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The Making of ADHD: A Comparative Content Analysis of Teachers' and Doctors' Worldviews

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Abstract: Little is known about how teachers and doctors make sense of ADHD. Drawing on a corpus of online accounts, we reconstructed their worldviews with a qualitative analysis. While both professional groups referred to a male troublemaker and to the German literary figure of the Fidgety Phil, they also expressed rival expert claims. Doctors represented the scientific authority in labeling and diagnosing ADHD, whereas teachers attached objective meaning to the medical judgement by pathologizing deviant behavior and justifying measures of control.

Keywords: ADHD, social construction, mental illness, mental health literacy, content analysis

Die Herstellung von ADHS: Eine vergleichende Inhaltsanalyse der Weltsicht von Lehrpersonen und medizinischen Fachpersonen

Zusammenfassung: Darüber, wie Lehrpersonen und medizinische Fachpersonen ADHS verstehen, ist wenig bekannt. Die Analyse von Online-Narrationen hat gezeigt, dass beide Berufsgruppen auf einen männlichen Unruhestifter und die literarische Figur des Zappelphilipps Bezug nahmen und rivalisierende Expertenansprüche äusserten. Medizinische Fachpersonen repräsentierten die Autorität bei der Etikettierung und Diagnosestellung, während Lehrpersonen dem medizinischen Urteil objektive Bedeutung beimassen, indem sie auffälliges Verhalten pathologisierten und damit die Anwendung pädagogischer Massnahmen begründeten.

Schlüsselwörter: ADHS, soziale Konstruktion, psychische Krankheit, psychische Gesundheitskompetenz, Inhaltsanalyses

La fabrication du TDAH : une analyse comparative du contenu des visions du monde des enseignants et des médecins

Résumé : On connaît mal la façon dont les enseignants et médecins comprennent le diagnostic du TDAH. À partir de témoignages en ligne, nous avons reconstitué leurs visions du monde. L'analyse qualitative montre que les deux groupes professionnels font référence à un perturbateur masculin et à la figure littéraire allemand de Philippe le Balanceur, sur fond d'une rivalité d'expertise. Les médecins s'attribuent l'autorité scientifique du diagnostic tandis que les enseignants attachent au jugement médical un sens objectif en pathologisant les comportements déviants et en justifiant des mesures de contrôle.

Mots-clés : ATDAH, construction sociale, santé mentale, littératie en santé mentale, analyse de contenu

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1 Introduction[1]

The number of children and adolescents diagnosed and treated with psychostimulants for ADHD (Attention deficit hyperactivity disorder) has grown rapidly over the past two decades, especially in the western world, making ADHD one of the most common used diagnostical labels given to school-aged children and young adults worldwide (Conrad and Bergey 2014; Prosser 2014). A comprehensive meta-review concluded that 5.3 % of all children and adolescents worldwide were diagnosed with ADHD (Polanczyk et al. 2007; Polanczyk et al. 2014). However, the number of diagnosed children is only one factor of concern, another one is the impact that the use of the label ADHD has on children's school and professional careers (Ohan et al. 2011; Hjörne and Säljö 2012; Ludici et al. 2014). ADHD has, for example, been associated with poor outcomes in the context of school performance (Rushton et al. 2019).

Over the past two decades, ADHD has been predominantly understood in medical terms. Due to this predominance as a medical condition, the diagnosis has primarily been shaped by the medical classification systems for diagnosis ICD (International Classification of Diseases) and even more the DSM (Diagnostic and Statistical Manual of Mental Disorders) (Singh 2002). With constant revisions of the diagnostic manuals, the terminology and the description of the disorder itself have gone through many changes including MCD (minimal cerebral dysfunction), learning disabilities, hyperkinetic reaction of childhood and ADD (Attention deficit disorder) with or without hyperactivity (World Health Organization 1994; Barkley 1997; American Psychiatric Association 2013). Today, ADHD is in principal categorized as a neurobiological disorder, developing in childhood or youth and categorized with symptom patterns of inattention and/or hyperactivity-impulsivity, applied when symptoms present prior to the age of 12 years rather than 7 years, and are present for 6 months in two or more different settings of the child's life, mostly in family and in school (American Psychiatric Association 2013; Levy 2014).

In practice this means, that the investigating medical professional will not only talk to the teacher involved but also will not be able to establish a diagnosis without taking the observations of the educational professionals or another third party into account.

Even though disturbances of behavior in the context of ADHD generally remain to be explained as a symptom of a partial "brain dysfunction" (National Institute for Health & Clinical Excellence 2009), the underlying neuro-anatomical and functional correlates have not been comprehensively understood (Curatolo et al. 2010).

While ADHD and it's pharmacological treatment have been focus of much debate and controversies, at least in Switzerland (Dupanloup 2004; Albermann 2016) and other European countries (Hansen and Hansen 2006), the discussion on

1 This research was supported by Stiftung Mercator Schweiz (2015–2018).

social conditions underlying the phenomenon was less prominent. Nevertheless, the social reality of the diagnosis has been part of the discussion on ADHD from the very beginning of the debate – alongside with medical and psychological concepts (Singh 2002; Smith 2014).

It is only in the last 10 to 20 years that research in social sciences has shown that the prevalence of ADHD diagnosis and treatment are influenced by a wide range of social factors, such as the school environment (Bailey 2010), family setting (Cormier 2012), gender aspects (Horton-Salway 2013), cultural constructions of masculinity (Singh 2003; Singh 2005), health and educational system factors (McDonald and Jalbert 2013), country specific political conditions (Malacrida 2004; Thomas et al. 2015) and the relative age of children in class (Layton et al. 2018; Whitley et al. 2019). Research in the United States has also shown that children living in upper-class neighborhoods were more likely to receive medication for ADHD than children from lower-class areas (Simoni 2019), and, that a higher socioeconomic status of parents was beneficial in order for children to profit from supporting measures (Owens 2020).

Today, despite the dominance of the prevailing neurobiological explanations, Karsch (2011) suggests that ADHD is shaped by Foucauldian "battles of meaning", so sociologically it is relevant that the phenomenon is subject to constant struggles of interpretation.

Our analysis can be understood in the line of this research: it understands ADHD as a phenomenon of a socially constructed reality (Berger and Luckmann 1966). However, in contrast to most of the social science research, this article, does not focus on the factors related to the characteristics of these children and the setting of the diagnosis in question, but rather on the social conditions underlying the making of the diagnosis itself.

It goes without saying, that both teachers and doctors are profoundly involved in the process of making a diagnosis: whereas teachers play a crucial role in identifying and referring children to further ADHD evaluation and testing (Snider et al. 2000; Sax and Kautz 2003), doctors represent the scientific authority responsible for the diagnosis itself.

While there is an overwhelming body of clinical literature considering the use, prevalence, and trends in the context of (medical) treatment of ADHD, fewer studies have been published in the social sciences (Prosser 2014). Whereas there has been a growing number of sociological studies on the perception and stigma of mental illness in general (Lincoln et al. 2017), only a handful of studies focused on specific perception on ADHD, many of which investigated parent's views, dilemmas, and barriers to treatment (Singh 2003; Singh 2005; Cormier 2012; Horton-Salway 2013; Matthys et al. 2014). Studies on teacher's perception, knowledge, and beliefs towards ADHD are sparse and mostly focusing on teacher's knowledge and misconceptions on ADHD, suggesting teachers to typically overidentify children with ADHD

(Havey et al. 2005; Fabiano et al. 2013) and lacking knowledge and awareness of ADHD children's conditions at school such as difficulties in concentrating (Kos et al. 2006; Canu and Mancil 2012). Similarly, research on doctors' attitudes and beliefs towards ADHD is sparse (Tatlow-Golden et al. 2016) and mostly focuses on their knowledge (Hirfanoğlu et al. 2008; Kwasman et al. 1995).

However, there is a general lack of systematic knowledge on the role of teachers' and doctors' understanding of ADHD in the process of establishing a diagnosis. The present article aims to fill this research gap by gaining knowledge on the professional attitudes or worldviews of these two professional groups in the context of establishing an ADHD diagnosis. In doing so, of understanding the nature this research also sheds light upon the nature of the relationship between the conflicting professional principles, in which the diagnosis is established.

2 Methods

This qualitative analysis draws on data from a transdisciplinary project[2] in the context of children with ADHD in Switzerland, that examines the importance of different settings such as school or family for day-to-day life situations and the well-being of ADHD diagnosed children aged 6 to 13. The present study analyzes the open answers in a standardized questionnaire with doctors and teachers to the question "How would you describe the word ADHD to someone, who has never heard of it?". Methodically, the narratives were analyzed by the means of a qualitative content analysis using Margrit Schreier's (2012) comparative approach.

Participants were recruited to participate of the survey of the aforementioned project. Two separate links to online questionnaires were sent out, one to 2300 pediatricians, with the help of a Swiss association for pediatrics and a large Cantonal Hospital in the German-speaking part of Switzerland, and one to 500 primary and secondary school teachers as well as 500 special educators, with the support of a Swiss teacher and special education association.

In total, 125 teachers and 81 doctors living in the German-speaking part of Switzerland participated in this study between 2017 and 2018. The overall response rate was low (7.3 %).

For the qualitative analysis, 177 accounts were considered since all teachers and 64 % of doctors (52 out of 81) answered the open question. Of those who answered the open question, 80 % (n = 100) of the teachers were female and 20 % (n = 25) male, aged 27 to 69 ($M = 52$). 50 % were special education teachers, 31 % primary school teachers and 19 % had other occupations (e. g. secondary school teacher). Most of the doctors (88 %, n = 46) were pediatricians or otherwise specialized in

2 The project webpage of the study can be accessed here: https://www.zhaw.ch/de/gesundheit/forschung/gesundheitswissenschaften/projekte/adhs-studie/ (01.11.2021).

the field of children and youth health (e. g. child psychiatrist), 42 % (n = 22) were female, 38 % (n = 20) male and 19 % (n = 10) did not specify their gender.

For the sake of undisturbed readability, the denomination of teachers and doctors as a homogenous group presents a simplification. The group of teachers mainly consisted of special needs educators, primary and secondary school teachers; the group of doctors was mainly composed of medical doctors, concretely pediatricians and other specialists in the field of children and youth health. However, it is possible that some subgroups (e. g. special needs educators) have more complex world visions (Mauger 2012) than others (e. g. primary school teachers) in this context.

The online questionnaires were administered to the participants with the survey program UNIPARK. The open question "How would you describe the word ADHD to someone, who has never heard of it?" was part of both surveys and participants were specifically told to freely answer this question, there being no wrong or right answer to the question, because we were rather interested in their personal opinion.

Specifically and prior to starting the online survey, participants agreed to an informed consent following the principles of the Declaration of Helsinki (World Medical Association 1999). Participants were also informed that all their data will be treated anonymously.

The overall study design was approved by a Swiss Ethics Committee on research involving humans.

The narratives to the open question were transferred to MAXQDA and analyzed by the means of a qualitative content analysis by Schreier (2012, 42), who suggests that descriptive research questions are often of a comparative nature: "what does one group of persons say about a given topic compared to another group?". This procedure is also applicable to the present research question, where the aim was to contrast teachers' and doctors' views on ADHD with the means of a qualitative content analysis by summarizing and describing key aspects of the data material (Schreier 2012, 38). In the initial data coding, inductive analysis was used, starting with reflexive immersion in the teachers and doctors' narratives and the crystallization of various topics emerging from the data. As a next step, a coding frame was built, where pre-defined codes were repeatedly revised, added, changed or expelled in the process of coding. This consistency check and constant adjustment of the coding phase especially in the beginning of the process is closely related to the "trial coding phase" (Schreier 2012). Later, the goal of the main coding process was to describe the meaning of the data material and to compare the codes cross-occupationally. In the main coding process, relevant parts of the narratives were indicated, further segmented and constantly compared between the two professional groups (Schreier 2012, 195 f). After a "trial coding phase" (203), the next step was to build up a three-step coding frame in order to "prepare the comparison of codes" (203). Finally, a three-step coding frame was built including main categories, sub-categories as well

as quotations serving as code definitions. The coding of the data material was done independently by two researchers and then discussed during all stages of coding.

A limitation of this analysis it that, due to the online setting, we did not have the possibility to ask follow-up questions. Furthermore, an open-ended question of an online questionnaire provides a very particular insight into the worldviews of teachers and physicians, whereas in-depth interviews or observations might have allowed more ingenious interpretations. On the other hand, opposite to face-to-face interviews or focus groups as a an important tool in qualitative research because of the "engagement and body presence" (Kolb 2012) of researcher and respondent, collecting our data online provided some major advantages. Firstly, recruiting participants through an online-setting served as a time-saving and pragmatic method. Secondly, participants were able to voice their thoughts and narratives freely, and, hierarchies, often produced in face-to-face interactions, might be partly dissolved (Gnambs and Batinic 2011).

3 Theoretical Framework

This article is framed around the theory of Bruce Cohens "Psychiatric Hegemony" (Cohen 2016), suggesting that prerogatives of neoliberal capitalism have allowed the discourse on mental health to "expand beyond the psychiatric institution" into many, previously untouched, areas of life, including, economic and political institutions and professional work fields. Far and foremost, the extension of psychiatric authority is understood through the interplay of power relations within structures of a neoliberal society, that can, for example, be seen in the pathologization and medicalization of life problems (Fletscher and Reynolds 1967; Conrad and Barker 2010), or, more concretely, in the medicalization of learning difficulties in schools and the introduction of pedagogical issues into the practices of medicine (Morel 2014; Cohen 2016). Especially in the context of a performance-driven or "achieving society" (McClelland 1961), children's conflicts, interactions, feelings or motion behavior in school must also be made comprehensible in the light of late capitalist developments (Dellwing and Harbusch 2019). So, in short, "psychiatric identities", as Foucault (1973) historically observed, are shaped by a discourse of medical authority.

Late capitalist structures have also reinforced social inequalities, to that effect that the dominant understanding of what is expected of us and the limits of our behavior are not only socially constructed but also defined by the dominant class (Cohen 2016). In this context, Bourdieu's expansion of Marx's concepts of the "economic capital" is important since he discusses the field of education in connection to social inequality. Social structures are then not only deposited in the "subtle differences of everyday life" but also internalized in people's habitus (Bourdieu and Boltanski

1976). Therefore, the reproduction of power relations in education is also formed through structural differences and practices in the "cultural field" (Bourdieu 1983).

4 Results

The open question was answered by all teachers, who participated in the study, and 64 % of doctors. While most of the teachers answered with long narratives and a more figurative language, doctor's narratives were shorter and more to the point. This difference in response rate and range might already indicates different attitudes of the two professional groups in regard to establishing a diagnosis.

4.1 Pathologizing deviance and justifying control

First, doctors and teachers reported, that when explaining ADHD to an outsider, they started their narratives by spelling out and elaborating the abbreviation (e. g.: "The abbreviation ADHD stands for attention deficit hyperactivity syndrome") before continuing their descriptions in their own typical professional terminology. Professionals of both groups assumed that ADHD typically refers to "special forms of attention" differing from a "normal behavior", even though participants hereby described very different phenomena such as "very active and restless behavior", "dreamy behavior" and "disobedience". The members of both professional groups qualified this behavior in the context of ADHD patients as pathological and thus potentially worthy of medical treatment, counseling, or other support. At the same time, teacher's narratives showed ambivalences in the context of dealing with affected children, statements varied from "treating the corresponding behavior with medication" to "using positive incentives in the classroom".

Second, a recurring theme in the accounts was the general difficulty in identifying children with ADHD. Despite expressing clear ideas about the diagnosis, both groups stated difficulties in identifying children with ADHD. Mostly, they attributed the difficulty in connection to a very "individual" manifestation of the symptoms, referring to characteristics of mental illnesses in general and emphasizing the importance of social aspects for affected children and their families in the context of an ADHD diagnosis. Doing so, even doctors, who are much more involved in the diagnosis itself than teachers, relativized the validity of the medical diagnosis, although not without mentioning the lack of information when it comes to social aspects of ADHD: "the environment and the milieu are shaping the evidence of the significance of the symptoms (…), for us it's hard to evaluate the daily life as well". To sum-up, both groups, but even doctors emphasize the significance of social and environmental conditions for the establishment of a diagnosis.

Third, a central point of reference was the figure of the Fidgety Phil (in German: Zappelphillipp), a main character from the popular tale of "The Struwwelpeter"

(1845). For example, one doctor said: "In the conventional sense, the expression Fidgety Phil would fit best to describe children with ADHD."

The "Struwwelpeter" was written by physician Heinrich Hoffmann (1844) to show his own son the consequences of human vices: Fidgety Phil is a boy who, in a very popular scene, continually evades fatherly discipline at the dinner table and, ultimately pulls down the whole tablecloth. References to Hoffmann's figure were visible in various accounts by doctors and teachers labeling a typical ADHD affected child as someone with a "fidgety" and "nervous" behavior.

The reference to the figure often went hand in hand with the idea that it is typically a boy with an impulsive behavior, who attracts attention and lacks self-control. Ultimately, extroverted behaviors such as hyperactivity and impulsivity were more prominent in the descriptions relative to introverted character traits such as inattention.

Even though neither teachers nor doctors explicitly excluded girls in their narrations, it is remarkable that in their characterization of ADHD children they mainly utilized masculine forms («Schüler», pupil; «Träumer»; dreamer) and never feminine ones («Schülerin», «Träumerin»). The typical ADHD child was depicted as a masculine troublemaker, disturbing others and interrupting teachers. It's a child that "can't sit still for long", is "troubled listening to what teacher says" and is "fidgety".

To sum this argument up: It seems as if doctors and teachers were referring to a male troublemaker in a general sense and to the Fidgety Phil in particular, in order to justify their measures to enforce compliant behavior. This does not only capture the phenomena of pathologizing deviance, but also links stereotypical (male) gender norms to extroverted behavior in the context of ADHD. In addition, teachers do not seem to apply disciplinary action without questioning its effects, they seem to be juggling between "disciplining" and "helping" and are also describing other solutions such as "rewarding" good behavior with "positive enforcements".

4.2 Rival expert claims

Doctors and teachers participating in the study both acted as experts. Members of both groups assumed that they possess specialist knowledge or at least a knowledge that is different from that of layman (e. g. parent). However, their expertise stems from different fields in society. Doctors considered ADHD as a medical issue and deployed numerous medical concepts such as "development disorder", "neurobiological development delay in the executive functions", "neurobiological disease", according to the international classification nomenclatures ICD and DSM, thus describing ADHD mainly as a medical issue in the framework of a *"neurodevelopmental disorder"*. In contrast, teachers used different descriptions of "learning difficulties", typically occurring in a school-based environment, characterizing children's behavior as problematic and obstructive.

It is noteworthy that teachers' statements are generally significantly longer and more detailed. Given the different professional roles of doctors and teachers in the process of identifying respectively diagnosing ADHD, this is not surprising.

Doctors are used to having a straight forward task, to make a diagnosis and recommend treatment (or not) at the end of a long process, whereas the teachers' job is to detect and identify ADHD in a school environment in the first place, and this without being medically trained. Because of their involvement in the assessment and treating process, teachers have to take into account many more factors, explanations and possible causes to ADHD related symptoms (e. g. "ADHD is a challenge", "a mental problem", "person with a different perception").

The narrations of doctors and teachers transmit different claims. This is evident when we looked at the interpretation of the Fidgety Phil. Teachers referred to the figure of Hoffmann in order to place the reason for children's "learning difficulties" within parental education. In contrast to this, doctors emphasized the supposedly physiological cause of the deviant behavior as expressed by the emblematic term used by one doctor writing about the "Fidgety Phil syndrome". The following statement of a doctor clearly showed the contradictions to the teacher's accounts: "A character trait leading to an above-average distractibility and an exceptional deficiency of concentration (partly with hyperactivity), without there being a parenting disciplinary problem".

What is typical in the medical narratives is not only the demarcation from the interpretation of teachers, but also – in the guise of a scientific style – the claim of universal validity. This becomes apparent in the following statement from a pediatrician mentioning the mandatory elimination procedure: "ADHD is a neurobiological disorder (…) if all other disorders can be excluded." In conclusion, doctors were representing a (self-)image as legitimate interpreters of ADHD.

4.3 Unchallenged medical dominance?

However, the narrations of teachers contained multiple statements challenging the authority of the medical diagnosis. They emphasized the significance of measures by the school system and the premature medicalization of children within the medical system. In their opinion, children with ADHD symptoms would need a "special learning environment", as one participant explained: "It is very important for them to have an environment as quiet as possible with clear structures as well as supporting them with learning and organizing." Another teacher stated these children would "need to be supported as closely as possible in order to better learn to control their interactions". School measures were, at least partly, presented as equally effective than medical treatment by teachers: "a regulated and structured, and irritation-free environment at school can facilitate the orientation for the child enormously". But teachers also subordinated themselves to the medical system. Even though they apply school measures (e. g. "child has to sit in first row") and would often prefer to solve

the situation within school (e. g. "if school can mitigate the problem, I feel better"), they describe a "limit", when the child's behavior becomes unbearable and must be treated with stimulant medication: "if someone disturbs the class for two months, I don't know how to continue, the pills just help, it's a fact".

In addition, many teachers ascribed ADHD children attributes that are generally positively connoted within the "cultural field" (Bourdieu 1983) that go beyond school requirements. In contrast, whereas only one single doctor qualified ADHD children as "sensitive and creative", teachers noted that ADHD children are "intelligent" and "especially creative". Others stated, that they are "good observers", with "a good overview", who "can take responsibility". The emphasis on the strengths also seems to put the children to advantage against the medical diagnosis.

Another central feature of the accounts of teachers is that they associated ADHD with school failure. "Learning difficulties" manifested in not being able to concentrate in order to fulfill certain tasks, especially written tasks or tests: "The attention deficit prevents him to get to a normal performance."

In addition, other teachers said: "children that are not able to fulfill their actual potential, under certain circumstances" and "do not have enough self-confidence". By mentioning "learning difficulties" as a central element in understanding ADHD from their worldview, teachers were attaching an objective quality to the medical judgment. It seems as if ADHD offers a way to explain – and justify – school failures.

Doctors on the other hand have mainly put forward a deficit-oriented picture of ADHD children – at least when describing ADHD related symptoms to an outsider.

However, who has what weight and legitimacy in the configuration between doctors and teachers is particularly evident in how these two groups of experts viewed their relationship with laymen. Doctors tended to emphasize their distance to layman, as is emblematically shown in the following statement: "ADHD is a term, to which all sorts of people think to have to tell their opinion. The term is filled with prejudice, dogmatism, and polemics". Doctors thus seemed to speak of an expert position, emphasizing that they are in possession of the knowledge necessary for the legitimate diagnosis. While doctors have the information, the legitimate discourse, and the confidence at their disposal to correct heretic opinions about ADHD, it also becomes evident that they are balancing between an understanding of medical and diagnostic criteria on one hand and the need to integrate and emphasize daily and social living conditions on the other hand: "Problems with impulse control, therefore often social problems. Abnormalities in attention und short-term memory therefore problems in school".

Teachers in contrast seemed more inclined to explain the diagnosis with metaphors and simplistic symbols. The following statement is representative of this: "In the brain, perceptions are transported with little ships to the centers, which react. Someone with ADHD simply hasn't enough of these little ships at hand". The teachers act in a mediating role vis-à-vis the laymen, to whom they seek to bring

knowledge about the symptoms closer, and in doing so they orient themselves more towards medical knowledge than towards an understanding of the problems in terms of the reality in school.

5 Discussion

Firstly, the analysis demonstrated that doctors and teachers associated the ADHD diagnosis essentially with deviant behavior and considered this behavior – from their respective professional view – as pathological and worthy of treatment. This is in line with research on medicalization of "deviant behavior" ((Fletscher and Reynolds, 1967); Scheff 1973), showing that modern societies do not only "lock away" the "mad ones" (Foucault 1973) but label and treat them within means of the medical system (Cohen 2016; Conrad and Barker 2010). This also resonated with research showing the constructed character of the diagnosis itself (Singh 2002; Karsch 2011).

At the same time, members of the both groups central to this process of diagnosing ADHD express remarkable reservations about the possibility of reliably assessing ADHD symptoms: their statements testified their struggle to identify "ADHD children". Both groups, especially teachers, seem to be balancing between blaming and medicalizing, between disciplining and helping, teachers struggled between positively rewarding "good behavior" and justifying controlling school measures. This can be connected to the idea of understanding psychiatric disorders as "traveling" (Harbusch 2019) or "boundary" (Bowker and Star 1999) objects, rooted in the new conception of (ab)normality in society, for example, that of a "flexible normalisme" (Link 2009).

On the level of our data, both groups seemed to be "caught in a balancing act" (Hansen and Hansen 2006), too, weighing up the diagnosis' desirable and undesirable effects. This balancing act can not only be linked to medicalization of "unruly behavior in the classroom" (Yawo 2012; Harbusch and Dellwing 2019), but, on a more general level, point to the fact that medicalizing abnormal behavior can present "social advantages" (Dupanloup 2004) for the pedagogic field, for example, that of giving teachers back the illusion of control in an otherwise uncertain future of these children.

Secondly, this study displayed mechanisms of the institutional dispositive responsible for pathologization and labeling of ADHD children. We showed that its two main professional groups not only draw on their respective disciplinary knowledge, but that medicine has an unchallenged status. Karsch (2018) came to a similar conclusion, meaning that the debate on ADHD not only takes place within the "medical realm", but that it is still the medical profession that has the strongest impact in defining physiological states (Foucault 1973). We were also able to show that for justifying disciplinary measures, recourse was made to the literary figure of

the Fidgety Phil and the male troublemaker. Since the Fidgety Phil was originally understood as a "pedagogic parable" pointing out moral demeanor (Karsch 2018), this can be interpreted as an example for medicalization of pedagogic principles and the expansion of medical authority into the educational field.

Our results here also resonated with research showing the male centered character of the discourse on the diagnosis (Singh 2005; Horton-Salway 2013), but puts this phenomenon in a broader context by indicating other forms of justification outside of the established knowledge systems stemming from the "dominant ideology" (Bourdieu and Boltanski 1976). The combination of class and gender norms can also be taken into account here. Serre (2012), for example, showed that, in France, middle class professionals in the field of social work perceived the behavior and attitudes of children on the basis of gender and class norms, and that effects such as solidarity and class domination played a crucial role in whether or not children were perceived to be "in danger".

Besides, we were able to show that the specific dispositive at work here functioned through a sort of reciprocal legitimization: Not only are educational practices legitimized by medicalization, as highlighted in previous research (Liebsch 2009), but it is the teachers themselves, who legitimized medical judgment in a setting, where the rules and values of cultural production prevail. Considering the expansion of psychiatry into different areas of work (Cohen 2016), it can be hypothesized that some teachers have been trained, for example, in the field of psychopathology or specifically in the context of ADHD, and that this knowledge of psychiatric categories might has influenced their worldviews. Teachers, and the educational field as such, might also have incorporated performance-oriented values and principles stemming from the dominant ideology of neoliberal concepts of performance-orientation within a construct of an "achieving society" (McClelland 1961).

Both expert groups stressed, that in children, to which the diagnosis applies, commonly school performance is especially affected. This is in line with research showing that teachers associated ADHD children to "problem pupils" (Fiechter 2015; Rutter 2018), and with studies demonstrating that, ultimately, it's the cultural difference between the school culture on the one side and the culture acquired in the context of primary socialization within the family on the other side that is being pathologized. On a more general level, the contribution ties in with discussions on the role of schools in reproducing social inequalities. Since the work of Bourdieu and Passeron (1964) it is known that the school system plays an essential role in the reproduction of social inequalities and that teachers' judgements play a key role in this. As a medical diagnosis, ADHD is at the same time an example of a judgement established outside the school system that has a differentiating effect within the school system (Liebsch 2009; Kuntz et al. 2018).

This being said, it would be interesting to systematically examine to what extent the identification of the symptoms by teachers and doctors is associated with

specific social beliefs and judgments. In the classical study "Learning to Labour" (Willis 2017), teachers' judgments on the rebel character of the working class "lads" was a key element of their school failure.

Finally, this study shows that the professional judgements of two professions with expert knowledge are not equally balanced. Due to its connection with the diagnostic monopoly, medical knowledge is superior to the knowledge of teachers in regard to diagnosing and treating. This, even though the expertise of the teachers includes generally much more concrete knowledge on the living conditions and problems of the pupils in question and even plays a key role in the process of identification and assignment of possible "ADHD children". Because of this "hierarchy of knowledge" (Buchanan 2016) doctors can claim universality for their rather deficit-oriented picture of children when describing typical ADHD symptoms, while teachers express an ambivalent attitude towards the diagnosis, describing different characteristics of children with ADHD symptoms.

This attitude of teachers can also be understood as part of their professional habitus (Muel-Dreyfus 1983) acquired in their professional training. In the context of "making" an ADHD diagnosis, teachers might take on the role between that of a "scientifically educated practitioner" (Harbusch 2019) and that of a "lay men" (Schatzmann and Strauss 1966), whose knowledge is removed from the psychiatric province to a larger "hinterland", but is in their own comprehension "almost professional".

6 Conclusions

It is the teachers themselves who by ultimately not rejecting medical judgments in the school setting, significantly contribute to the acceptance and legitimization of medical knowledge and to the subordination of their own expertise to medical expertise within a sphere hitherto organized on the basis of pedagogic principles. This might not be surprising, considering that school has ever since, even before the rise of the prominent debates on ADHD, been a place under medical and psychological influence (Keupp 1972) and surveillance (Foucault 1975).

One might speculate here that the "ideological power of the psychiatric discourse" (Cohen 2016) within a neoliberal society has indeed expanded, even more so in the last couple of decades.

Teachers contribute themselves decisively to their subordination vis-à-vis doctors even within the school setting and hereby the reinforcement of their already dominated position in society opposite doctors. Power relations between doctors and teachers might also be rooted in class norms (Serre 2012), teachers representing the middle class and doctors belonging to the upper class. Whereas in our study, the subordination of teachers was found to be a constitutive element of the relational

dynamics between teachers and doctors, Frigerio et al. (2013) have found a different logic of dynamics between teachers and parents, where interactions of "blame" played a crucial role in the (re-)production of power relationships. If and to what extend a "culture of blame" (Singh 2004) might be crucial in understanding teachers' and doctors' rival worldviews needs to be investigated further.

The subordination of teachers to the medical system, might be the reason why – as studies show – teachers and educational professionals show lack of mental health literacy and can be overwhelmed in their role of having to perform mental health programs in school (Almeida et al. 2017). Additionally, it has been pointed out by Singh (2008) that supporting children is difficult for "under-resourced" teachers, who were more likely to advise a parent with a misbehaving child to get medical prescription rather than to apply pedagogical techniques or mental health programs in the first place. However, one explanation could be that the mental health literacy movement is also affected by the ideological expansion of psychiatry (Cohen 2016), and can therefore be interpreted as a "boundary object" (Bowker and Star 1999) itself, balancing between medical authority – as part of preventive and public health medicine (Jorm 2000) – and societal subordination (Huber et al. 2012) focusing on sociological concepts such as school policies and stigma. However, it would be interesting to investigate the weight of medical and social factors in the context of mental health literacy programs, and, more specifically, whether and how the mental health literacy of teachers varies in different school settings (e. g. public vs. private schools), depending on the regional school policy in the context of handling mental health problems and offering programs in this field.

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