

Agitated/inattentive children: explanatory models¹

Crianças agitadas/desatentas: modelos de explicação²

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Abstract:

This article presents different approaches found in the literature regarding agitated and inattentive children in school. Two tendencies can be identified: one aims on biological aspects and the other on predominantly social aspects. In the first approach, agitation and inattention are characterized as alterations based on the individual, with biological basis, and described as a symptom of Attention Deficit Hyperactivity Disorder (ADHD). In the second, the focus is shifted to the psychological, educational, social, historical and cultural context, and their influences on the process of human development. Concepts of normality and their social implications are discussed. A critical view is given to the increasing medicalization of the teaching-learning process and the transformation of collective problems into individual problems, in order to exempt institutions from their responsibilities. Inspired by the historical-cultural perspective, an integrative vision is proposed, encompassing school, family and society, expanding possibilities of planning and educational and social action.

Keywords: attention, education, elementary school, attention deficit disorder with hyperactivity

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Resumo:

Este artigo apresenta diferentes perspectivas teóricas que dizem respeito às crianças vistas como agitadas e desatentas na escola. Foram identificadas duas abordagens: uma predominantemente biológica e outra predominantemente social. Na primeira abordagem, a agitação e a desatenção são caracterizadas como alterações situadas no indivíduo, com base biológica, e descritas como sintomas do transtorno de déficit de atenção e hiperatividade (TDAH), uma doença mental. Na segunda abordagem, o foco é deslocado para o contexto psicológico, educacional, social, histórico e cultural, e suas influências sobre o processo de desenvolvimento humano. São discutidos conceitos de normalidade e suas implicações sociais. É apresentada uma visão crítica à crescente medicalização do processo de ensino-aprendizado e à transformação de problemas coletivos em problemas individuais, de modo a eximir as instituições de suas responsabilidades. Inspirada na perspectiva histórico-cultural, é proposta uma visão integradora, que abranja escola, família e sociedade, expandindo possibilidades de planejamento e atuação educacional e social.

Palavras-chave: *atenção, educação, ensino fundamental, transtorno do déficit de atenção com hiperatividade*

This article aims to present different approaches identified in the literature on the phenomenon of agitation and inattention of school-aged children. The interest on the theme is due to the increasing view of this phenomenon as a symptom of a disorder (Attention Deficit Hyperactivity Disorder - ADHD) and, as presented by Collares and Moysés (1996), the medicalization of the teaching-learning process.

The term “agitation” is understood in this text as describing a situation in which we can observe an increase in the level of activity (movement in global and/or fine level) of a student or group of students compared to other students or groups in the same age range in a certain context and in relation to a standard considered ideal. The term “inattention” is understood as describing an occasion in which we observe a reduction/lack of attention in educational situations, when this level of attention is considered smaller than the peers’ of the same age in a certain context or in relation to a standard considered ideal.

In the center, we can identify in the literature two tendencies to approach the theme: one of predominantly biological focus and the other predominantly social. In the first, the phenomenon of agitation/inattention has received, through time, different designations. According to Antony e Ribeiro (2008), the different names used reflect cultural, scientific, and theoretical differences towards the conceptions of the disorder. According to Santos and Vasconcelos's (2010) review the variations in naming and understanding ADHD can reflect the different research focuses in each period. In the systematization of nomenclature (Antony & Ribeiro, 2008; Santos & Vasconcelos, 2010), we observe a variety of names used to designate ADHD, as a minimal brain damage (1940s), hyperkinetic impulse disorder and hyperkinetic reaction of childhood (1960s), attention deficit disorder with or without hyperactivity (1970s), attention deficit disorder (1980s) and attention deficit disorder and hyperactivity (1990s). Despite the variations of terminology, in all terms there is a perspective of characterizations of individual alterations.

On the second approach, predominantly social, the focus is shifted to the psychological, educational, social, historic, and cultural contexts, which influence the developmental process. Some central aspects of these approaches will be presented in this work.

Agitation/inattention: predominantly biological approaches

Conception

The phenomenon of agitation/inattention has been frequently approached as a manifestation of a pathology and designated by psychiatry as ADHD. Currently, in most countries, according to Faraone, Sergeant, Gillberg and Biedermann (2003), it is used the definition of ADHD presented in the Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association (APA).

In this manual, ADHD is included in the disorders of neurodevelopment together with other psychiatric disorders as the autistic spectrum disorder, intellectual deficiency, specific learning and motor disorders. ADHD is defined as “an ongoing pattern of inattention and/or

hyperactivity-impulsivity that interferes with functioning or development.” (American Psychiatric Association [APA], 2014, p. 59³), as characterized by a list of symptoms of inattention and hyperactivity/impulsiveness

For a diagnosis the subject must present at least six symptoms of inattention and/or six symptoms of hyperactivity/impulsivity in the list. The symptoms of inattention include descriptors as: is easily distracted, has problems sustaining attention in tasks or play, frequently loses school supplies, does not seem to listen when spoken to directly (APA, 2014). The list of hyperactivity-impulsivity includes: fidget and squirm in their seats, leave their seats in situations when staying seated is expected, talk nonstop (APA, 2014).

The symptoms should occur before twelve-years of age and be present in at least two environments (for example, school and home), for at least six months. Besides this, the criterium for diagnosis establishes that there should be “clear evidences that the symptoms interfere in the social, academic, and professional activities or reduce their quality” (APA, 2014, p. 60).

Currently, in the designations of clinical area, ADHD is very present, emphasized as one of the characteristics that define psychomotor restlessness, inattention, and social and cognitive impulsivity. The diagnosis is clinic and should be done by an interdisciplinary team, based on criteria established in diagnostic manuals of international classification (Rohde, Barbosa, Tramontina, & Polanczyk, 2000). In DSM-5 (APA, 2014), ADHD is considered a neurodevelopment disorder, what characterizes its biological base.

We found in the literature many authors using the definition of ADHD proposed by DSM. However, some scholars explore even more this concept. To present the characteristics of the disorder, Benczik (2000), psychologist and psychotherapist, shows a definition in accordance to the DSM-IV. According to her, children with ADHD can also be considered immature and incompetent on social aptitudes, besides presenting a behavior “unequal, unpredictable, and non-reactive to the normal interventions of the teacher” (Benczik, 2000, p. 46).

³ Translator’s note: the pages of DSM in this article refer to the Brazilian Portuguese edition.

Barkley (2002), a Ph.D. in psychology and a professor of clinic psychiatry, considered a renowned specialist in ADHD, affirms that the disorder consists of three behavioral problems: having problems to focus attention, problems on controlling impulses, and excessive activity. Besides those three characteristics, cited by most of authors in the theme, Barkley (2002) also considers ADHD a “disorder of self-control, willpower, organization and guidance of behavior towards the future” (p. 77), therefore a difficulty on self-regulation.

ADHD causes/origin

Regarding the causes of ADHD, there is a lack of consensus in the literature. In the DSM-5 (APA, 2014) itself, in a part dedicated to risk factors and prognostics, we do not find a direct indication of causes, but several factors that trigger or can contribute to the disorder. They are: (i) personality: association of ADHD with lower levels of behavioral inhibition; (ii) environmental factors: explanations on the level of the organism physiology, as low birth weight, cigarette smoking, alcohol use, or drug use during pregnancy, exposure to neurotoxins, among others, as well as psychosocial explanations, as history of abuse, negligence, and change of foster houses; (iii) genetic and physiologic factors: it is suggested that the disorder is frequent in 1st degree relatives of those with the disorder. We can see the lack of evidence by the uncertainty shown by the manual when, for example, we can read that “the heritability of ADHD is substantial. While specific genes were correlated with the disorder, they are not necessary or enough causal factors” (APA, 2014, p. 62). Besides this, it is worth reminding that relatives share more environmental influences than those not related to each other. Therefore, possible genetic influences cannot be proved, only, a higher occurrence of behavioral phenomena in people with a closer degree of consanguinity; and (iv) path modifiers: a suggestion that some patterns of family interaction in Early Childhood could influence the path of ADHD. In all items, there is a perspective of a biological base (even if no factor is directly related to it) and that environmental and psychosocial factors can have some effect on the disorder. Thus, we notice a multitude of factors, little evidence and, consequently, an inconsistency on what is said about the etiology of ADHD.

Many authors highlight the difficulty to reach scientific evidences regarding the origin of ADHD due to the complexity of measuring the possible causes of the disorder. According to Barkley (2002), researches have been suggesting that ADHD is caused by brain disorders, mainly by abnormalities in brain development, which would be more related to heritability than environmental agents. Thus, Barkley (2002) considers that ADHD is a genetic/hereditary based disease.

Thomas Brown (2007), professor of Psychiatry in Yale University, affirms that “ADHD mainly results from genetic factors interacting with prenatal, perinatal, and postnatal experiences which, together, cause significant problems in the brain” (p. 205). The author describes the disorder as a set of cognitive difficulties that, in many cases, results from chemical problems in the brain, mainly a bad functioning of the systems that regulate executive functions – an issue present in the argument of many ADHD researchers, even if there is no consensus on the topic.

Condemarín, Gorostegui and Milicic (2006), the first two pedagogues and the third a psychologist, highlight the difficult in establishing a precise etiology of the disorder, whereas there are many hypotheses in the literature but without a consensus or which are not satisfactory. According to the authors, there are many causes considered etiologies for ADHD, as hereditary factors, consumption of refined sugar, food additives, psychosocial factors and neuroanatomic alterations. Despite the array of possible etiologies, and the fact that there are studies on these possibilities, the authors claim that it is not possible to define ADHD as caused by one of those causes separately. They affirm that, to do a diagnosis, it is necessary to have reports from parents and teachers, and a neurological evaluation, highlighting that this diagnosis is relatively difficult to be done, should use different tools, and be multidisciplinary. We must note that the many factors listed have different orders of magnitude but are related as factors of the same level (for example, “consumption of refined sugar”, “genetics” and “psychosocial factors”).

A conception of ADHD that includes priorities, regarding the causal and predisposing factors, have practical consequences. The clinical analysis and the criteria of classificatory systems used by the physician directly influence the diagnosis (positive or negative) of the disorder. Besides, if the physician has a more biological perspective, s/he will treat the child individually, considering only factors as “bad functioning of executive functions”. On the other

hand, if social and environmental factors are considered, changes in family structure, routine, and at school might be proposed as part of the treatment.

Implications

Regarding the conducts to be followed and the treatments for ADHD, we found in the literature an approach that emphasizes the individualized treatment, with the use of medication and the follow-up of various professionals. Some families and educational strategies were found.

Besides the issue of medication as treatment, Benczik (2000) emphasizes the importance of an integrated approach with a multidisciplinary team, interventions of psychotherapy and psychopedagogy, and parental and teachers' guidance. Besides this, the author presents some aspects that should be taken into account when choosing a school for a child with ADHD, such as: staff knowledge about the disorders, classes with 12 to 15 students, the position of the school on medication use (if it believes is beneficial or not), an openness in the school for professionals to follow-up the children, among others. The author still offers guidelines to parents and teachers on how to deal with these children and the interventions that can be made, for instance, to distinguish disobedience from incompetence/inability, to be optimistic and patient with the child.

In this same direction, Cooper and O'Reagan (2001), educators considered specialists in ADHD children, point that the intervention related to the disorder should be done by a multidisciplinary team with physicians and psychologists. The authors also agree with Benczik when considering medication a positive intervention strategy, which will favor the learning of adequate behaviors and increase the ability to concentrate, creating a "*window of opportunity* through which parents and teachers can begin to help the child develop strategies and habits for effective learning and self-regulation" (Cooper & O'Reagan, 2001, p. 35). Similarly to Benczik, the authors bring some basic principles on dealing with these children in the classroom, as: keeping a clear and precise communication, develop a positive relation with the student, establish places to study with minimal distractions, keeping a structured routine, use interventions to regulate behavior.

As done by Cooper and O'Reagan (2001), offering guidelines to teachers and parents, Barkley (2002) proposes 14 principles to deal with ADHD children to guide parents in raising their children. The author even suggests parents to keep a copy of this list somewhere visible to easily remind them of those principles. Among the guidelines are: provide immediate answers and results to children's actions, use incentives over punishments, use external motivations (as rewards), foresee problem-situations and plan actions to be taken, and practice forgiveness.

Brown (2007) suggests that most people with ADHD suffer a great deal during schooling. However, the educational issue appears very little in the book – when the author presents some behavioral interventions and adjustments to be done at school. Strongly connecting ADHD with the school environment, Brown (2007) affirms that “fortunately to many, the suffering with ADHD syndrome can be diminish when leaving school” (p. 208). It is worth mentioning that the adjustments proposed are punctual, and do not involve rethinking the pedagogical planning and school organization.

Despite finding different explanations to ADHD in these texts, there is a consensus regarding the treatments to be used. From the analysis of the phenomenon (agitation/inattention) as a biologically-based disorder, a neurological disorder, we found in the ADHD literature considerations that the “pharmacological support is on itself the most effective treatment, because it helps controlling hyperactivity and attention disorders” (Condemarin, Gorostegui, & Milicic, 2006, p. 123). Therefore, the use of pharmacological medications would be a way to cause changes in behavior, attention, personal relationships, learning, memory, and others.

We see the same position of biological base in the work of Thomas Brown (2007). In all his book the author repeats that the main problems of ADHD are essentially biochemical and that the use of medication is necessary. According to Brown, the medicated treatment is considered the most efficient for the disorder. Additional treatments, in his opinion, are only necessary for some people that have significant behavioral, emotional, and social problems, as they do not diminish the main problems that, according to him, have a biochemical origin.

Methylphenidate is the medicine usually prescribed to treat people with ADHD, commercialized in Brazil as *Ritalina* and *Ritalina LA* by the laboratory Novartis, and as *Concerta*

by the laboratory Janssen – all controlled medicine. Methylphenidate is a stimulant of the central nervous system, from the same branch as amphetamines, with the role of increasing concentration and ability, and reducing impulsive behaviors. As many other stimulants, Ritalina provokes mood swing and, according to the package insert, can cause physical and psychological dependence. When observing the insert of this medication (Novartis, 2017), we can see a great number of side effects from its use. Some reactions are considered common, as: decrease of appetite, nervousness, trouble to sleep, excessive emotional angst, drowsiness, vomits, stomachache, articulation pain, and others. Some of the side effects considered rare are: growth decline, abnormal hepatic function, hallucinations, and low count of red cells and platelets.

The use of *Ritalina* is rapidly growing in Brazil and worldwide. According to the news published in the Ministry of Health website, the country is the second biggest consumer of this medication in the world (Ximenes, 2015). According to the news published in the newspaper *O Estado de S. Paulo*, in the last 10 years there was a 775% increase in the use of *Ritalina* in Brazil (Cambricoli, 2014). In the United States, the numbers are even bigger. According to the Centers for Disease Control and Prevention (CDC) approximately 6.4 million children between 4 and 17 years old are diagnosed with ADHD in some moment of their lives (Schwarz & Cohen, 2013). This is the same as saying that approximately one in each five boys in high school or 11% of school-aged children received a medical diagnosis of ADHD.

Another aspect to be highlighted refers to the differences of occurrence in ADHD diagnosis in different countries, what has always been a target of questions and controversy. Aiming to evaluate if ADHD would be a sub product of North American culture and if there were differences in the occurrence of the disorder in different cultures, a study was done by Faraone and other researchers in the area of psychiatry (2003). The authors did a literature review of epidemiologic studies published between 1982 and 2001, related to the occurrence of ADHD in different countries. They analyzed 50 works found in the data base Medline (specialized in biomedical and life sciences), all done following the criteria of DSM, proposed by APA. Out of the 50 studies, 20 were done in the United States and 30 in other countries (such as Canada, China, Germany, Hong Kong, India, Netherlands, New Zealand, Spain,

Sweden, Taiwan, Australia, Brazil, Colombia, Iceland, and Ukraine). The researchers did not find studies on ADHD in African countries nor Eastern Europe.

The variability of occurrence in the studies is justified by the authors by biological and cultural differences, such as the definition of the disorder, criteria and methods of diagnostic, characteristics of the population in the sample, and terms used. According to the authors, “certain populations can have a smaller occurrence in the symptom of ADHD (ex: Iceland, Australia, Italy, and Sweden), but this cannot be concluded based on the available data” (Faraone et al., 2003, p. 110). It is interesting that, despite not been able to conclude something on the smaller occurrence in certain countries, the authors reach conclusions related to similar occurrences between the U.S. and other countries. Thus, even using researchers on 22 countries, with 60% of studies from one of them, and recognizing that the population studied is not representative of the world population, the data found is used as scientific evidence on the similarities of ADHD occurrence in the world.

This aspect, the differences of occurrence, is dealt in the DSM-5 as “diagnostic issues related to culture”. In this part of the manual, it is said that the occurrence difference can be related to methodological differences and diverse diagnostic practices, but also that there might be “cultural variations in terms of attitudes or interpretations on childhood behavior” (APA, 2014, p. 62). The United States is used as an example where the diagnostic rates among white populations tend to be higher than the ones found among the African American and Latin populations. Thus, we can see that in DSM-5 itself there is a discussion about social environment, when we see marks of cultural differences influencing the occurrence of the disorder, even within the same country.

Another research worth mentioning, led by a group of Brazilian researchers, also has an analysis of epidemiological studies on ADHD around the world, pointing that the world occurrence of the disorder is, on average, 5.29% (Polanczyk, Lima, Horta, Biederman, & Rohde, 2007). The research was done through the analysis of original publications in the last 27 years on the occurrence of ADHD, from which 303 were revised and 102 articles included in the study. It is important to say that, even though the authors affirm that the research involved studies from all continents, more than half of the analyzed publication (64 to be exact) were

conducted in North America and Europe. Besides this, the diagnosis criteria most frequently used in the publications were the ones from DSM-IV, that, according to the authors, are connected to higher occurrence of diagnosis than when other criteria are used, such as those of DSM-III and the International Statistical Classification of Diseases and Related Health Problems (ICD 10). Thus, it is contradictory that a study aiming to do a global average of ADHD occurrence is, mostly, based in articles published in certain countries, using predominantly a criterion of diagnosis. Besides proposing a global average of ADHD occurrence, it is possible to clearly infer that the authors guided their view so that the disorder is not seen as a social construct and that the significant variability around the world is seen as connected to methodological differences, not the geographical location or cultural relevance.

It is important to observe that, while there is an increase in the number of diagnosis and the use of ADHD medication in countries such as Brazil and the United States, in France the number of children diagnosed with this disorder is under 0,05%. Part of this difference is related to the way mental diseases are perceived in different countries and the criteria of diagnosis. In the United States, psychiatrists consider ADHD as a biological disorder, with biological causes, treating them with stimulants. In France, psychiatrists consider ADHD as a medical condition with psychosocial and situational causes, treating it from the problem in the social context in which the child is inserted, with family counseling and psychotherapy (Wedge, 2012). Besides this, the diagnostic criteria used in the U.S. come from the DSM, while in France another criterion is used, from the *Classification française des troubles mentaux de l'enfant et de l'adolescent* (CFTMEA- French Classification of mental problems in children and teenagers), as analyzed by Vallée (2009) – anthropologist and Ph.D. in Sociology by the University of California. According to this author, DSM encourages the observation of symptoms as manifestations of biological disorders, placing them in certain categories and administrating the treatment for the disease in question. On the other hand, CFTMEA encourages the observation of symptoms as manifestations of psychological processes, and the diagnosis is seen as part of the process, what means that, during the treatment, physicians gain a larger understanding about the patient and, often, change the diagnosis (Vallée, 2009).

Considering this difference of ADHD occurrence in different countries, it is important to discuss aspects that go beyond biological characteristics, observing the agitate/inattentive behavior from a social perspective.

Agitation/inattention: predominantly social approach

There are in the literature, studies and analysis that point to the role of different factors to understand the ways children act – among them agitation and inattention. Such studies consider that environmental, social, educational, and cultural factors are important in the process of human development and, consequently, on the aspects related to children's behavior. Thus, there is a criticism of a predominantly biological model, as it focusses only on one factor over many others.

Criticisms to the biological model

As seen, one of the ways to approach agitation and inattention is to frame it in a diagnosis of ADHD. However, there are criticisms of this excessively biological perspective. One of the clues for this critical analysis involves the data on the differences of occurrences of ADHD in different countries. Would these differences be connected to social and cultural issues? This debate on the interference of the social environment in the diagnostics was raised by two British psychiatrists, Sami Timimi and Eric Taylor (2003), in an article published in the *British Journal of Psychiatry*. The physicians approached the same issue from opposite perspectives, Timimi as the author with a critical psychiatric view and in favor of the social causality factor and Taylor a psychiatrist convicted of the biological factors as causing ADHD.

Taylor defends that there are physical differences in subjects with ADHD, as genetic variations and brain alterations, found in some studies with neuroimaging (Timimi & Taylor, 2003). According to him, mental health services are needed because severe hyperactivity is a risk factor for the development, affecting psychosocial adequacy, and can trigger a higher occurrence of accidents, conduct disorderliness, psychiatric problems during the teenage years, among

others. Taylor affirms that social factors probably influence the degree of hyperactivity seen as a problem and that “this interaction between the child and the expectations of the adult world are clinically important” (Timimi & Taylor, 2003, p. 9).

Because of this subjectivity when analyzing behaviors and differences in rigor in the criteria, Taylor affirms that there can be an excess or a lack of diagnostics in children that were not properly identified. However, the author emphasizes that ADHD is not a social construct and that social influence only refers to the identification or not of the disorder. It is interesting that, in Taylor’s final argumentation, the article editors highlight that “he and his department received commission to give lectures in educational meetings and scientific conferences sponsored by pharmaceutical companies” (Timimi & Taylor, 2003, p. 9).

Under a different perspective, Timimi affirms that there are no clinical tests for ADHD nor specific markers of cognitive, metabolic, or neurologic order (Timimi & Taylor, 2003). The author also recognizes that the epidemiological studies indicate a great difference on the occurrence of the disorder and that, besides this, some neuroimaging studies were done with small samples with no control groups, leading to inconsistent results. Among other claim on the inconclusive results of certain researches, Timimi points that “in any study the brain was considered clinically abnormal” (Timimi & Taylor, 2003, p. 8). The author also debates about not having a specific treatment for the disorder, the disorientation of researches on its causes, and the great profit of the pharmaceutical industry with ADHD.

Timimi defends that a cultural perspective is needed to understand the factors that made ADHD reach such a proportion, such as the issue of unstructured families, the loss of parental moral authority, and school pressure (Timimi & Taylor, 2003). According to the author, from a biological point of view, children are immature as they are still under development; however, the way this immaturity is seen and the meaning given to it come from the culture and the social environment they are inserted.

Thus, we can see that, even on the opposite opinions of physicians – as seen in Taylor and Timimi (2003) –, the social factor is present in the debate on ADHD, even regarding the excess of diagnostics. Based on this debate, it is clear that the social factor cannot be ignored,

be it as a key part on the emergence of the disorder, or as an element that influences its identification.

Also, according to Timimi (Timimi & Taylor, 2003), ADHD medical model reflects a decontextualized and simplistic idea, that reinforces the social responsibility of parents, teachers, and physicians on raising well-behaved children. The author points that it is been created an unnecessary dependence on doctors, discouraging children and families to use their own abilities to solve problems” (Taylor & Timimi, 2003, p. 8). Besides this, to Caliman (2010), there is an attempt of ‘biologization’ and pathologization of moral, observed in ADHD history, with diagnostics that always strengthen the process of pathologization of subjects that do not fulfil societal expectations in which we live, be them morally, politically, or economically.

As mentioned before, the behaviors considered undesirable have increasingly been inserted in health area manuals and, therefore, an increase on diagnostics and pathologies. According to Caponi (2007), doctor in Philosophy and professor at *Universidade Federal de Santa Catarina* (UFSC), “the medicalization of behaviors considered abnormal has extended to almost all domains of our existence” (p. 530). The author presents in her article a historical perspective on the changes in diagnostic criteria in psychiatry since the middle of the 19th century, increasing the behaviors considered deviant. As a consequence of this enlargement, there is an increasing medicalization of misconducts that deviate from the current order. In this study (Caponi, 2007), she observed changes in the classification of deviation, with references between normality and anomaly, providing new intervention strategies and, therefore, increasing the illnesses related to behaviors.

Standardization/definition of normal

Regarding the behaviors considered deviant, we have to reflect that those are considered deviations in relation to a standard considered acceptable for a certain social or institutional segment. Those who present a deviant behavior are always been compared to others who have a behavior considered correct under a certain standard, socially established, that allows this classification, as suggested by different authors (Foucault, 2006; Patto, 1996; Velho, 2003).

Foucault, French philosopher, draws in his works several critical analyses of societal normalization models, from which we highlight those related to childhood normality and abnormality. In his course *Psychiatric Power*, transcribed and published as a book with the same name (Foucault, 2006), the philosopher debates on psychiatric practices, established as mechanisms of power and disciplining madness. We highlight here one of the chapters in the work “Class of January 16th, 1974” on the psychiatrization of childhood, in which the author brings considerations on the ways of psychiatric generalization, under the concept of children’s idiocy and the childhood as the place of origin of mental illness.

Based on psychiatric texts at the time, the author considers that, in the beginning of the 19th century, there was a process to distinguish madness to “idiocy” and “mental retardation”. The question of normalization appears when Foucault (2006) affirms that:

Thus, all these phenomena of mental debility – idiocy itself or retardation – will be situated in relation to two normative instances: the adult, as a terminal stage, the children as defining the average speed of development. (p. 264)

This way, idiocy and mental retardation are analyzed by the author as varieties of childhood, as different times and stages of development, and not as mental illnesses. Their treatment, according to Foucault (2006), should be the same as with any other child, imposing an educational model with certain variations, and pedagogy itself as a therapeutical tool. However, the author affirms that, despite this clear distinction established by theoreticians, idiots were still included in psychiatric spaces, in the 19th century, as a way to free parents to go to work (Foucault, 2006, p. 271).

Besides this, the creation of a new category, in the middle of the 19th century, called “mental alienation” started to encompass madness together with idiocy and imbecility, breaking with previous categories and placing all of them under psychiatric treatment, with the same process of hospitalization. In the author’s words, “the education of idiots and abnormal is psychiatric power in its pure state” (Foucault, 2006, p. 272). Hence, all that was considered different from the normal development should be under doctors’ care.

Foucault (2006) also affirms that “the disjunction between mad children and abnormal children seems to be one of the absolutely fundamental traces of the exercise of psychiatric power in the 19th century” (p. 281). The consequences arisen from that refer to the growing power that psychiatry takes over all deviations and anomalies of the development, and its connection to disciplinary regimes. Thus, we see that psychiatry widens its field of action in the 19th century, starting to care not only of the mad and sick adult, but also the children that did not follow the development considered normal. According to Foucault (2006), it was from the child, which he calls “not mad”, that there was the psychiatrization of childhood and the creation of a generalization of the psychiatric power. The consequence of this process is daily lived by children in medical treatment due to their “abnormalities”, mainly regarding those perceived in the school environment.

The standardization of society has been debated from different points of view and it is relevant to approach it anthropologically. According to Gilberto Velho (2003), Brazilian anthropologist and author of several books in the area, the individuals considered deviant have been seen under a medical perspective, as if their “abnormality” in the way of being and acting was a symptom of illness and unbalance. This concept that people out of the “standard” and in disagreement with the norm should suffer from some kind of problem deserves attention and raises questions in what is considered a “normal behavior”. In this dichotomy normal *versus* abnormal, the “normal” behavior would be the one that follows the socially established rules, does not cause conflicts and conforms to the maintenance of the order. In contrast, the “abnormal” behavior would be the one that escapes from the norms, that does not follow the rules as the others, that disagrees and threatens the current order and that, consequently, needs to be corrected and controlled. The author affirms that the idea of deviation is carried by a negative and problematic connotation and that “in one way or another, implies the existence of an ‘average’ or ‘ideal’ behavior that would be expressed in harmony with the working demands of the social system” (Velho, 2003, p. 17).

As suggested by Velho (2003), the subject that does not adapt to the established rules and norms of society do not present a symptom of disease. This subject is inserted in society and his/her conformity to the established rules have the mark of the sociocultural environment

s/he is, which can vary. In other words, “he will not always be deviant. There are areas of behavior in which he will act as any other ‘normal’ citizen. But, in other areas he will diverge, with his behavior, from the dominant values” (Velho, 2003, p. 28). This way, those considered deviant have their behaviors invalidated by others, according to the place they are, with the society itself as an accomplice in the trial, in the establishment of rules and the consequent verdict of deviation.

Also, according to Velho (2003), this strict model of a society or culture is key to have a continuity of social life and, in this perspective, the members of this groups have very distinct limits in relation to the variety of behaviors. There is a variation of rules throughout time, within a certain culture and in its various institutions.

The issue of normalcy in the structure of school institutions is complex and one of the points which provokes this debate refers to the differences between children and the difficulties when grouping them into homogenous classes. In his work about school failure, Patto (1996) – a specialist in school psychology and professor at *Universidade de São Paulo* – also makes interesting observations on the emergence of normalcy classifications. According to a literature review done by the author, there was a great development in medical and biological sciences in the end of the 18th and in the 19th century, specially in psychiatry. In this period appear rigid classification on those considered “abnormal” and the areas of neurology, neurophysiology, and neuropsychiatry would focus on studies in laboratories attached to the mental hospitals. According to the author’s analysis, physicians were the first professionals that started to deal with cases of school learning difficulty. The creation of a new category for those “boneheaded”, or idiots, previously confused with crazy people, took the issue of abnormality from the hospitals to the school, as “ the children who did not follow the colleagues’ school learning came to be called school-abnormal children and the causes of their failures were pursued in some organic abnormality” (Patto, 1996, p. 41).

As previously discussed, the issue of normalcy is frequently presented in school institutions. The traditional school model, used in most Brazilian institutions, is highly normative and guided by internal rules, giving space for differences to emerge and disagreements with the pre-established rules. Thus, the terminology used in the beginning of

schooling, which designated children that did not follow the rules as “school abnormal children”, might have been altered in the 20th century, but the roots of the issue of measuring differences and searching a homogeneity is still current. According to Patto (1996),

The consideration of environmental influence on the personality development in the first years of life and the importance given to the affective-emotional dimension in determining behavior and deviations provoked a terminology change in the discourse of educational psychology: from abnormal, the child that presented adjustment or school learning problems started to be called *problem child*. (p. 43)

With the increase in the number of children considered as “problems” in schools, consequently, sent to specialists in the health area, diagnosed with mental illnesses, and the increasing medicalization of children, some researchers have defended a critical view about the possible excesses in diagnostics, highlighting the importance of distinguishing biological and social questions. Such authors affirm as the components are taken as pathologies lead children in school age to be submitted to treatments of this “problems” increasing the number of those with disorders and medication users. In this line of thought, children need clinical treatments for their academic problems, focusing only on the learning difficulties of the individual and removing from the school institution its role in the process.

From the moment that there is a distinction established, a suspicion of a disease and, consequently, a diagnosis, children and teenagers are referred towards a specialist. The practice of “referring” children that do not correspond to what is demanded in schools happens, according to Patto (1996), since the 1920s, when around the world there was an increase in the number of clinics specialized in diagnosing and treating children with learning problems and school mismatch.

Medicalization in contemporary society

Collares and Moysés (1996), professors, respectively PhDs in psychology and pediatrics, from *Universidade Estadual de Campinas*, also have a questioning perspective towards learning problems. According to the authors, schools have been searching explanations for children’s

failure in school and in the family, exempting the questioning of their roles and, often, searching biological causes of the ‘non-learning’ at school. According to them, the medicalization of the teaching-learning process takes place when there is a disconnection of “the axis of a political-pedagogical discussion for causes and solutions allegedly medical, therefore inaccessible to Education” (Collares & Moysés, 1996, p. 28). This displacement and consequent referral of students creates a demand for professionals to deal with this children and teenagers, as psychopedagogues, speech therapists, psychologists, psychiatrists, neuropsychiatrists, and physicians specialized in childhood disorders.

From the moment it is assumed that there are diseases to be remedied, the use of medication comes into question, often seen as a silver bullet. Medication becomes a determinant factor for the child seen as pathologically agitated and inattentive to sit down in class and focus on the activities, acting normally and decreasing their academic difficulties.

The use of medication by children, considered indiscriminate by some authors, led to a broad debate on the medicalization of education. Several people and groups in the areas of health, education, human rights, and the rights of children and teenagers in Brazil, created the Interinstitutional Work Group on Medicalization and released the *Forum Manifest on the Medicalization of Education and Society* during an international seminar in 2010 held in the country. According to this manifest, medicalization is understood as “the process that, artificially, transforms non-medical issues into medical problems” (Fórum sobre Medicalização da Educação e da Sociedade, 2010), converging topics of various orders (political, social, cultural, affective) into biological problems. Thus, the responsibility of the problems is centered in the individual, so that authorities, professionals, and governments are distanced from their responsibilities. In this line, medicalized culture distances men from themselves and from their context, as he starts to depend on the medical power. Behaviors start to be seen as symptoms of illnesses and collective problems become individual ones, so that the subject needs a treatment while institutions do not do their share in a broader discussion.

Charles Tesser (2006) – physician and professor at UFSC – presents in his article a discussion on what he calls a process of social medicalization. According to his analysis, from a criticism drawn by other authors about institutionalized medicine, social medicalization happens

when biomedicine starts to redefine experiences and human behaviors, turning them into medical problems. Thereby, medicine starts to focus itself in classifications and the malleable aspects of pain and other symptoms, aiming analgesia and the reduction of pain, having its judgment power recognized by society.

Thus, according to Tesser (2006), people lose their autonomy to face their evils and, therefore, depend on health services, the objective perspective of the physician, and medications to cure what cannot be cured subjectively. According to Tesser (2006), in this medicalized culture, people become incompetent and helpless, having to use the medical service, what is “foreign to the traditional or personal understanding of the sick person – sometimes almost residual – and disaggregating of the entangled relations of men and their disease, their environment, nature, himself, and those close to him” (p. 65).

In the case of children, the issue is even more delicate, as they are not the ones complaining about their problems, but the parents and teachers that consider their behaviors inadequate or deviant, as signs of biological disorders. Children’s anomaly is, however, treated by the physician without a broader perspective on their lives, family environment, everyday life and their particularities. Thus, we see that the process of social medicalization is inserted in the school environment.

An integrating view under the historical-cultural perspective

Several authors highlighted the importance of social factors in the formation of human beings. Vygotsky, a Byelorussian multidisciplinary researcher who lived in the beginning of the 19th century, had a significant influence in psychology and education. Among his many analyses, Vygotsky approaches the relationship between human beings and their physical and social environments and how external questions impact their development. The author proposes to study the concepts historically, to approach all their development processes, including phases and changes.

According to Vygotsky (2008), during development there are processes of biological order, which he calls “elementary” or “lower mental functions”, and those of sociocultural

origin, called “higher mental functions”. The lower mental functions (as reflex actions and automatic responses) are completely and directly determined by environmental stimulation, from perception; while higher functions (as perception, attention, abstraction, reflection) are marked by the presence of artificial stimuli that define behaviors, having a voluntary and intentional character. According to Vygotsky (2008), “the history of children’s behavior is born in the entanglement of these two lines” (p. 42), that is, it is through this dialectic process between men and culture in which the children are inserted that their behavior is developed and organized. Thus, the author argues on the importance of the milieu without denying its biological roots, affirming that both constitute human development and the determinants of behavior.

To the author, the development of higher functions is done through social processes, from interactions with mediating elements. The functions in children’s developments appear first in the social level, that is, among people, to latter appear in the individual level, within children. According to Vygotsky (2008), “all higher functions originate in the relationships between human individuals” (p. 58). Thus, we see that higher functions start from the relations between people and that, to be internalized, need mediation. Voluntary attention, as a higher mental process, needs mediations and social relations to be developed. We will see later more about this function which relates to one of the behaviors analyzed in this study: inattention.

To Vygotsky (2004), from a motor point of view, attention is connected to the adaptation movements of internal and external organs, as well as the suspension of all other movements that are disconnected to the activity to be done. Attention, in this perspective, can be understood as a system of preparatory reaction that place the body in the proper position and state for the activity to be done. As pointed by the author, the motor reactions of attention surpass the reactions of the perception organs, entering in the organism and altering its functioning. Initially attention is presented involuntarily (non-arbitrary), with unconditioned reactions that are manifested since the newborn’s first days of life, provoked by external stimuli. Through the development process, with a long and complex training, this is transformed into voluntary attention (arbitrary), with reflexes conditioned and subordinated to internal stimuli. In this Vygotsky’s (2004) analysis, attitude reactions are characterized by volume and durability,

playing the role of organizer, with an effort that is incessantly prolonged. Thus, voluntary attention is not something that is instantly manifested but an action that demands effort and works with rhythms of activation and rest, having a natural oscillation.

Regarding inattention, called distraction by Vygotsky (2004), the author presents two different aspects, from a psychological point of view. On one hand, he considers that distraction “can actually derive from weakness of attention, the inability to gather, to concentrate the attitude in one target” (Vygotsky, 2004, p. 157), on the other hand it is an element simultaneous and advantageous for attention, because been attentive to something presupposes a distraction from everything else. Therefore, distraction can be seen as something from the field of abnormal, when considered as a disrupting behavior, and as something normal, when seen as an everyday manifestation and a natural element of attention.

Still according to Vygotsky’s historic-cultural approach, attention would be an important object for the pedagogical practice, considering its great capacity of development and its potential to educate, introducing coordination, assimilation, and guidance, helping transform arbitrary attention. According to Vygotsky (2004),

Children’s attention is guided and focuses almost exclusively by interest, and that is why the natural cause of children’s distraction is always the lack of coincidence between the two lines in the pedagogical question: the interest itself and the occupations proposed as obligations (p. 162)

Thus, in the author’s approach, formal education should consider children’s natural inclinations, while, at the same time, interfering in them, within and organizational and normalizing process. Therefore, we can question if children’s inattention in school emerged due to a school environment of little interest with unmotivating and meaningless activities to the students or, in a broader sense, the structure and working of the school institution.

We saw that voluntary attention is not an innate function of children, something born with them, but a function developed from the social relationships established between people. Mediation, in this case, has a fundamental role to internalize this function. This way, attention and inattention can be influenced by the content and the quality of the mediation throughout learning.

Final remarks

On the literature that deals with the phenomenon of agitation/inattention with a predominantly biological approach, the diagnosis of ADHD, considered as a mental illness, is done from detecting a series of specific behaviors. It is a definition based on descriptions, not explanations. Its diagnosis and treatment are determined by physicians, with the collaboration of other professionals. The focus is on the individual, with the predominance of a medicated treatment. We observed that there is a tendency of valuing this predominantly biological approach for agitate and inattentive children, given the high consumption rate of methylphenidate in Brazil – a medication used for ADHD treatment.

On the other hand, on the literature that approaches agitation and inattention in a predominantly social perspective, the phenomenon involves a multitude of factors and, therefore, should be considered within this complexity. The criticism made throughout this work concerns those who consider the biological factor as a central component in explaining behaviors – or ways to act – seen as dissonant with the others.

We understand agitation and inattention as complex, multifactorial phenomena, with influences from the social and cultural environment, including, among those components, biological factors (interacting with the others). Considering this multiplicity of factors in agitation and inattention, we start to consider children in a broader perspective, allowing us to reflect on their context – school, family, society – in a wider debate, that expands the possibilities of educational and social planning and action.

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