavior have not been incorporated into these "educational materials," provided to parents and teachers in Chinese cultures, and, therefore, the reception of these workshops within East Asian "disease brokers" is uncertain. Yet, it can be asserted that through this indirect route of outreach, pharmaceutical companies have managed to somewhat contribute to the increase of ADHD diagnoses and have provided a method through which individuals would actually learn about and become self-identified with the disorder, regardless of culturally differential behavioral norms.

These factors in tandem lead to the increased awareness and diagnoses of ADHD. At the same time, the potential corporate benefits from expanding the ADHD market of pharmaceutical companies have driven the pharmaceutical industry's influence in the support group system of ADHD patients. Today, it is not uncommon for online advocacy and support groups to be intertwined with the pharmaceutical industry sponsorship. Not only are Western groups now accessible globally, but many of these organizations are also expanding and creating branches outside of the Western world, which "may facilitate pre and/or self-diagnosing, thus increasing the likelihood to seek or obtain a medical diagnosis and treatment" (Conrad & Bergey, 2014, p. 39). ADHD support groups are successful in encouraging treatment and fostering community relations with affected people. This is often the case due to the status of legitimacy they hold in front of ADHD patients. This reputation comes with the public talks and events, organized to raise awareness for ADHD, featuring experts in neurobiology and psychology. Scientific talks, regarding ADHD, increase the legitimacy of the disease due to the "empirical" proofs often cited from experts in these fields. These particular events are furthermore funded and organized by

scientific sponsors such as pharmaceutical research and production companies. The financial affiliation of many support groups with the pharmaceutical industry creates a conflict of interest. Yet, the overwhelming spread of the ADHD diagnoses and the increased numbers of prescriptions suggest that many individuals see helpful self-identification in the ADHD diagnosis and treatment, regardless of the motivations behind the pharmaceutical company's involvement in the patient's diagnosing process. It could be said that, while pharmaceutical companies benefit financially, many individuals resolve to identify with ADHD symptoms. This phenomenon is seen globally, regardless of the cultural differences between different nations.

The global expansion of ADHD diagnoses has been both scrutinized and justified through ethical arguments and in some cases with empirical data. Not many cross cultural comparison studies have been conducted thus far, however, one of the most extensive studies states that: "…the data… suggest that there is no convincing difference between the prevalence of that disorder [ADHD] in the USA and most other countries or cultures" (Faraone et al., 2003, p. 113). Many critiques of the studies of cross cultural prevalence of ADHD state that the use of DSM criteria across cultural borders does not translate or accommodate the norms of childhood behavior in different nations and cultures. The globalization of conditions such as ADHD may change the cultural perception of normal child behavior or social and familial dynamics. The globalization of psychiatric norms has yet to incorporate the differences in cultural perceptions; this may further cause problems not only in treatment and diagnosis but also in proper research and data collection, as stated in the conclusion drawn by Alban-Metcalfe et al. (2002). The globalization of psychiatric criteria has thus far failed to reflect the different cultural considerations needed for a diagnosis. This can be related to the difficulties in academic and clinical management of ADHD diagnosed children in East Asian schools and homes (see Ch. 3).

Furthermore, the lack of culturally sensitive rating scales and behavioral assessments for data collection has stalled the progress of ADHD research in different cultural settings. It is hardly possible to collect empirical data based on cultural assessments without seeking out a method for accurately comparing culturally different results and potentially incorporating these differences in the survey methods (Alban-Metcalfe et al., 2002). Furthermore, as discussed earlier, the view of psychiatric conditions in different cultures differs in many aspects beyond just ADHD and therefore it could be culturally acceptable for children to be "hyperactive" in a given society, while it is not so in the West. This begs a discussion of whose social standards should be followed; should we attempt to normalize psychiatric diagnoses to only one social standard; should we encourage further culturally nuanced accommodations in places like East Asia in order to promote greater population understanding of the ADHD and furthermore how has the penetration of Western views into the East affected their societies and their cultures. In the following two chapters, I will attempt to provide evidence in favor of the creation of culturally specific accommodations to behavioral therapy in East Asia.

V. Conclusion

Starting from the initial observations on hyperactive children, and later on of those on adults, ADHD has developed to be a controversial condition with aspects affecting individual's character identification, social perceptions, and cultural acceptance. Initially looked upon as a disease of the "human volition" (Lakoff, 2000), today ADHD has grown into an international phenomenon, which has affected every nation in the world to some degree (Lecendreux et al., 2011). With the medicalization of contemporary human condition, alongside the lack of concrete testing methods for ADHD, the expansion of diagnoses has grown dramatically. Furthermore, the shift in perception of culturally appropriate childhood behavior (Timimi & Leo, 2009) has

only added to the process of diagnoses increase. The legitimacy of medicating the "hyperactive" human behavior is still debated and furthermore the expansive diagnosing criteria have created more discussions about the use of pharmacologic drugs as the primary treatment method. The globalization of the disease has expanded beyond the Western shift in childhood behavior, and under the influence of factors such as the Westernization of psychiatry, widely available Internet access, disease support groups, and pharmaceutical companies, the medicalization of ADHD has reached global proportions (Timimi & Leo, 2009). The consideration at hand, concerning East Asian societies, is that the Chinese perception of "normal" has been affected by medicalization and this has allowed for the enforcement of Western standards of behavior across a very different culture. This is something recognized as a possibility for ADHD's increased prevalence: the contemporary cultural shift of perception of "appropriate" childhood behavior in the society. East Asian cultural considerations have yet to be integrated in the screening, treatment, and diagnosing criteria of the disease and with that we must ask how different cultures have handled the effects of ADHD within their societies and is it permissible to use the overarching medicalization in order to incorporate the cultural nuances of child behavior with the prospect of helping more patients. Throughout the following chapters I will address the phenomenon of culturally "appropriate" child behavior in further depth through an analysis of the spread of ADHD to the East and will examine the possible benefits of cultural adaptations to treatment and therapy for ADHD.

CHAPTER 2: CULTURAL DISCREPENCIES IN THE VIEWS OF "APPROPRIATE" CHILD BEHAVIOR

I. Introduction

Increased global access to scientific findings via widespread Internet availability has contributed to the spread of awareness for diseases such as ADHD in East Asia (Lakoff, 2000).

Simultaneously, Chinese culture, while heavily westernized, has preserved many deeply rooted connections to their ancestral tradition, Confucianism. Confucianism, one of the oldest cultural philosophies and religions in the world, teaches about the importance of a strong family unit, establishes expectations for childhood behavior, and praises the appropriate parental authority during the child's life (Slote & DeVos, 1998, p. 290). While Confucianism is still heavily present in East Asian societies, contemporary Chinese cultures and their way of life are subject to strong Western influences. This mixture of Western influence and traditional Confucian views has led to a variable interpretation of childhood ADHD in East Asian cultures (Alban-Metcalfe et al., 2002). In one example, Mann et al. (1992) studies several Asian countries (Indonesia, Japan, China) as a comparison to the USA. The results demonstrate that the "Chinese and Indonesian clinicians gave significantly higher scores for hyperactive disruptive behaviors than did their Japanese and American colleagues" (Mann et al., 1992, p. 1539). These findings are further explained in *Handbook of Cultural Psychiatry* by Tseng (2001, p. 456):

> The results [of Mann et al., 1992 study] demonstrated that the children labelled 'hyperactive' differed greatly in their degree of hyperactive behavior….This supports the notion that the assessment of hyperactive behavior among children is subject heavily to the norms of behavior established by the professionals in each cultural setting.

It seems that the cultural discrepancies and the differential standard of practice affects not just the general population's views on ADHD but also the clinical diagnostic process. Contemporary global psychiatry is heavily based on the diagnostic criteria in the DSM-5, which have been influenced by modern-day Western views of normal childhood behavior. Therefore, these diagnostic criteria are strongly contingent on North American cultural perceptions of appropriate childhood behavior (Timimi, 2009). The adoption of the DSM-5 as the basis of psychiatric diagnosis globally has allowed for these cultural influences to extend beyond cultural borders.

As a result, the diagnosis and consequently treatment of disorders, such as ADHD, enter societies, which do not experience mental illness the same way as it is experienced the West, particularly in the United States. In a culture, which still incorporates the help of shamans or monks (Phillips et al., 2009, p. 2048) in the treatment of psychiatric symptoms, it needs to be understood that psychiatric conditions are still approached very differently. Nevertheless, medical psychiatric practices in East Asia still lack cultural adjustments. Since the interpretation of ADHD symptoms vary cross culturally (Mann et al., 1992), it is fair to ask whether it is possible to normalize the diagnosis of ADHD universally and furthermore if that would be an advisable step in cultural psychiatry (Sight et al., 2013). Because of the different societal view on "normal" childhood activity and the social limits on hyperactivity, the different cultures experience psychiatric phenomena differently. Nevertheless, thus far little cultural adjustments have been made to accommodate patients from different cultures according to their personal needs. The ADHD diagnosis has remained culturally insensitive and its treatment options still lack the needed cultural adjustments. This is reflected not only in the discrepancies in medical treatment for ADHD, but also in the lack of academic accommodations for ADHD students in East Asia, and the insufficient medical knowledge and sympathy towards children and families struggling with the disorder. In order to reveal the necessity for cultural accommodations to ADHD treatment in East Asian, it is first necessary to explain the culturally different perceptions of "appropriate" child behavior. In this chapter I discuss the differences and similarities to the historical shift in the expectations and perceptions of "appropriate" childhood behavior in the Western and Eastern views. I note the current Westernization influences on the Chinese perceptions of childhood behavior and furthermore note the lack of cultural accommodations and treatment roadblocks in East Asia, experienced due to the cultural insensitivity of the ADHD

diagnosis and treatment. I make a case for the cultural discrepancies and needs of Chinese ADHD patients and try to create understanding for the culturally specific needs of patients globally.

II. The historical shift in Western views on appropriate childhood behavior

The view on appropriate childhood discipline and child upbringing has gradually shifted throughout the history of the Western world. From the Middle Ages to today, the responsibility for child-rearing has been attributed periodically to the mother, the father, a wet nurse, an attendant, and historically returned again to the mother in the 1940s-50s (Timimi, 2005, p. 6-7). The expected behavior of children varied from unquestioned obedience to their parents and learning from the surrounding adults, to keeping a steady job and contributing to the family's income despite enduring abusive working conditions (Timimi, 2005, p. 7-8). Child labor in North America, particularly in the United States, did not become restricted nationwide until the nineteenth century, and since then it has been banned altogether. In the late nineteenth century enforced public education in the United States normalized the overall system of learning and allowed for close observation of childhood behavior in the classroom. It was during this period of time that research on children became possible: "Schools made children available to professionals like sociologists, psychologists and doctors, all of whom sought to do scientific surveys on pupils" (Timimi, 2005, p. 9). These initial studies set the foundation of childhood behavior testing observations and were also the first close documentation of Minimal Brain Disorder (MBD) and hyperkinesis (Lakoff, 2000). The initial studies of MBD found the affected children as ones "whose behavior was difficult to control, [who] might be suffering from organic brain damage, and further that such damage led to the crippling of the children's moral development" (Lakoff, 2000, p. 152). Children with MBD and hyperkinesis were often treated as

unfit to manage their academic work and as the standardization of education in the West increased the value of academic achievement, many parents feared that the children, diagnosed with MBD, would underachieve or not be able to compete in society (Timimi, 2005). These fears, regarding the performance of ADHD-affected children, have only increased today, since the pressure for academic achievement in the West has not subsided.

Today, the norm for childhood behavior in the West is commonly related to academic achievement, which is greatly respected and celebrated. Excelling in school has been popularly associated with overall lifetime success and stable career path (Timimi, 2005, p. 12). It has become an essential responsibility of children, especially those in the upper middle class, to excel academically and to receive top rankings when compared to other students. Often there is an expectation for children to enjoy studying and to place priority on schoolwork over social games. This pressure placed upon students to excel and compete in the classroom has sometimes been reinforced by praise given to children who enjoy learning at school. It is thought that "in certain quarters there is a belief that childhood has been eroded, lost or has suffered a 'strange death'" (Timimi, 2005, p. 12). This new view on childhood in relation to achievement has been part of Western societies only since the beginning of the 20th century:

> By the turn of the century a declining manufacturing sector has resulted in an increasing demand for an educated workforce and so schools are under greater pressure to increase the number of pupils gaining educational qualifications and moving on into higher educations and are subject to constant monitoring by the government. With fewer 'traditional' jobs available to boys at the end of their schooling, the link between self-esteem and academic achievement is greater than that at any time in the past (Timimi, 2005, p. 14-15).

This societal shift has resulted in the increased pressure on children to perform better academically. In the West, academic achievement has focused on grade achievement in a universal-style classroom, rather than the development of character and personal self-identity.

There is increased pressure on children for grade-earning and numbers competition, which are associated with academic success. Furthermore, this has changed the experiences of what was once the norm for children: playtime, creative expression, and games (Timimi, 2005, p. 12). At the same time, the rates of ADHD have increased steadily in the last couple of years and have caused the speculation for a causative relationship between the contemporary pressure for academic success and the increase of behavior disorders in children (Sight et al., 2013). Thus far, however, there has been no scientific proof of the cause of one on the other and the overall increase of behavior disorders in children has remained unresolved.

The rise of behavioral disorders in children, specifically young boys, has led to concerns about their ability to compete in a demanding academic atmosphere, and furthermore, in the competitive workplace. While academic underachievement is not a cited symptom of ADHD, disruptive behavior in the classroom and inattention to detail often leads to a drop in grades and performance (Jacobson, 2002). However, the aforementioned academic underachievement, which results from the manifested symptoms of ADHD, is culturally variant and often subjective. As Ken Jacobson (2002) states in his summary article: “Currently, a case could be made that political and personal factors affect whether children achieve expected levels of performance. In some cases, performance standards are culturally out of step with students’ epistemologies, while in other environmental conditions may be a large factor” (p. 286). The acceptable level of academic achievement is something determined by a blend of familial expectations, academic institutions, and even societal understandings. For example, expectation for grade achievement in the United States and furthermore grade evaluation is dramatically different from that in Eastern cultures or even within other North American grading systems. Furthermore, as the school educators are turning into the most common “disease trackers”, who first recognize hyperactivity

symptoms, it is not surprising that ill-behaved, underperforming boys are commonly pointed out as subjects with ADHD. The diagnosis of ADHD has been related to the Western concept of underperformance and the diagnosis has predominantly been given to children who are not reaching the "acceptable level" of grade achievement. In order for children with ADHD to perform up to par, many after school programs, testing accommodations, and special classes have been designed in order to equalize their chances for academic success. However, these accommodations, and furthermore the level of expected academic performance are strongly culturally influenced and thus far have been seen impossible to standardize across the different cultural contexts.

III. Cultural influences on ADHD perception in East Asia

Unlike the historical shift of Western views on child rearing, the majority of Eastern cultures are strongly influenced by the traditional Confucian teachings on way of life, education, and familial arrangements. In Chinese cultures, dedication to learning has been a central pillar of childhood for centuries: parents and teachers devote their time to educating the young generations and provide wisdom and life lessons for the buildup of strong character and "personality development" (Slote & DeVos, 1998, p. 289). The Confucian view on childhood also entails a model of parenting through which parents need to encourage "appropriate habits" in order to ensure the upbringing of smart and successful adults: "In general, 'bad habits' were to be eliminated early; witness the proverb 'The bad habit of age three continues until age eighty'" (Slote & DeVos, 1998, p. 289). The traditional family focuses on discipline and respect for the elderly when raising children. Furthermore, the older traditional Chinese family expects greater respect, excelling education, and leadership from the boys in the household. As a strongly patriarchal society, sons were strongly favored over daughters. However, this preference has

decreased starting in the 1980s with the "one child per one couple" family plan enforced in China, which limited the number of children to one per family. As a result, the overall pressure on children of both sexes to behave according to school and household rules and excel academically has only increased: "Furthermore, single children feel increasing pressure to succeed in life due to their parents expectations towards their only child" (Lin & Wang, 2007, p.131). This Westernization of East Asian countries has changed the cultural expectations of children and has placed an increased value in attending universal classroom schools, where one teacher is responsible for many students and works towards accommodating their different styles of learning (Timimi, 2005), rather than the traditional common practice of passing down "jiao" teachings: the wisdom, manners, and proper behavior lessons taught at home from the parents (Ma & Lai, 2014). Traditionally, children were expected to appreciate and enjoy learning life lessons from their parents (i.e. wisdom teaching of "jiao"). The cultural phenomenon of "character teaching" has existed for centuries and has developed through the expectations of children to enjoy the learning process. These expectations reflect the Confucian view on childhood. Confucianism paints the image of more learning-driven children and, therefore, the educational responsibilities of children in East Asia are directly affected by these cultural beliefs. Unlike in the United States, where standardized education, and therefore learning as a whole, has developed as a central pillar of childhood barely in the twentieth century, East Asian societies have respected learning as a foundation for building up respectable adults for centuries. As Confucianism emphasizes raising respectable adults, it also allows for the different cultural perception of child behavior. The Confucian culture of the East Asian societies defies the perception of child behavior. These different child behavior standards are essential for the society and the clinicians in these settings, as they are the basis of ADHD recognition and

diagnosis. If a child fails to meet those social standards, he/she would be treated for the disorder. Yet, the appropriate behavior standards are so different cross-culturally, that the diagnosing process in the two cultural settings is affected. For example, the level of hyperactivity recognized as "abnormal" in China is very different than the intensity of behavior outbursts, perceived as diseased in the Western world (Alban-Metcalfe et al., 2002). Since the diagnosing process of ADHD is also influenced by these differences of culture, it is fair to say that cultural implications in this psychiatric process need to be accounted for.

Cultural adaptations to the ADHD diagnostic process are necessary in order to encompass differences such as the East Asian Confucian view on specific behavioral outbursts. Chinese culture influences the diagnosing process through the emphasis placed on specific characteristics of ADHD, which are regarded as more concerning than the symptoms, emphasized in the United States. Interestingly, while Confucian tradition teaches appreciation for education and hard work and academic achievement is still a highly regarded aspect of childhood responsibilities, Chinese parents are concerned with more than just academic underperformance when their child is misbehaving. As Alban-Metcalfe et al. (2002, p. 286-87) state:

> There is evidence to suggest (a) that Chinese parents appear to be more concerned about expressions of physical aggression by their children, (b) that, in contrast to Western parents who encourage assertive and independent behavior, Chinese parents tent to foster dependence and (c) that Chinese parents emphasize academic achievement more strongly and that an important part of training is sitting down and concentrating on academic work.

The Confucian tradition teaches children about the increased respect they must pay to their elderly and, therefore, expects compliance with the orders of parents. Furthermore, Confucianism reinforces familial harmony and parental dominance over children. Childhood dependence on the parents is related to the reinforcement of compliance to parental rules and the need of elders' permission when making decisions. These factors may foster restricted childhood

behavior in a way that children in East Asian cultures are taught self-control and containment of their outbursts. Physical aggression, as the most violent form of behavioral outburst, is disruptive of the familial harmony and points to the lack of obedience to the parents. Therefore, due to the teachings of Confucianism, Chinese parents perceive those behavioral outbursts as most concerning in comparison to all other symptoms of ADHD. In the Western world, children are commonly allowed self-expression and their own autonomy in decision-making (Timimi, 2005, p. 10). With that, it can be seen why many Western parents encourage assertive behavior and do not rank aggression as concerning compared to other ADHD symptoms. These differences shape the different views on behavioral outbursts and behavioral disorders.

Since these behavioral observations and expectations vary culturally and historically, the uniform, globalized symptomology of behavioral disorders should not be universally applied cross-culturally without taking into account the different perception of childhood behavior. The need for cultural adjustment of the ADHD diagnostic criteria has led to the discussion of the difficulty in having universal psychiatric treatment (Sight et al., 2013). The experience of hyperkinesis is recognized globally, as shown by the increasing rate of ADHD diagnoses across the globe (Ma &Lai, 2014). However, while ADHD can be identified through the Western diagnosis, the interpretation of the diagnostic criteria cross-culturally varies dramatically. With that, the treatment methods and social adjustments to the disease need to be culturally specific. Nevertheless, thus far little has been done to adopt cultural modifications to the diagnostic criteria and disease management outside of the Western world.

IV. Westernization of child upbringing and differences in diagnosis management

While Chinese cultures have retained the Confucian influence in their views on childhood, modern day life in East Asia is strongly influenced by the Western culture. The global shift

towards embracing the Western standards of childhood behavior have expanded beyond the recognition of ADHD diagnoses, but into the establishment of policy and laws that protect the universal rights of the child as defined in the West. For example, contemporary international laws against child abuse and appropriate discipline are thought to take a very Western-oriented approach in determining the legal boundaries of parenting (Timimi, 2005). Little cultural adjustment is allowed when establishing these standards. Today, there may be some cultural confusion about appropriate "methods of disciplining" children and furthermore about how to interpret child protection and children's rights laws within different cultures and countries. This began with the United Nations [UN] convention of the Rights of the Child which sought to codify the protection of children and their rights yet gave rise to confusion because of cultural differences in its interpretation (Timimi, 2005, p. 31). For example, many cultures issue punishment of various kinds in order to discipline their children. Furthermore, many Eastern cultures disagree with the individualistic view of childhood that the Western world has adopted. This creates a discrepancy in the views between the West and the East on need and severity of parent-enforced discipline. Today, East Asian cultures turn strongly to the Western view of parenting in part because of the perceived "success" of Western nations and the methods of education to which they subject their children (Ma & Lai, 2014). The shifting views and expectations of children in the West have also shifted the treatment and expectations of children in East Asian cultures. Furthermore, this change in views of appropriate childhood behavior has also influenced the demands society places on parents and the role parents play in raising viable adults.

The contemporary westernization of the parental role shows heavy influence on the East. This influence has manifested in the observed increase in childhood autonomy in East Asia and

furthermore with the newly accepted "child independence" allowed by parents: "Hong Kong parents have found themselves increasingly exposed to Western values, beliefs, and knowledge in child rearing derived from developmental psychology; all the literature reiterates the parents' active roles in fulfilling the child's developmental needs, respecting him or her as an individual and listening to his or her voice" (Ma & Lai, 2014, p. 175). This new way of valuing children's autonomy can be seen as a way of empowering children to shape their own habits and forming their own opinions. This strongly reflects the Westernized method of education, where children spend more time in a universal classroom among their peers and less time being educated at home by their parents. "Jiao", the traditional teachings of values and beliefs in the home, while still practiced, has not been regarded as highly as previously. Nevertheless, the concentrated attention towards high academic achievement in the classroom has not changed. Something that has been occurring, however, is the increased incidence in noticing behavioral outbursts and disorders in the classroom environment. Due to the greater time dedicated to classroom education, it is to be expected that a greater percentage of behavior misconduct would be seen in school. The shift towards granting children greater autonomy and the westernization of school pedagogy have led to more behavioral disorder recognition by teachers (Ma & Lai, 2014). Not only the role of the parent, but also the role of the teacher has shifted: as the school has turned into the major ground for behavior disorder recognition, the teacher perception of "misconduct" can turn into a primary step in the diagnosing process. These new behavioral observations on children lead to the increased reliance on the individual teacher's perception of "appropriate" behavior.

The cultural influence on teachers' perception of behavioral disorders have let to discrepancies in the use of diagnostic criteria for ADHD across Eastern and Western cultures.

Furthermore, the recognition of ADHD in the classroom places teachers in the role of the persons who identify students with behavioral disorders. This extends to the responsibility of teachers to discuss the problem with the family, and recommend treatment. In the Alban-Metcalfe et al. study, conducted in 2002, the authors note the differences in recognizing ADHD symptoms between Chinese teachers and their UK colleagues. When both groups were shown the same, recorded video of a toddler's behavior, "the teachers from mainland China rated the child significantly higher [in ADHD severity] than did either the Hong Kong or UK teachers, with the Hong Kong teachers' ratings higher than for the UK teachers" (Alban-Metcalfe et al., 2002, p.293). The overall ratings of ADHD and behavior anomalies are interpreted more stringently in Chinese cultures. The differences in cultural perceptions of appropriate behavior between East Asia and the West affect the recognition of ADHD and the prevalence of treatment of the disease. Depending on the cultural influences on teachers' perception of appropriate child behavior, different countries have different standards for the severity of symptoms for classification of the same disease.

East Asian cultures not only rate overall ADHD symptoms more severely, but also place much greater emphasis on the hyperactivity aspects of the disorder. Because of the reverence of cultural values of familial interdependence and sustenance of order through respectful obedience to the elders, the disturbance of household harmony through impulsive acts is treated more harshly (Timimi, 2009, p. 26). According to Chinese culture, without familial harmony and peace the overall order of society would flounder. These beliefs affect the thresholds of severity for recognizing symptoms to diagnose ADHD. Norvilitis and Fang (2005) surveyed 126 Chinese teachers of various grade levels and tested their perceptions of ADHD symptoms in comparison to those of their American colleagues: "First, as hypothesized, it appears that the Chinese group

may be more attentive to the hyperactivity symptoms, whereas the Americans focus on both hyperactivity and inattentiveness…Such a focus on hyperactive behavior would be consistent with cultural beliefs that discourage assertiveness to maintain social harmony" (p. 422). Hyperactivity and lack of self-control are the most notable symptoms of ADHD in Chinese cultures. In the West, however, ADHD is more commonly associated with the symptom of inattentiveness, mostly in a classroom or in the workplace. Emphasis is placed on productivity and high achievement, rather than on disturbance of the surroundings. Similar to the results of Alban-Metcalfe et al. (2002), these results show that academic underperformance is the most concerning symptom for Western families, yet for East Asian families the disturbance of order (i.e. physical aggression, lack of self-control) is greater cause for concern. The surveys for ADHD, given to both groups of teachers, were the same, however, the recognized symptoms for diagnosis were different and were strongly related to the different cultural views and expectations of children.

Not only is the emphasis of diagnosis placed on different aspects of the disorder's symptomatology, but also the ability to treat and manage the disorder's symptoms long-term is very different between the Western and Eastern cultures. With the different methods of upbringing and the different expectations from parents and even teachers, Chinese students develop different habits than their Western peers. This consequentially leads to a different level of academic achievement, different study habits, and different life choices. This difference is contingent on the cultural upbringing, rather than on the different geographical location. In one example, cultural differences between the West and East have even shown effects on ADHD students' ability to adjust to university life. ADHD students of Chinese origin have been seen to adapt to the university environment differently than American students. Norvilitis et al., (2009)

looked into the adjustment of Chinese students with ADHD in American universities and found that, while they were given the same diagnosis as American students, there were some differences in the academic habits and of life choices Chinese students achieve during university.

> The Chinese students reported better study skills than the American students and also reported more confidence in their career decision making. It is possible that these results are the direct effect of a Chinese educational system that encourages a greater focus on academics from a young age than the American system, and in which college education remains a relatively rare privilege that students would not want to squander (Norvilitis et al., 2009, p. 91).

The different study habits and career decisions are correlated with the cultural differences, and with that, the upbringing of Chinese students affects their personal decision-making and academic habits. Norvilitis et al., (2009) note, however, that there was "no difference in grade point average by country" (p. 90). While the study habits were different between the two groups of students, their overall performance did not differ. The personal ability of Chinese students to express self-control and the cultural emphasis on academic focus and performance reflect the differences in the management in an academic setting. While ADHD has been greatly medicated in the United States with the purpose of improving academic focus and reducing inattention, it seems that these symptoms have comparatively lower impact on Chinese ADHD patients in a university environment. Nevertheless, ADHD patients in East Asia, while having better study habits than American students, still feel the effect of the disease and therefore require appropriate treatment and educational accommodations in order to have the opportunity to excel in their environment. As previously explored, ADHD patients in Chinese cultures still display behavioral outbursts and aggressive behavior (Alban-Metcalfe et al., 2002). While the rates of ADHD recorded in East Asia are similar to the ones seen in the United States, the accommodations present in the school environment are dramatically different or insufficient in the East Asian

countries. Little has been done to address the needs of ADHD children in the Chinese school system and furthermore reinforces the need for cultural accommodations for patients with this syndrome.

V. Discrepancies in recognition of and accommodations for ADHD patients in East Asia

In order to provide children with ADHD with the same chances for academic success, school accommodations should aim to address the needs of children of all capabilities (Alban-Metcalfe et al., 2002). However, even today, East Asian countries lack proper adjustments for students with learning disabilities and ADHD diagnoses:

> . . .with the exception of a few, most of the teachers have little knowledge of the disorders, and are ill-equipped to meet the special learning needs of the child to provide guidance and advice to the anxious and distressed parents. Besides not being responsive to the children's special learning needs, the teachers have labeled them as bad and problematic, which has made the children's learning at school even more difficult and unpleasant (Ma & Lai, 2014, p. 132).

Since ADHD students are not yet given academic accommodation in East Asian countries, it is impossible to expect the same level of behavioral conduct and performance from ADHD-diagnosed children as their peers. Coming from a culture, which heavily values the academic success of their children, Chinese parents and teachers can find their children's academic underperformance greatly frustrating. Furthermore, in a culture where peaceful and docile child behavior is praised, children with behavioral outbursts and lack of compliance can be subjected to greater stigma in society, especially in the classroom environment. Many parents in East Asia have felt direct or indirect blame for their children's lack of "appropriate discipline" and the inability to achieve academic success (Ma & Lai, 2014). This stigma and parent blame further result in failure to treat and accommodate the "misbehaved" children in the school system. Furthermore, not only are the parents commonly blamed for their children's behavior, but

children with ADHD themselves are stigmatized and accused of disrupting the academic process while in school. East Asian teachers' lack of proper knowledge about ADHD leads to the blame on children as "problematic" and "troublesome" while at school. This leads to resentment of schoolwork and lack of academic motivation for many children. These concerning observations are worsened by the discrepancy in clinical education and psychiatric access between urban, metropolitan areas and rural areas of China and other East Asian Nations (Yu-Cun et al., 1985). The Western world has managed to provide most schools with trained professionals who can work and aid the development of children with ADHD. The successful globalization of the ADHD diagnosis in East Asia, however, has not yet been accompanied by such westernized approaches to managing ADHD in schools. Furthermore, while many pharmaceutical companies have worked to increase awareness towards ADHD via workshops and tutorials (see Ch. 1, Section IV), these training sessions have merely served to explain the scientific proof and symptoms of the disease. The information regarding disease management needs to be accompanied with proper cultural education sessions, addressing the stigma behind mental illness and the purpose behind long-term medical prescription. While the information provided by pharmaceutical companies can progressively address treatment and management of ADHD, few workshops incorporate the cultural aspects, affecting the disease. This leads to the problem of teachers and parents misjudging the ADHD symptoms and mistreating children, especially in the school environment. The pharmaceutical industry can further encourage the parent-physician consultation and address the cultural discrepancies during clinical and support group funded events. We do not yet know if or when these academic and therapeutic accommodations will be incorporated into Asian countries or if they will be effective in addressing the disease with the needed cultural modifications.

As Chinese schools rarely are aware of the needs of ADHD children, the lack of understanding of ADHD in different geographic regions of China can further worsen the treatment of ADHD patients. A major difference in the treatment and accommodations for hyperactive patients in East Asian countries relates to the dramatic difference between more modernized urban living versus the rural agricultural areas of Asiatic countries (Yu-Cun et al., 1985). Upon the emergence of Multiple Brain Disorder (MBD) in the 1970s, the first research conducted in China correlated MBD with class difference, education level of the families, and the geographic regions of the country: "The possible relationship between the occurrence of MBD and social background seemed to become clearer from the finding that the rate of MBD was much lower in the children of scientific and technical professionals than peasants and workers" (Yu-Cun et al., 1985, p. 784). In surprising parallel to the Western world, East Asian countries seemed to initially notice MBD within lower socioeconomic classes (Lakoff, 2000). The study conducted survey screenings for MBD symptoms at several elementary schools in rural and urban regions. The results of the surveys noted the self-reported symptoms of MBD; the study, however, did not reference actual medical diagnoses given to children of the regions. This survey showed higher prevalence of MBD symptoms outside of the cities and suggested that the economic status within rural areas itself plays a role in the rates of MBD. While these findings may parallel the historical theory of "social Darwinism", which discusses the predominant ADHD behavior within lower socioeconomic layers of society (see Ch. 1), The Yu-Cun et al. study does not relate the survey findings to class division. While Yu-Cun et al. establish correlation between socioeconomic status and the rates of ADHD symptoms expressed in children; one can hardly be attributed as a cause of the other. Rather, it is more plausible that different environment and parenting techniques are utilized in the rural versus the urban

locations: the methods of upbringing likely differ between the professionally educated urban population and the predominantly farming rural regions. This further plays a role in the conduct of the children in school. The familial emphasis on the importance of classroom education in urban locations, versus the emphasis on the child's physical help with housework outside of the cities can influence the behavior of the child in school. The primary source of income in rural areas of China is most often agriculture, therefore, it is expected that the most valued attributes for families is ability to do physical labor (Yu-Cun et al., 1985). While education in rural areas is still valued, children, especially from lower income farmer homes, are taught the importance of agricultural labor and work on the fields. Their priorities, unlike children from higher income, professional households, include supporting the family's income. Therefore, schoolwork can become secondary and with that the behavioral expectations of children from rural households are very different. Children from urban areas are more often raised in households of professionally employed parents whose main priority and values are to ensure school success and to have children who achieve potentially higher, professional education than their parents. With that, the habits urban children build in the classroom are different than the habits of their peers in the rural areas. These differences in childhood upbringing correlate to the socioeconomic status of the families in cities and the province. The socioeconomic state of the family shapes the attitude and behavior of children towards classroom education. In this way, the ADHD diagnosis indirectly relates to the income level of families, so that the demands of a particular environment can lead to the behavioral outbursts of children from different socioeconomic groups.

More recent studies on ADHD prevalence in East Asian societies further discuss the relationship between the hyperactivity in children and the socioeconomic status of the family. Nevertheless, the Chen et al. (2007) results on the *diagnosing* frequency of ADHD are in conflict

with the Yu-Cun et al. findings, where only the symptom prevalence as self-reported by the individuals via a survey has been noted. ADHD diagnoses are strongly correlated with the adoption of the newer westernized psychiatric methods, developed in the last 50 years. Therefore, physicians trained in Western psychiatry would much more freely diagnose ADHD symptoms without seeking non-medical explanations for the child's misbehaviour (Chen et al., 2007, p. e441). With that, there is great dependency of the ADHD diagnoses rate on the type and quality of health care available regionally. The overall lower socioeconomic status of rural areas in East Asia, the lower quality of health care and lack of specialized medical professionals outside of the cities may explain the lower instances of contemporary ADHD diagnoses in the rural regions. In Taiwan, for example, it has been shown that "children with health insurance registered in suburban and rural areas were less likely than their peers in urban areas to have a diagnosed neurodevelopmental disorder, and the incidence rate was even 44% lower for ADHD among youngsters enrolled in rural areas" (Chen et al., 2007, p. e440). While the incidence of self-reported symptoms of MBD (and consequently of ADHD) is higher in rural areas (Yu-Cun et al., 1985), it seems that the actual clinical diagnosing rates of ADHD are lower in the rural locations of China. These discrepancies in the rates of ADHD diagnosis, based on overall economic state of the geographic region, are striking. Chen et al. (2007) looked at data from the National Health Insurance Research Database of Taiwan. This, while an accurate resource for the rate of treatment of children of Taiwan, is also not representative of the rate of ADHD *symptom* distribution in the country. This study did not conduct a direct survey of the self-reported symptoms of ADHD in children and, therefore, it is not possible to determine if the rate of treatment in suburban and urban areas reflect the rate of ADHD symptom occurrence. It is also worthy of noting that "given a lower density of general hospitals and the lack of trained

specialists in psychiatry or pediatrics, the suburban or rural areas may fall short in children's general and mental health services" (Chen et al., 2007, p. e441). This trend also translates to a lower number of ADHD diagnoses within the lower socioeconomic class of individuals. The lack of uniform medical care across the nation, alongside the inherent East Asian cultural influences on the social perception of ADHD, has led to dramatic discrepancies in the treatment and diagnoses of hyperactivity between urban and rural regions. This yet again reinforces the importance of cultural adaptation of the ADHD therapy to the needs and understandings of regional East Asian populations. Furthermore, the need for better psychiatric education of medical professionals across the different areas has been shown with the lack of balance in ADHD diagnosing throughout the society.

An important consideration to globalizing the ADHD diagnosis in Chinese cultures should relate the methods used for treatment of the disorder and the cultural views on medicating children (Timimi & Maitra, 2009). The globalization of Western scientific methods has taken precedence over cultural differences and has encouraged the universalization of Western pharmaceutical standards of practice. One example of this phenomenon is the pharmaceutical prescriptions of methylphenidate (MPH) all over the world as a treatment for ADHD (Timimi & Maitra, 2009). While the drug is controversial in the West and its long-term effects are still widely questioned, prescriptions for MPH drugs, such as Ritalin, have entered the market in China, Taiwan, and Hong Kong (Timimi, 2009). Nevertheless, the administration of Ritalin, especially to children, is often stigmatized and frowned upon in these countries. As ADHD symptoms include behavioral outbursts and, at times, disruption of the environment in the classroom, children with ADHD are often stigmatized in their schools (Gau et al., 2006). However, the Confucianism based culture looks upon daily medication as a sign of weakness and

scrutinizes the medical treatment of children in public: “More than half of parents think that taking medication at school embarrassed their child and hurts their child’s self-esteem” (Gau et al., 2006, p. 291). Confucianism still plays a key role in the parenting views of Chinese parents and these views greatly influence the parental and societal approach towards ADHD treatment. With that, many parents feel hesitant to give their children multiple doses of MPH medications, and even less so to accommodate long-term use of the drug. While the Western-based ADHD diagnosis has succeeded in entering East Asian societies, the proper cultural accommodations to ADHD behavioral therapies have not been made. The cultural differences in perception of medicating children need to be addressed and understood by the medical practitioners before the successful treatment of ADHD can begin. If the cultural stigma placed on daily psychiatric medication is too great to overcome, it is best for the physician to seek alternative methods for therapy and treatment.

Cultural stigma and skepticism towards MPH treatment are not only seen by the parents, but also by teachers. In a 2006 study looking at the reasons behind skipping MPH doses in Taiwanese children with ADHD, Gau et al. (2006) found that: “The explanations for missing doses were forgetting to take IR MPH at school, the medication having no effect, forgetting to bring IR MPH to school, refusing to take IR MPH, bitterness, side effects, *and teacher’s objections*” (p. 292, emphasis added). While it has been noted that some teachers in the West may not agree with the ADHD diagnosis, public rejections towards treatment of children have not been recorded. Furthermore, with the availability of school nurses and medical aid staff in the West, there has been an observed monitoring of children’s medication schedule. In many East Asian countries, however, “…not every primary or high school is staffed with a nurse and teachers are not responsible for giving medication to students” (Gau et al., 2006, p. 287). This

puts pressure on children to self-administer their medication, and furthermore stigmatizes them in front of their peers while in the classroom. These reasons, alongside the symptom of forgetfulness of ADHD patients, lead to often missed or skipped MPH doses. The discontinued treatment or irregularly administered treatment can further cause great stress in the household and family and furthermore, leaves the symptoms of ADHD to take toll over the child's performance and behavior.

The economic state of different geographic regions and the discrepancy in availability of properly trained medical practitioners in rural and urban areas not only play a role in the diagnosing rate of ADHD, but also further influence the treatment methods used by physicians. While it is uncertain if the MPH treatments could be a culturally acceptable remedy for ADHD in Chinese societies, the decided method of treatment may correlate with the geographic location or the type of medical practitioner who is treating the child. Lien et al., (2014) looked at the different methods of treatment and the duration of treatment after the ADHD diagnosis has been issued to families in Taiwan: "Predictors of treatment termination differed by treatment mode; by and large, the roles of health care providers appeared more salient than that of family socioeconomic status" (Lien et al., 2014, p.6). Most treatments were discontinued three to nine months after initial diagnosis and it seemed that only the children who had access to bigger, modern urban patient centers received the combination psychosocial therapy and MPH treatment. Many of the children in rural areas and the ones who could not afford or had no access to a pediatric psychiatrist were only seen by pediatricians and were only treated with psychosocial therapy. The discontinuation of treatment was directly related to the poverty level of the families. Most of the families who decided to stop the combination treatment were impoverished and could not afford the time away from work and the medical costs. The discrepancies of ADHD

treatment and diagnoses vary not only between the Western and Eastern cultures but also within the regional demographics of these cultures. While the globalization of ADHD has managed to increase the awareness about the disease, few regional adjustments have been made to address the different needs of families within urban, higher income populations and the rural, lower income group. ADHD is experienced differently not only by the East Asian cultures as a whole, but also within the different socioeconomic groups of one society. These remarkable class differences affect every aspect of the disease: the diagnosing process, treatment, attitude, and accommodations to the affected students. With these noted differences within East Asian societies it is imperative that cultural and regional differences are addressed accordingly, in order to reduce stigma at schools and communities, especially in the rural areas of the region.

VI. Conclusion

The definition of "appropriate" childhood behavior has been shown to be malleable and fluid across different cultures. While the current Western view of "childhood" focuses on the child's autonomy and personal freedom, the traditional views of the Chinese culture look for respect, obedience, personal self-restraint and preservation of harmony within the household. Nevertheless, the westernization of Eastern cultures has allowed for the further shift of parenting and societal attitudes towards the current Western views on appropriate childhood behavior and expectations. The changing view of childhood across the globe has influenced the view on the role of a parent in his/her child's education: Chinese parents have removed the focus from the household familial education (jiao) and have concentrated their efforts on teaching the importance of classroom academics. These views and the different involvement of parents and teachers in the child's life, as well as the socioeconomic level of different populations within a nation, have made room for the different perceptions of ADHD diagnosis, and the conflict in

treatment methods of ADHD between different geographic areas. The differences in availability of medical help between rural and urban areas have created a discrepancy between the treatments and the diagnosis prevalence in different populations depending on their socioeconomic status. Furthermore, the lack of proper training of teachers in ADHD recognition and sometimes the culturally stigmatizing opinions on psychiatric medical treatment lead to non-compliance with medicine administration and discontinuation in MPH doses to children, who need the drug. These discrepancies in cultural perceptions of the ADHD treatment and diagnoses reflect differences between Chinese and Western cultures. Overall, the views and experiences of childhood ADHD, while influenced by the West, have remained dramatically different across cultural borders. The attempts at normalization of diagnoses and rating scales have shown to reflect these factors and have further demonstrated the subjective aspect in ADHD recognition. The childhood experiences and, therefore, childhood misdemeanor are culturally influenced phenomena, which thus far have not been recognized as such by the ADHD diagnosing and therapy treatment process. Furthermore, the different experiences of ADHD and the diagnoses, treatment, and even social perceptions vary depending on the regional economic needs and the geographic income distribution of East Asian countries. The same symptoms and diagnoses would be experienced differently between children in rural regions and urban areas. This lack of uniform medical procedures only drives the need for proper accommodations for ADHD students at school and demands proper, economically-sensitive methods of treatment and therapy that would respect the needs of low income families, without burdening these households with further stigma.

CHAPTER 3: THE EFFECTS OF CULTURE ON FAMILIAL MANAGEMENT STYLES OF ADHD

I. Introduction

Despite the long history of ADHD, the cause of the disease has still not been attributed to either biological or environmental factors. The extensive research on the biochemical brain balance of children with the ADHD diagnosis has not yet yielded conclusive results (Furman, 2009, p. 23). Environmental factors, such as parenting styles and familial relationships, socioeconomic status, domestic violence, even nutrition and diet have also been considered plausible factors, that could be potentially related to ADHD (Timimi, 2009, p. 136). Before ADHD became a credible medical diagnosis, it was not uncommon to blame the parents for the wrongful acts of their children: their misbehavior was often attributed to poor discipline at home and inadequate parenting (Carpenter-Song, 2009, p. 68). The discovery of a "new" medical condition shifted the "blame" of parental responsibility towards parental feelings of helplessness, in light of the fact that even well-raised children could be burdened with ADHD symptoms. While the current psychiatric community does not attribute ADHD to factors in upbringing, parents sometimes feel personally guilty about their son or daughter's condition. This self-blame for the conflictual child behavior often results in the added stress and strain to the familial environment: "Families of children and adolescents with ADHD are at an increased risk for interpersonal conflict, separation, and divorce, decreased parenting self-esteem, higher levels of depression, and a heightened sense of social isolation" (Kendall & Shelton, 2003, p. 259). These behavioral ancillary effects of ADHD on the family members are especially expressed in the mothers, probably due to the greater number of women as the primary care givers. With these family-wide influences of an ADHD diagnosis, families have been seeking new ways to manage the stress that comes with the disease. Households adopt different management styles in attempts

to cope with ADHD, in order to achieve a functional familial dynamics while still addressing the needs of the child with behavioral disorder. The following chapter will attempt to explore the trends of family management styles (FMSs), causes and effects of the familial environment on the condition of ADHD children, and furthermore draw differences between the management in Western and Eastern cultures. I discuss the different FMSs and cultural views within the families in North America and East Asia. I start by describing the trajectory of FMSs as defined my Kendall and Shelton (2003). I then continue on by drawing the similarities between the different cultures while I reference the "trajectory" of affective and ineffective FMSs in both cultures (Kendall & Shelton, 2003). I discuss the adversity faced in low income or single parent households of ADHD children and in the lack of proper psychiatric help in East Asian rural regions in contrast to the more advanced urban regions. I discuss the roles of the parents in the management of ADHD and the need for proper parent psychiatric consultation, with the goal of encouraging proper disorder management, socialization and upbringing of the ADHD child. I conclude by discussing proper clinical and cultural accommodations for parents and ADHD patients globally in the familial, academic and social context. The factors of household environment, family interaction, and the parental management of ADHD diagnosis may show observable effects on children's behavioral disorders and bring clarity to the need for accommodation for ADHD patients, experiencing culturally specific boundaries beyond the school grounds. Through appropriate cultural psychiatric workshops and parent therapy sessions, addressing aspects of the East Asian culture, physicians and parents can nurture a more supportive environment for the ADHD child.

Before I dive into the explanation of the differences in familial management styles, it is important to understand how the different family management styles (FMSs) and household

environments affect the development of children's behavior. The undeniable effect of environmental factors on childhood behavior is present cross culturally, regardless of the differences in parental views and actions. The importance of the holistic environment for childhood development has been noted throughout research for years (Atzaba-Poria et al., 2004). The individual factors contributing to the environment of a child were once seen as isolated instances, which individually shape childhood upbringing. However, recently, these different factors have been shown to have cumulative effects on the management of behavior problems and the lives of children with cognitive disorders. In their 2004 study, Atzaba-Poria et al. look at and classify the environmental factors into three different categories that shape the behavioral development of a child and contribute to his or her overall behavioral upbringing: (1) the "exosystem" (e.g., parent marital status, socioeconomic status), (2) the microsystem (i.e. friendship relationships, parent-child relationships) and (3) the 'individual': the individual child's nature, reactions and choices (p. 707). These three environmental or personality factors have been seen to contribute to a cumulative effect on the behavioral and psychological development of children, according to the data in Atzaba-Poria's work. This cumulative effect of factors was seen across different cultures, regardless of the differences between ethnic minority (i.e. Indian immigrants) and majority (i.e. English) students: "None of the interactions between the different ecological level CRVs [cumulative risk variables] and ethnicity were significant, indicating that the patterns of statistical prediction of children's problem behavior from the CRVs did not differ for the two ethnic groups" (Atzaba-Poria et al., 2004, p. 714). The total *cumulative* effect on child behavior recognized as the combination of factors categorized in the exosystem, microsystem, and "individual's character", does not depend on the cultural differences between ethnic groups. While different factors are included in the cultural

environment, the harmful cumulative effects are not contingent on any single culture. It can be said that the cultural influences on parenting, while different, are not notably more harmful to ADHD children living in the same cultural context. The universally harmful factors seem to appear in every society; one culture is not notably worse at approaching ADHD than another. Atzaba-Poria et al. (2004) note the importance of the total accumulated risks from the environment and account for it when measuring the problem behavior of children: "This indicates that the level of cumulative risk, regardless of the specific type of risk, is an important element in accounting for problem behavior" (2004, p.714). If the overall level of cumulative risk factors, measured within a household, is high, that already leads to negative behavioral effects on developing children. When looking into the microsystem risks, the specific parenting methods and the relationship children form with their parents help shape an important factor in behavior development. The microsystem risk factors encompass the risks of inappropriate family management of behavioral problems and the effect of harsh or inappropriate parenting. This would suggest that if the family were further demonstrating unfit management of the ADHD symptoms, this would increase the cumulative risk of ADHD and further worsen child behavior. It is fair to assume that the negative cumulative risk factors from the parent approach to hyperactive behavior would show even greater effects on children diagnosed with ADHD. Furthermore, the parenting approach, and subsequent risk factors to ADHD-type behavior, would be different depending on the different cultural context of the disease. The different cultural perceptions of proper upbringing, as well as the culturally influenced management of ADHD, would also create different effects on the diagnosed children and their proper development. While no one culture is inherently better at approaching ADHD, certain culturally influenced behaviors and lack of disease understanding can affect the upbringing of ADHD children.

Overall, it is notable to explore the differences in the familial dynamics of different cultures, and, furthermore, how those cultural and familial differences affect the risk factors within a household, the FMSs, and the behavioral development of ADHD children.

II. North American Family Management Styles

ADHD has been an increasingly common phenomenon in North America and the Western world since the 1970s (Mayes & Rafalovich, 2007), however this familiarity with the disorder has not prepared all families for the challenges of having a child with ADHD. Each family expresses different methods in managing the difficulties of raising a child with impaired behavioral habits. Before I explore the different familial experiences seen in the West, it is important to recognize that even the experiences within one culture are not completely uniform, especially when observing the heterogeneous nature of the Western world. Different families see ADHD diagnoses differently and this reflects the management styles of the households and, furthermore, can be seen to reflect both the exosystem and microsystem factors, related to the behavioral development of children (Atzaba-Poria et al., 2004). These observations are commonly noticed among researchers in the field. In her 2009 article, Carpenter-Song looks at the familial turmoil of several households in USA. It seems like even within the Western world, the perception of the disease's cause and effects vary from family to family. In her study, Carpented-Song (2009) looked at the perception of ADHD within different populations of the United States and found that:

> …Euro-American families in the study voiced biomedical explanations and preferred to use a clinical lexicon of 'disorders,' 'conditions', and 'episodes' or specific diagnostic categories to describe behavioral and emotional problems. In contrast, African-American families overwhelmingly resisted anthologizing their children's experience, reflected in a more diffuse vocabulary of 'issues', 'challenges' and 'difficulties' to describe problematic behaviors and feelings (p. 79).

While examining the culture of the Western world with a grand overview, it is important to remember that even within one culture, there are degrees of difference especially in a population as diverse as North America. The families interviewed had very different views on the cause and legitimacy of ADHD. Many families look on ADHD as a challenge related to the environment, rather than a biological imbalance. In some cases ADHD was even seen as a form of social control: "At one point Toni recounted how she often must make trips to multiple pharmacies to fill Robbie's prescription because the pharmacies run out of the stimulant medication. When she complained a pharmacist told her it was because 'all the little black boys need their medication'" (Carpenter-Song, 2009, p. 80). In some instances, the medical and scientific trends in the world can further be influenced by the principles of social dilemmas and justice. Carpenter-Song (2009) found that the phenomenon of medicalization does not wholly explain the experiences of different families in North America: "despite the dominance of biochemical and neurological explanations for behavioral and emotional distress in contemporary U.S. culture… nonpathological interpretations have not been wholly eclipsed by broad trends toward biologization and medicalization" (p.61). Regardless of the prevalence of acceptance for ADHD as a neurobiological disorder, the Western world is not immune to diverse views on hyperactive behavior as a nonpathological behavior pattern, which is normal for young children. These views affect the family management styles and, furthermore, the treatment children receive, as well as the dynamics within the household.

Focusing on the clinically diagnosed children, whose parents accept the ADHD diagnosis, Kendall and Shelton (2003) have noticed different familial dynamics, adopted within the households, in order to accommodate the needs of their children. Family management styles (FMS) of Western families can vary from poor and ineffective to competent and knowledgeable

(Kendall & Shelton, 2003). Some families manage to integrate ADHD into the lifestyle of their family, while some households struggle with the symptoms of their children and with the long-term repercussions of the disease. In their 2003 paper reflecting their observations of families dealing with ADHD and the familial survey answers, collected post nurse's examination, Kendall and Shelton noted the three major categories of FMS, in which they placed the corresponding familial reactions to the disorder: "Although each family type was described as a set of separate characteristics, there was also evidence to suggest that the last three family types – ADHD-controlled families, surviving families, and reinvested families – could also be viewed as a trajectory" (p. 277). The classification of the FMS that Kendall and Shelton (2003) use is different than the classification used in research done by other groups. However, there is a similar use of a trajectory listing to describe the styles of management that families adopt when working with their children (Zhang et al., 2014). This classification of FMSs in a "trajectory", while not identical across cultures, draws parallels between the management of ADHD in families globally. The FMSs around the world influence the ability of children to cope with the diagnosis of ADHD and the functionality of the family unit. The different FMSs, while not definitively bound by categories, represent a trajectory, escalating from best to worst ways to approach ADHD within the household. While different cultures experience different cumulative factors contributing towards the FMSs for ADHD, categorizing FMSs in a step-wise format from least effective to most effective helps with the understanding of the parallels in ADHD management around the world. This common way of categorizing FMSs is important for the understanding of the components and limits of effective or ineffective management styles. While the categorization of FMSs can seem arbitrary, the ranking of different attitudes towards ADHD

or treatment of children illuminates the differences between the beneficial FMSs in comparison to the problematic ones.

The ranking of FMSs along the aforementioned trajectory is based on the functionality of families with ADHD children as they personally described their familial dynamics in the Kendall and Shelton work (2003). The following two categories of families with ADHD children were able to move beyond centralizing ADHD symptoms and rather "focused on other aspects of family life, such as emotional well-being, planning for the future, or seeking support" (Kendall & Shelton, 2003, p. 271). These families (Surviving family, Reinvested family) form the more progressive side of the described trajectory of FMSs. They are able to sustain the familial harmony and work towards resolution of the behavioral problems of their children, rather than utilize short-term conflict resolutions, such as threats and confrontation. These two family styles are seen in parents who generally manage to "move beyond guilt and anguish, able to let go of the 'anticipated normal child' and come to terms with their role of parenting a behaviorally disordered child" (Kendall & Shelton, 2003, p. 275). These families do not over-identify with their child but accept the diagnosis and work towards adapting to it, rather than trying to find a non-medical explanation behind the existing condition. These families are able to build a functional relationship within the family unit, as well as built a healthier environment with their ADHD child.

The Surviving and Reinvested FMSs relate to the effectiveness of the parental support ADHD children receive; the most important parental role arguably being the necessity of proper child socialization. The ADHD child experiences many difficulties while trying to socialize with other children and siblings similar in age, who do not struggle with the disorder's symptoms. Therefore, an ineffective FMS, such as the so-called "ADHD-controlled FMS", can be

detrimental to the upbringing and proper socialization of hyperactive children. In one study a mother notes the struggles her son has to go through during play time: "Now I see that he really doesn't play with them [other children] very well, he only wants to play with them if they play what he wants. If they don't play his games he gets mad…" (Kendall & Shelton, 2003, p. 272-73). The socialization of children with ADHD can become a long-term problem and can cause further familial turmoil. Furthermore, the greatest problem that many families experience comes from their lack of ability to accept and manage the ADHD condition appropriately. In the ADHD-controlled FMS, the families themselves are overwhelmed by the disorder and are unable to provide proper support for the affected child. Some parents attempt to defend their children at all costs and allow the ADHD symptoms to control the familial relationships, instead of attempting to focus on symptom control and resolution in order to achieve a long term goal: "…In these [ADHD-controlled] families mothers seemed to over-identify with the difficulties their sons were having and typically excused, minimized, or justified negative behaviors rather than confront them…underlying these parenting behaviors was a sense of powerlessness and hopelessness" (Kendall & Shelton, 2003, p. 266). The ADHD-controlled family gives in to the pressures that come with raising a child with a behavioral disorder. This kind of environment is not beneficial to the child's socialization and relationship building with his or her peers. It typically causes more conflicts between the parents and victim blaming of (more commonly) the mother. It also reinforces negative child behaviors and puts ADHD in a central place in the household.

There are many factors, which play a role in the proper management of ADHD symptoms and the FMSs within a household. While the support of families for their children with ADHD is essential for their effective upbringing, households, which face inherent adversity, have much

greater difficulty addressing the needs of ADHD children. Factors, such as income level and absence of one of the parents can lead to greater difficulty in ADHD treatment and management. Studies show that single-parent households "experience multiple adversity factors that impact their involvement in behavioral parent training[3], including higher rates of depression and stress, as well as less social support" (Chacko et al., 2009, p. 206). Single-parent households with ADHD children are correlated with greater childhood disobedience and rebellious acts (Stiefel, 1997). Furthermore, low income and domestic abuse are also correlated with greater severity of ADHD symptoms:

> Because ADHD is considered an environmentally dependent disorder, children with ADHD raised in these environments [financial problems, mental illness, domestic violence etc.] often have severe symptoms that, in turn, increase the stress and chaos in their families, increasing the severity of their symptoms even further (Kendall & Shelton, 2003, p. 264).

Logically, lack of a nurturing environment for children can lead to behavioral outbursts. The effects of adverse environments on the upbringing and the behavior of children are evident in every culture (i.e. Chen et al., 2014). While parents may try to support their ADHD child, the lack of accommodations in the environment, low income, and maybe lack of support from the second parent affect the stress level at home and consequently lead to a FMS in the ineffective side of the Kendall and Shelton's trajectory. The accumulation of these factors creates a more stressful environment for the child. The mentioned studies point to the fact that, regardless of the cultural differences in familial dynamics and FMS, the increased environmental pressure and

[3] Behavioral Parent Training (BPT) is a treatment method, established to help parents understand and approach the behavioral outbursts of their ADHD children in a constructive way (van den Hoofdakker et al., 2007). Unlike the system of family management styles (FMSs), which is internally developed within the household without professional help, BPT is a behavioral treatment method developed with the help of professionals, who work alongside parents to help the upbringing of ADHD children (Chacko et al., 2009). BPT, like behavioral therapies for ADHD children, has shown to positively influences the behavioral patterns of ADHD children and help parents effectively partake in the treatment of their children.

adversity the family faces affect the behavioral state of children and can worsen their disorder across cultural barriers.

The effect of the lack of proper environment management within maladaptive families on the development of ADHD children is best seen in the single example of "The Chaotic FMS" (Kendall & Shelton, 2003). This particular family style is exceptional and uniquely hazardous for the ADHD child and surrounding family: "the chaotic family is viewed separately [from the FMS trajectory] and based on a set of extreme circumstances and family problems different from the other three types of FMS" (Kendall & Shelton, 2003, p. 277). This FMS is not prevalent, yet it is representative of a portion of the recruitment sample in the study: "The parenting strategies used by this mother [in the chaotic family] ranged from laissez-faire to maladaptive, including the use of corporal punishment" (p. 264). This particular family description serves as an example for instances in the Western world where, despite the common exposure to ADHD-related information, families still struggle to cope with the diagnosis. As mentioned above, adversity in the environment (i.e. socioeconomic struggles, lack of parental support ect.) of the family leads to more difficulties in managing the ADHD disorder, regardless of cultural understandings. The exosystem of the family drives the resolutions used by the parents in the chaotic family style. The lack of financial and social resources leads to the increased stress and difficulties in managing ADHD symptoms. This could explain the increased severity of ADHD symptoms expressed in children in those circumstances and, furthermore, explain the increased numbers of ADHD children in low-income families and in social services:

> "Because the external environment influences the severity of ADHD, when there is extreme stress and disorganization in the family, ADHD symptoms will be more pronounced, and these children are referred into the health, social service…This is one hypothesis for why there are disproportionate number of children diagnosed with ADHD from lower socioeconomic and socially disadvantaged groups" (Kendall &Shelton, 2003, p. 265).

The methods used by the families when handling the child's behavior are further influenced by the exosystem and express cumulative effects on the behavioral trends of children. The greater adversities a child experiences add up to a greater cumulative effect (from both the exosystem and microsystem) and that results in a less effective FMS.

The FMSs, as described by Kendall and Shelton, have been reinterpreted by other researchers (i.e. Zhang et al., 2014), and furthermore can be recognized cross culturally, as seen in section III. These FMSs, while studied in detail in North America, have found analogues with similar characteristics in East Asian cultures. The cultural factors that distinguish households globally further have formed the differences in FMSs in East Asia. Nevertheless, while not fully identical, the classification of FMSs in East Asia have somehow adapted similarly to the same stress factors and concerns as these of families in the West. The cultural differences have been an active factor influencing the upbringing methods and parental attitudes towards their children. With that, the differences in family management between Chinese cultures and the West are worth detailing and exploring in order to discuss possible cultural adaptation of ADHD therapy and treatment in order to address the needs of culturally Chinese families.

III. Chinese Cultural Influences on Family Management Styles

Cultural differences between the Western and Eastern cultures are expected when considering the upbringing and relations of parents to their children. Furthermore, the family management styles (FMSs) in Chinese households have been heavily influenced by the cultural beliefs and values. While every family differs in their personal situation (see Carpenter-Song, 2009), there are some aspects, which seem to be globally similar between the East and the West. In their 2014 paper, Zhang et al., look into the management styles of 387 primary caregivers of

Chinese speaking households with ADHD diagnosed children. The vast majority of the households were experiencing troubles with the management of the disease symptoms and child rearing. Nevertheless, while not prevalent in the studied sample, a portion of the primary caregivers showed "competent" management style: "Parents in this cluster placed more emphasis on the effort of managing the child's condition and had more concern regarding their child's condition; they could manage the situation" (Zhang et al., 2014, p. 45). The competent management style also correlated to the geographic region of the surveyed families with those in urban settings much more likely to display this style. Previously discussed aspects, such as understanding of the disorder, accessible treatment, and accommodated management of ADHD, seem to correlate to the urban geographic areas in East Asian countries as well (see Ch. 2). The access to a well-informed health care system and the exposure to an ADHD diagnosis in urban settings allows for different family attitudes and treatments in those regions. Furthermore, the congregation of more professionally educated individuals in urban areas can also play a role in the acceptance and understanding of ADHD diagnoses and, therefore, a better response to the needs of children with ADHD. Higher education level and greater exposure to diverse individuals and understandings within the cities can contribute to the greater rates of competent ADHD management styles in the urban areas of China.

Another aspect affecting the FMSs of East Asian families relates to the cultural views on mental illness. The shame and stigma many Chinese parents and children experience from a mental health diagnosis has affected the family management styles and the dynamic of the household. In traditionally Chinese societies, the children's responsibility to reach academic achievements, to remain obedient, and to sustain harmony in the household and classroom are also directly linked to the family's management and parenting. Furthermore, Chinese patriarchal

society places the primary responsibility of child rearing on the mother; women in the family are often either directly or subliminally blamed for the behavioral condition of their children (Ma & Lai, 2014). In several studies, mothers, acting as the primary care giver of the household "report anxious/depressive symptoms, to have less affectionate and probably more controlling/overprotective parenting styles, to perceive less family support from their family, and to report that their children interacted less with them and the fathers and had more severe behavioral problems at home" (Shur-Fen Gau, 2007, p. 692). ADHD symptoms are often attributed to lack of proper parenting in Chinese cultures and parents of ADHD children are often blamed. Guilt and parental blame are much more prominent in East Asian cultures due to the increased attribution for the child's behavioral habits on the mother. The shame and guilt parents may feel when faced with an ADHD diagnosis can correspond to the frustration and anxiety mothers experience. Furthermore, this stress is exacerbated by the lack of treatment or prematurely discontinued treatment for ADHD in these environments (see Ch. 2: Gau et al., 2006). The anxiety and stress from guilt in the family further affects the FMS negatively and contribute to the cumulative risk factors that affect the behavior of children.

The stigma, anxiety, and stress in the house further hurt the relationship that parents build with their children. Many essential pillars of the Chinese culture can be affected by ADHD symptoms and could result in the disruption of functional familial dynamics. The Chinese culture, which values harmony, collaboration, and compliance, can be resistant to recognizing ADHD symptoms as such and this can unfortunately contribute to the distance between ADHD patients and their families:

> Chinese parents, on the other hand, may view ADHD symptoms as particularly unacceptable and disturbing provided the higher expectation for self-regulation and compliance. Therefore, it is conceivable that in the Chinese culture, these disruptive behaviors in children with symptoms of ADHD may compromise the

> quality or parent-child interactions and relationships. In other words, the parent-child interaction in the Chinese families of children with ADHD may be characterized by more conflicts, higher tension and less warmth (Tseng et al., 2011, p. 138)

The ADHD diagnosis can place heavy burdens upon the Chinese household dynamics just as it does in the Western family. Nevertheless, the overall effect of the ADHD behavior on the household is somewhat different. With the cultural differences between the household ideals come the different perception of ADHD and its symptoms. Regardless of exposure and scientific knowledge of the disease, many cultural implications remain a factor in the familial turmoil. The stigmatization, as well as the victim blaming many parents feel when raising a child with an ADHD diagnosis, translates to the experiences of lack of familial support from the extended family. The interaction between the parents and extended family members form an environment that is strongly influenced by the ADHD diagnosis and further reflects the cultural views of the societies. Mothers often report "low…family support as the most associated parental/family variables to distinguish children with ADHD from school controls" (Shur-Feng Gau, 2007, p. 692). A distinguishing attribute of ADHD-affected families in this study is the notable low familial support the mothers feel. The lack of familial support may lead to the narrowing of the close circle of relatives around the ADHD child. These changes work to affect the family structure in a way that ADHD families become smaller, more emotionally intense units, making these relationships deeper and reducing the child's opportunity to discover the skills of negotiating greater socialization, more commonly found in extended families. Without the support of the family as a unit, the pressure on the immediate family, especially on the mother, becomes extreme and parental symptoms of depression and sleep problems commonly occur in mothers of ADHD children (Shur-Feng Gau, 2007). The difficulty in socialization of ADHD children translates to the conflicts and negative interactions with siblings (Tseng et al., 2011).

Furthermore, as Chinese cultures further experience great stigma towards misbehavior and mental illness, alongside the lack of socialization due to lower rates of familial support, it is not surprising that many individuals feel anxious when faced with an ADHD diagnosis. From this follow the results of Tai et al. (2013) study, which found that "more cases of ADHD developed anxiety disorders than did matched controls with younger age onset and a shorter 'survival time'" (p. 660). The strains on the relationships between family members, which some households could experience, the anxiety of parents and children patients, and the feelings of familial abandonment all play important role in the FMSs Chinese families adopt and the cultural stigma experienced.

The family management styles in East Asian countries are further influenced by the socioeconomic status of the families and other external difficulties that the families encounter. These findings are in correlation with the data about Western households, facing social and economic difficulties. Similarly to the Kendall and Shelton work, Zhang et al. (2014) looked at the different FMSs seen in families in China, with a focus on families, which may face employment change. Three specific FMSs (uncertain management, management with difficulty, and struggling management clusters) were recognized to have the lowest scores in condition management ability of the ADHD symptoms (Zhang et al., 2014, p. 48-49). The issue of employment change often correlates to the issue of income changes. Therefore, it is natural to expect greater stress levels and difficulties in managing ADHD symptoms in families, which face shifts in the job placement and, therefore, greater adversities. The issue of income plays an important role in Chinese cultures, probably because of the economic inability to access proper health care, medication, and even additional academic help and tutoring for children, whose culture heavily praises academic success. The stress created in many families due to lack of

money is related to the short length or discontinuation of treatment for ADHD. Lower socioeconomic status is correlated with ineffective FMSs in ADHD families both in East Asia and in the USA (Kendall & Shelton, 2003). The noted classification of FMS in East Asian countries (uncertain management, management with difficulty, struggling management) (Zhang et al., 2014) mirrors the FMS trajectory described by Kendall and Shelton (2003). Furthermore, the factors of lack of understanding of ADHD and the income level of the affected families is important for both the Eastern and Western FMS. Yet, the cultural implications in East Asia play a role in the greater seen familial turmoil in families of ADHD diagnosed children. The stigma, blame, and cultural lack of acceptance for psychiatric conditions affect the familial relationship and dynamics differently than seen in the West. Nevertheless, economic, and further adverse conditions, factor in the FMSs of families in both cultures in a similar way.

Finally, it is notable to mention that East Asian views on psychiatric disorders, self-composure, and, furthermore, behavioral standards are not restricted to the geographical region of East Asia only. This cultural phenomenon has been seen in areas of North America, where East Asian cultural habits have managed to survive within immigrant families. These East Asian cultural differences strongly influence the habits formed by the children and the familial understanding and approach to mental illness. For example, Chinese parents in North America can be seen experiencing psychiatric disturbances, such as ADHD, differently than the popularly accepted Western medical diagnosis. In previous years it has been seen that Asian Americans, especially some from more traditional households, do not seek psychological help as often: "Furthermore, cultural values about child-rearing may also deter parents from seeking child mental health treatment …Observers of Chinese culture have claimed that a long history of stigmatization of mental illness existed in China prior to 1949 and continues to present-day

Taiwan" (Lau & Takeuchi, 2001, p. 679). Lau and Takeuchi's work goes to show that the perception of behavioral imbalances in Chinese culture is different than that of the West with a direct correlation to the "traditional value orientation": "perceived severity of the problem was the major predictor of help-seeking intentions…another direct determinant…was the degree of shame and stigma aroused by the child behavioral problem" (2001, p. 689). This data is further supported by a countrywide survey of China, seeking to determine the longevity and rates of psychiatric treatment in comparison to the predicted rates of psychiatric and behavioral disorders in the country (Phillips et al., 2009). The results mirror Lau and Takeuchi's work. The treatment and diagnosis rates are significantly lower than the predicted rates of disorders in the society. The data reflects the importance of societal perception and the stigmatization shown in Chinese cultures away from the West and further underlines the importance of perception of ADHD outside of the Western world. Since many parents may face great embarrassment from an ADHD diagnosis, many parents might refuse to bring their child to the doctor. With this lack of diagnosis of ADHD, the child misbehavior could persist forever and with that the dynamic of the household could change dramatically.

IV. Conclusion

Overall, the cultural differences between the West and East have manifested in the Chinese views on psychological disabilities and the stigmatization of mentally ill patients. The shame and misunderstanding of cognitive disorders expressed towards ADHD children are due to the Chinese cultural view on the importance of child compliance to their parents' orders and the cultural importance of proper motherhood and childhood upbringing. These views often stigmatize not only the mother and her role as the sole caregiver of the family, but also can inadvertently cause more stress and anxiety to the children. The increased misunderstanding for

ADHD diagnoses is commonly reflected in victim stigmatization and parental blame of the mother as the primary care giver. Many mothers report decreased familial support and consequently poorer child socialization of the ADHD child. These factors are not noted with the same severity in North America and are not recognized to contribute to the FMSs in the West. Socialization of children in Chinese cultures can be a struggle. Depending on the socioeconomic status of the family and the perceived lack of support from the extended family, many parents can exhibit more problematic FMSs and not address the needs of their children appropriately. Adversities in the exosystem, such as socioeconomic struggles, lack of support of one of the parents, and house abuse, are shown to affect the ADHD children negatively cross culturally. While the "trajectory" of FMSs, described by Kendall and Shelton (2003), is noted in both cultures, the factors, affecting the FMSs across East Asia are different from the ones exemplified in North America. Cultural stigma for mental illness and lack of geographical uniformity in medical care affect the treatment length of ADHD and consequentially the effective parental influence on the ADHD child's upbringing. The lack if proper education in rural areas about the cause and diagnosis of ADHD and the different priorities in the households (i.e. the need and demand for child help in the agricultural harvests) furthermore lead to shorter treatment times and less sympathy for the ADHD families. Furthermore, better education about ADHD and greater ability to provide medical care (i.e. higher economic status) lead to more effective FMS in both cultures. The lack of conclusive research on the biological factors of ADHD and, furthermore, the disobedient nature of patients with the disorder leads to patient blaming and feelings of guilt, as well as parental lack of patience in East Asian cultures. The Chinese culture regards the ADHD diagnosis differently, and with that it creates a different environment for the treatment of ADHD children. These cultural differences demand better culturally sensitive

accommodations (i.e. parent-doctor workshops, after school programs, ADHD specialist consultations), which address the needs of the Chinese families appropriately.

CONCLUSION

The contemporary Western world is infatuated with an increased notion of academic achievement, and furthermore, with exceptional classroom performance of children. As the globalization of Western views and lifestyle continue, more societies regard "academic performance" in the sense of Western grade earning as essential child responsibility and a desirable aspect of "appropriate" child behavior. This contemporary cultural shift in expectations from children all around the world has encouraged cultures outside of the West to assimilate to the lifestyle of Western countries. Furthermore, with the effects of the Internet, the media, and other methods of globalization, it is difficult to isolate one society from another. With the adaptation of universal academic standards and the increased awareness of medical symptoms, the clinical and medical criteria for diagnoses worldwide have experienced westernization, yet have remained insensitive towards cultural differences. Since the first recognition of ADHD in the 1970s, the diagnosis has now expanded and different nationalities and cultures face comparable rates to those seen in the USA and the UK (Faraone et al., 2009). Furthermore, the expanding market of pharmaceutical drugs, such as MPH for the treatment of ADHD, and multiple support groups encouraging self-diagnosis and identification with the disorder have encouraged the awareness of ADHD and have created a method of diagnosing through "disease brokers" (e.g. parents and teachers) (Conrad & Bergey, 2014). This medicalization, however, has remained incomplete. While the pharmaceutical industry has provided MPH drugs as the pharmaceutical standard practice for ADHD treatment, no cultural adaptations have been offered for the successful understanding and behavioral therapy treatment for ADHD as mental illness.

East Asian societies have greatly remained unaccommodated towards the needs of parents and children with ADHD. Modern day East and West cultures, while quickly becoming more integrated and interconnected, still carry heavy cultural differences, which thus far have not been discussed from a point of view of psychiatry. Through the analysis at hand, I have tried to look at one instance of a cultural clash over the diagnosis of ADHD, which has extended over the medical, social, and academic field. The phenomenon of ADHD has reached a global scale and yet many of the cultural differences that factor into this clinical condition worldwide—its diagnosis and treatment –have been overlooked. For example, in East Asia the Confucian tradition still influences the expectations and views on childhood behavior, academic achievement, and even medical treatment. In a sense, the East Asian perception of "appropriate" childhood behavior is culturally founded.

As the definition of "appropriate" behavior in the West has changed during the years (Timimi, 2005), so have the criteria for the ADHD diagnosis. Yet, this malleability in diagnosing has not been taken into account when accommodating members of the East Asian cultures. With greater expectations for harmonious and self-controlled behavior of children, East Asian cultures create an environment conducive for an increased number of ADHD diagnoses upon failure to meet the high standard of child docility. Nevertheless, while the threshold for diagnosis within Chinese clinicians is lower (Mann et al., 1992), the lack of availability of appropriate educational instructions for East Asian societies, both in the academic and medical fields, often drives patients to discontinue treatment very quickly (Lien et al., 2014). This void in cultural accommodations to the clinical approach to ADHD affects the management of the medical condition. Furthermore, in a culture where continuous psychiatric medication is incredibly stigmatized (Phillips et al., 2009), it is to be expected that the risk factors and the FMSs within a

household environment would be differentiated based on the psychosocial factors of the culture (Atzaba-Poria et al., 2004). There is, thus far, no single culture shown to be better at managing the cumulative risk factors that come with ADHD. Nevertheless, there are certain aspects of cultural influence, which could contribute to the familial management styles and affect the ADHD children in a constructive or destructive way (Shur-Fen Gau, 2007). The differently effective FMSs (i.e. Managing families or Reinvested families) for handling ADHD exist in both East Asian and Western cultures, yet the factors, which add towards the parental treatment of the disorder, and the cultural accommodations, that the families are given, are very different. The stigma, seen in Chinese cultures, can drive parents to resent their ADHD child and can further affect the socialization or the relationships within the extended family (Tseng et al., 2011) and with that the level of anxiety and depression within family members (Tai et al., 2013). Furthermore, the regional differences in the adaptation of effective FMSs point to the fact that different areas of East Asian countries require different regional, alongside national, accommodations, enabling the destigmatization and proper treatment of ADHD. Urban areas seem to manage ADHD diagnoses much better than rural regions, due to differential quality of medical care, as well as different perception of behavior habits (Zhang et al., 2014). With that, greater countrywide uniformity in medical treatment availability and better therapeutic accommodations in rural areas can improve the condition of ADHD patients. The cultural influences and expectations for self-composed behavior in East Asian children affects FMSs and can further encourage treatment discontinuation and familial disconnect. Such great levels of stigmatization towards psychiatric conditions are ingrained in the Eastern culture, and yet they remain unrecognized within the clinical treatment of ADHD in East Asian cultures.

Overall, the failure to properly address the cultural specificities of ADHD within East Asian cultures has caused greater stress for families and discontinuation of treatment. While the ADHD phenomenon has entered the Eastern world, little therapeutic and academic accommodations have translated to the Chinese nations alongside the diagnosis and pharmaceutical prescriptions. While there are localized differences in the treatment and medical approach within each culture and nation (Phillips et al., 2009), it is important to remember that ADHD diagnostic criteria are based on observations and conclusions made in the Western world. The heterogeneous population in North America alone means that one can and does experience ADHD differently and the differences become even more severe if we look at a culture as different as the Confucian culture in the Chinese nations. While developing specific cultural diagnostic criteria would be challenging and would lack clarity and concreteness, social and academic accommodations can be developed specifically for the communities that need them. A trained nurse or a medical practitioner in the school can make a difference in the administration of the MPH medication and could reduce the stigma from self-administrating drugs at school. Furthermore, the academic accommodations with specialized programs and curriculum would help children with ADHD gain acceptance by their peers. A family consultation with a psychologist or a physician, trained in Western medicine can help the family realize the needs of their child and accept his/her behavior without placing further stress and stigma upon him/her. These simple suggestions could extend the cultural understanding for ADHD and could ease the social effects of Western medicalization of ADHD, which has been limited to the diagnosing process and pharmaceutical treatments without the proper incorporation of therapeutic and academic accommodations. These new adaptations to the ADHD globalization could

furthermore help the affected individuals receive understanding and closure in regard to their behavioral condition.

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