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Diagnosing ADHD in Danish primary school children: a case study of the institutional categorization of emotional and behavioural difficulties

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ABSTRACT

This study of institutional categorization reports an investigation of the practices, procedures and assumptions of psychiatric staff members when diagnosing ADHD. The main data upon which the study is based consist of transcribed audio recordings of meetings in the psychiatric clinic. Here children referred from primary schools on the suspicion of ADHD are attended to. The tools and procedures for gathering information are shown to produce decontextualized and individualizing representations of children’s conduct. The evaluation against a number of norms is found to be central. Finally, the discussions at the central team conferences are shown to reveal the use of hypothesis testing structured around a number of dichotomies, where isolated aspects of the child’s life are considered against each other as the source of the difficulties. Together, these practices have cumulative and profound consequences for how children’s problems come to be understood as caused by a neurological condition.

KEYWORDS

Institutional categorization; ADHD; communication; psychiatry; learning disabilities

Introduction

This study investigates the work of two different psychiatric teams at a Danish psychiatric clinic in order to examine the process through which primary school children are diagnosed with ADHD. The intention is to study the assessment, discussions around, and categorizations of children’s difficulties, as the processing of children’s cases unfold. The diagnosis of ADHD has been intensely debated in Denmark for more than a decade, as the number of children receiving this diagnosis has been on a steep rise (Langager 2014). Issues such as possible negative impact on school peers’ learning outcomes (Kristoffersen et al. 2015) and teachers’ workloads associated with the presence of diagnosed children in the mainstream classrooms (Kristensen 2013) have been prominent topics in this debate, as well as regional differences in numbers of diagnosed children and the use of medical treatment (Baes-Jørgensen 2011). In the Danish debate, as in other Western countries, the very concept of ADHD has been questioned, and scholars stand divided with respect to questions of aetiology (cause of disease), specificity and demarcation of the diagnosis (Jørgensen 2014; Hinshaw and Scheffler 2014). Nonetheless, ADHD has emerged as a significant category used by schools, municipal administrations and the general public to define and understand the emotional and behavioural difficulties of children. The psychiatric system and its diagnoses have had a very visible impact on the structuring of the special schooling services in Denmark with designations.
such as ‘ADHD special school service’, ‘Autism spectrum special school service’ etc. Until the policy of inclusion brought about a fundamental change in the allocation of special educational support, a diagnosis of ADHD often lead to placement in special schooling services designed for ADHD-diagnosed children. Though many municipalities in the light of the inclusion strategy have worked to change this, and retain most of the diagnosed children in mainstream classrooms with varying degrees of specialized support, the ADHD-diagnosis continues to play an important institutional role by officially typifying the kind of problems that the institutional actors are faced with. So far, however, not much neither Danish nor international research has scrutinized the institutional genesis of this diagnosis, and this makes it interesting to investigate how children’s cases are processed through the psychiatric system and how children come to be assigned the category ADHD.

The psychiatric context of the problem of diagnosing ADHD in primary school children

The Danish psychiatric system is rooted in the WHO’s ICD system for classifying diseases and conditions, and formally, the diagnosis is labelled hyperkinetic disorder (WHO 2017, 206). However, as it has become commonplace in Denmark to use the term ADHD from the American DSM-system in school, public, and administration, as well as in the psychiatric system itself, we will also use this designation in the present study. The WHO’s ICD system for categorizing hyperkinetic disorder is, on the one hand, a purely descriptive criteria-based categorization. The child can be diagnosed if it has severe and persisting difficulties with attention, hyperactivity, and impulsivity. Furthermore, the ICD system stipulates a set of supplemental conditions, of which the most important are that the disturbances of attention and overactivity must be present in more than one context (e.g. school and home), and must cause severe difficulties for normal functioning in these contexts. On the other hand, however, the guidelines for diagnosing ADHD clearly stipulate that the psychiatric teams must also carefully consider a number of possible differential diagnostic possibilities, and consider if one or more alternative diagnoses would more precisely characterise the problem at hand, such as anxiety, conduct disorders, depressive disorders, mood disorders, etc. (Ibid., 208). The main issue with these differential diagnoses is that they often share the symptoms of attention difficulties, hyperactivity and impulsivity with ADHD, but have a fundamentally different aetiology and, consequently, they often demand a different treatment. This means that the psychiatric staff are faced with the intriguing problem of carefully considering a number of categorizations, designating fundamentally differing mental conditions that could potentially produce identical symptoms of hyperactivity, impulsivity and lack of attention. Put differently, although the ICD in the case of hyperkinetic disorder states that ‘...knowledge of a specific aetiology is lacking at present...’ (Ibid., 206), the psychiatric staff nonetheless have to discuss and decide on aetiology. The aim of this study is to draw attention to the various situated ways in which ADHD is identified, understood, and demarked, in this specific institutional context, and how this categorization becomes the basis for further decisions and interventions.

Theoretical context of the study: institutional categorizations of children’s difficulties

Institutional ethnographic studies analyse how the ongoing coordination of specialized functions and actions unfold through the activities of professionals (Smith 2006a, 2). Special attention is given to the institutional tools and resources that professionals make use of in their work, and, as particularly important resources, the categories and procedures involved in the sequences of interconnected activities that make up institutional action (Ibid., 9; DeVault and McCoy 2006, 23). Through the use of categories, institutions define the nature of a problem, and people are ‘transformed’ into entities that the organization can recognize and process (Lipsky 1980). As
Grossen, Florez & Lauvergeon argue, ‘...categories are resources that orient the professionals’ actions and decisions...’ (2014, 17), as institutions ‘think and act’ based on categories (Douglas 1986). In this way, categories like ‘ADHD’, ‘learning disability’ or ‘autism’ play a standardizing role in the way institutions handle instances of children’s problems, thus being the preconditions for understanding as well as for further actions and interventions. Within institutional settings, the use of official categories produces a common ground for further dialogue, and by assigning a label of this kind, professionals are in a position where they feel they know a great deal about the person and they ‘...can readily formulate topics of conversation based on the knowledge stored in terms of that category’ (Sacks 1992, 41).

An important study of the institutional practices that assemble a categorization of children’s school problems is Mehan, Hertweck and Meihls’ study ‘Handicapping the Handicapped. Decision Making in Students’ Educational Careers’ (1986). Through case studies of the work of Californian school placement committee members (school psychologists, nurses, special education teachers, municipal administrates etc.), they ‘...investigate the diagnostic process and (...) examine the way information is used to make decisions about students...’ (Ibid., 100). The most important component in the diagnostic process is the committee’s search for the cause of the student’s educational difficulties, the authors argue. This search unfolds through certain forms of reasoning (Ibid., 133), which involve a special sort of hypothesis testing. A number of potential sources of the student’s difficulty are introduced, ranging from peer relations, family problems, problems with fine-motor control to low intelligence and learning disabilities. The combination of possible hypotheses is not considered, instead they are considered against one another two at a time. This structures the discussions of the committee around some very fundamental inside-outside dichotomies, ‘...one of them pivoting on the child, the other on the school. The source of the problem may lie inside the child (in the form of mental states, academic performances, motivation and the like), or outside (in the situations surrounding) him’ (Ibid., 131–132). Rather small pieces of information suffice as evidence to eliminate a hypothesis from further consideration, e.g. a teacher answering ‘He’s got a lot of comrades’ (Ibid., 132) provides the committee with enough evidence to discount the ‘outside’, i.e. social or situational choice of the dichotomy, thus placing the problem in the child. Repeatedly throughout the meetings ‘[t] he questions were posed (...) in such a way that they had to make dichotomous choices of the “either/or” variety: either this aspect or that aspect of the child’s life was the source of the difficulty’ (Ibid., 133). The authors conclude:

The committee’s form of reasoning can be called “the elimination of competing hypotheses” in the course of which a number of possible hypotheses are considered simultaneously. Those that do not accumulate supporting evidence are excluded, until only one remains (Ibid., 133).

Within this perspective, institutional categorizations are always selections from alternatives, and an analysis of the institutional discussions and negotiations can illuminate the alternative and competing representations of objects, events, people, or children’s problems. Mehan (1996) analyses these modes of representation by scrutinizing the syntax and vocabulary used in instances of representation. For instance, a teacher saying ‘he has difficulties applying himself to his daily work’ is an individualizing mode of representation, as it places the problem ‘beneath the skin and between the ears’ of the child (Mehan 1996, 255). As opposed to this, a contextual mode of representation emphasizes how the child’s performance may vary according to kinds of materials, tasks, or motivation.

Within the theoretical framework of membership categorization analysis (Sacks 1992), Hester analyses discussions between teachers and school psychologists at special education referral meetings in the UK school system and scrutinizes

...the naturally occurring local detail of the talk-in-interaction through which ‘problem children’ are identified as deviating or departing from category-predicated rules and norms (...) and/or as having other kinds of ‘special educational needs’... (1998, 133).
A prominent feature of how the categorization of children as specific types of ‘deviant’ is interactionally accomplished is through the use of category contrasts. This involves stipulating a norm (for instance, what a normal 9-year-old is able to do) from which the conduct, abilities or predicates of the particular child in question deviates. This makes ‘...a readily available standard for comparing children and for evaluating their relative progress. It is in terms of this standard that children may be described as “underdeveloped”, “behind”, “backward” (Ibid., 139). This form of reasoning presumes an intrinsic domain of distinct types of children’s problems or ‘deviances’, which provide ‘...a sense for the participants of their being respondents to an independent or objective set of problems within the school’, which Hester also designates a ‘mundane’ model of reasoning (1991, 461). The designations of types of problems are not just words, but have profound impact on the actions that follow, as they become ‘...grounds for intervention and treatment’ (Ibid., 462).

Similar results have been found in studies of student health team meetings in Sweden (see, for example, Hjörne and Säljö 2004a, 2004b, 2012). Although vague, the discourse employed at these meetings still points to children’s shortcomings in individualizing terms as the causes of school problems. Categories such as ‘weak’, ‘slow’, ‘immature’ or ‘ADHD’ were frequently used to provide explanations of whatever had happened in class. This is a further indication that a distinct type of psychological and individualizing discourse in school settings seems to be prevalent in many Western countries.

Following the work of Mehan, Hertweck and Meihls, this study will scrutinize forms of reasoning and the nature of the premises as well as modes of representations used in diagnostic reasoning during the progress of children’s cases. Following the work of Hjörne and Säljö, this study will analyse how these features come to constitute an explanation of the child’s difficulties. Following Hester’s work, the use of category contrasts and evaluations against norms in the dialogues of the psychiatric team members will be analysed. As Hester points out, categorization of this kind is consequential and suggests relevant actions, and because of this consequentiality, this study will also scrutinize the institutional consequences of a diagnosis of ADHD in the psychiatric clinic. The act of diagnosing ADHD is not the isolated act ex nihilo of a group of psychiatric professionals, but involves a range of resources and procedures. In a manner inspired by the work of Smith and colleagues, these elements will be analysed as the institutional resources, mediating and making categorization of the case possible.

Data and empirical setting of the study

The main data upon which this study is based consist of transcribed audio recordings of meetings between psychiatric staff members at which children referred from schools on the suspicion of ADHD are discussed. These data were gathered as a part of broader institutional ethnographic fieldwork taking place between March 2015 and March 2017. As the process of assigning ADHD is a complex institutional action segmented across diverse localities, the fieldwork included observations at schools, home visits, observations at the psychiatric clinic and interviews with children, parents, teachers, psychiatric professionals, etc. Participant observation (Cohen, Manion, and Morrison 2011) at the psychiatric clinic during 16 sessions, where staff members conducted tests, interviewed children and family, and held staff conferences, generated approximately 15 hours of audio-recorded material. In addition to the audio-recorded observations, six separate interviews with staff members were conducted, generating approximately 6 hours of audio recordings. The audio material was transcribed in extenso. Field notes were taken, and access to official documents was obtained. Many of the interviews with members of the psychiatric teams were ‘on-the-spot interviews’ (DeVault and McCoy 2006, 22), situated in the conference rooms of the psychiatric clinic, and were performed right after the meetings of the teams. The ‘stimulated recall’ method (Haglund 2003) was used on several occasions in the process, where bits of recorded sound from meetings were played to
interviewees as part of the interview. As a way of validating and deepening the analysis, central themes, findings and observations were presented and discussed with the main participants in the supplementary interviews, and their comments and clarifications were recorded (Hammersley 2006). In order to secure the anonymity of the participants, pieces of information (names, places, etc.) have been left out or slightly modified. All the staff members, children and parents were notified of the purpose of the study, and all participants gave informed consent to participate.

Three children were followed longitudinally through assessments by two different psychiatric teams at one child and youth psychiatric clinic located at a hospital in a midsize Danish city. The children assessed were Alma (7 years old), Anne (8 years old) and Mette (9 years old). All three received an ADHD diagnosis.

**Results**

In all three cases, the psychiatric assessment process consisted of four important steps. 1) Gathering of information using institutional tools. 2) Assessing if the child’s behaviour corresponds to the ADHD diagnostic criteria. 3) Ruling out other candidate causes than ADHD. And, finally, step 4), the categorization of the case and discussions about the institutional consequences. In the following, these four steps of the psychiatric assessment will be analysed one by one. However, before proceeding to the main analysis, we will briefly comment on the process leading up to the psychiatric assessment, as the initiation of cases has consequences for the steps that follow. Most commonly, a case starts out in the school context, where a teacher experiences a child to have difficulties in terms of being overactive, lacking in concentration and disturbing his/her classmates. At this point, the difficulties are often discussed with colleagues as well as the child’s parents, and different measures are tried in class and at home. Eventually, the case is brought up at a school meeting at the request of the teacher, and if considered relevant, some preliminary investigations will be made by the school psychologist. If these preliminary investigations indicate ADHD, the school psychologist can turn the case over to the psychiatric clinic for further assessment. This is comparable to the preliminary procedures employed in other countries, cf., for instance, the case of Sweden as analysed by Hjörne and Säljö (2004a). One particularly interesting feature of the institutional linkage between school and psychiatric system is that once a case is received in the psychiatric system, it is filed as a ‘NB-ADHD’ case (lat. ‘Nota bene’, ‘pay attention’), meaning that this is the main focus of the psychiatric assessment. This means that the diagnosis is the starting point of the assessment process, as a sort of working hypothesis. The psychiatric professionals are not just asking any question or looking at the child in an open way, as the question in the assessment process is ‘Is this ADHD or is it not?’ This corresponds to Hester’s findings, where he notes that ‘…the pupil is not at first referred, then categorized. Rather, the pupil is categorized in the act of referral itself’ (Hester 1998, 148). This also shows that the job of the psychiatric team members is to refine, confirm or reject the initial categorization of the child. As the following analysis will show, this seems to have important consequences for the further steps in the process, as it narrows down the scope of the information considered relevant.

**Step 1: gathering information using institutional tools**

Once a case is initiated as an ‘NB-ADHD’ case, it is handed over to a specific team of professionals at the clinic. A team consists of a psychiatrist, a varying number of psychologists and a varying number of psychiatric professionals (nurses). Each of these parties has different institutionally designated roles during the assessment process. First, the team decides which information is relevant to gather in the specific case and what tests to perform. There is a relatively stable core of institutional tools used for collecting information at this point in the process:
(1) A first meeting with child and parents. A psychiatric professional, often assisted by a psychologist or psychiatrist, interviews the child and observes behaviour and the interplay between parents and child during the session.

(2) A psychiatric professional, often assisted by a psychologist, interviews parents about the developmental history of the child (called anamnesis).

(3) A psychologist performs tests on the child. Most often:

   i) a cognitive test, Wechsler Intelligence Scale for Children (WISC)
   ii) one or two attention tests, most commonly the Test of Everyday Attention for Children (TEA-Ch) and the Conners Continuous Performance Test.

(4) A psychiatric professional undertakes school observations, often from 9–11 am on a typical school day, followed by an interview with the teacher.

(5) Parents and teacher fill in a rating scale questionnaire, Attention Deficit/Hyperactivity Disorder – Rating Scale (ADHD–RS).

(6) A general practitioner performs a thorough physical examination of the child, including blood pressure, sight, hearing etc.

If considered necessary, this information can be supplemented by additional tests, a home visit by a psychiatric professional, etc. An important feature in step one of the assessment process is the continuous transformation of face-to-face interaction into text (Mehan 1996, 246). These are the ‘… work-text-work sequences that make up institutional action’ (Smith 2006a, 9). Interaction and conversation in one setting in the sequence of steps become text to be considered and discussed at a team conference, where the team meets and reviews all the collected information in order to come to a conclusion. For example, when a psychologist and a child interact and talk during a test situation (interaction), the psychologist retrieves the test results (text) and writes clinical notes on the child’s behaviours (text). When a teacher interacts with a child in the classroom (interaction), he or she fills in a rating scale questionnaire on the occurrence of ADHD symptoms (text). These texts, generated from interaction in a complex, multifaceted reality at a certain step in the process, become resources for the discussion during the main team conference. However, the texts also become separated from the interactional complexity in which they were created, a process that involves a selection of information and a focused reduction of complexity (Mehan, Hertweck, and Meihls 1986, 94). In this way, institutional texts work as filters in the course of the series of institutional actions, allowing only certain information to pass through. As Smith puts it, ‘[t]he filter cleans up the potential clutter of detail (…) in standardizes it (…) [and] allows comparisons to be made in standardized terms’ (2006b, 70). The interesting question is which information is sought out and selected at this initial step. Some of the questions that the psychiatrist asked Alma during the initial interview session during their first meeting can illustrate this:

‘Do you feel restless?’, ‘When you are sitting and completing the workbooks you like, do you sometimes become irritated that you simply cannot remain seated and keep working, or are you able to remain seated and keep going for as long as you like?’, ‘Do you always eat all you need [at school]? Or do you perhaps feel restless and so do not eat all you are supposed to at school?’ (Alma’s case, first meeting, June 2015.)

The above interview questions focus on scrutinizing behaviour related to the characteristic symptoms of the ADHD diagnosis such as for example feelings of unrest, lack of concentration and occurrences of impulsivity, and many of the questions have this specific focus. Vocabulary from the diagnostic criteria are present in the questions, such as ‘restless’ and ‘cannot remain seated’ (WHO 2017). The same focus is evident in the test situations, where a psychologist has the double task of ensuring that the child completes the tests in the intended way and simultaneously recording clinical observations of the child’s behaviours. As a part of the TEA-Ch test (Test of Everyday Attention for Children), Anne was instructed to find identical pictures of spaceships in a picture full
of different types of spaceships and at the same time count the number of sounds played on a CD player. As she performed the tasks, the psychologist was sitting in front of her, looking at her. Every time she yawned, he noted it. Every time she turned from side to side on the chair, he noted it, and as will become evident in what follows, this type of observations will be important at the later case conference, as they are noted as instances of impulsive behaviour. The same filtering process occurs through the use of the ADHD-RS rating scale (Attention Deficit/Hyperactivity Disorder – Rating Scale) used during assessment: an observer rates the behavioural symptoms of ADHD by indicating if the behaviour is occurring ‘often’ or ‘not so often’ in the daily conduct of the child. Examples of behaviours in question are ‘failing to pay close attention to details’, ‘leaving his or her seat in the classroom or in other situations where children are expected to remain seated’ and ‘frequently talking excessively without responding appropriately to social constraints’, all corresponding to specific ADHD diagnostic criteria (WHO 2017). Here, the focus on ADHD behaviour is very explicit. All behaviour not related to the diagnosis (e.g. telling jokes, playing with peers, etc.), as well as the context of the behaviour and the child’s possible intentional reasons for that behaviour (e.g. leaving his or her seat in the classroom because he/she is thirsty and going out to get a drink of water) are disregarded and filtered out. The questioning, the rating scale questionnaire and the recording of clinical notes all seem to be clear examples of what Mehan (1996) would call an individualizing mode of representation, and it is interesting to note that much of it seems to be an effect of the very tools of the assessment, e.g. the rating scale questionnaire. Generally, there is quite a gap between the complexity of reality and the focused information produced during this type of behavioural recording. Furthermore, there is always the risk of fundamentally misinterpreting the observed behaviour, for example noting intentional behaviour as impulsive behaviour. This risk of misinterpretation is also from time to time mentioned in the work of the psychiatric team, as in the following excerpt from a team conference where a psychologist reports on clinical observations from a test session with Mette:

Psychologist: I can see she is sitting by the computer; she is sitting there and pressing the keys. She groans, she yawns. She is fiddling with the light settings, which I thought was also something impulsive, but afterwards she says that it was actually because the light was too bright. So that’s fine, actually, that she is able to regulate it. (Mette’s case, team conference, December 2016).

The particularly interesting feature of this excerpt is that the psychologist recognizes that he at first made a misinterpretation, marked out by the mental state verb phrase ‘I thought’. The general question is, however, if it is ever possible to rule out the risk of misinterpretation during the recording of behaviour, as e.g. impulsive behaviour has no surface sign that clearly separates it from intentional behaviour. The distinction between these two categories seems to involve some degree of interpretation and therefore also the risk of misinterpretation: It rests on the observer’s ability to recognize and understand when an observed action is voluntary and intentional, and when it is impulsive. Several scholars have raised the issue of how it is practically possible to discern ADHD-behaviour (e.g. impulsive behaviour) from seemingly identical behaviour caused by different psychological processes (e.g. intention), when there is only visible access to the behaviour, not the psychological process in itself (Jørgensen 2014; Klein et al. 2014).

**Step 2: assessing if the child’s behaviour corresponds to diagnostic criteria**

In all the cases, a concluding team conference is a central step in the assessment process. A team conference about one child lasts approximately 30 to 45 minutes. It is quite structured and led by the psychiatrist. Such conferences have three major purposes. 1) To go through all the information gathered and determine if the child’s behaviours correspond to ADHD symptoms and if test results
and rating scale scores indicate ADHD. 2) To rule out other possible causes of the disturbed behaviour, and 3) to decide on a diagnosis and the appropriate institutional measures. Mette's case was considered in December 2016, and the following dialogue took place when the psychologist, who conducted Mette’s attention test, was asked to review the results and present his observations.

Psychologist: If you look at the one called selective attention, if she is to look at one specific item, that is, to find spaceships in pairs or to find something distributed unevenly, she performs at an average level. (...) She scores 7 on a scale of 10, which is precisely average to slightly less than average. So an average performance on selective attention. Regarding shifts of attention and attention control, she scores below average on both parts of the test; that is, she scores 6. And this is primarily because she is spending a lot of time on it. She actually has many correct answers. So she is actually doing the right thing, but she takes too much time searching. So she fails in terms of time. (…)

Psychiatric professional: And clinically? [Clinical observations]

Psychologist: Yeah, well, clinically I think: A nice, happy, smiling girl, good eye contact, talking. A little impulsive, turning from side to side on her chair but tries hard. She yawns, fumbles with the papers and has two breaks, the first one after about half an hour and the second after another half hour.

Psychiatrist: Is that what we expect if we look at a nine-year-old?

Psychologist: No I would actually expect that she would be able to do this. (…)

Psychologist: What it says in relation to lack of attention is that there is a strong indication that she has difficulties. In relation to impulsivity, there is a strong indication that she has difficulties in this regard. And in relation to attention, and alertness, there are some indications that she might have difficulties there. (Mette’s case, team conference, December 2016)

A noticeable form of reasoning in this excerpt from the team conference on Mette’s case is the way information is evaluated against norms: The scores are ‘average’ or ‘below average’. The clinical observations too are evaluated against a norm in the form of category contrasts, as Mette’s conduct is not ‘what we could expect if we look at a nine-year-old’. Regarding the team conferences in general, this is the prevailing form of reasoning when assessing test results, observations and rating scale scores. Some of the involved norms are numerical and the psychiatric staff express the evaluation numerically, and in other instances, the norms that the information is evaluated against are more implicit. These norms are central resources in this part of the process. The prevailing mode of representation in this part of the assessment process is clearly individualizing; she finds it difficult to sit still, she scores 7, she has difficulties. Most of the context of the child’s behaviour is not recorded nor brought up at the conference, but filtered out (Smith 2006b). This way of communicating observations makes the child the owner of the problem, as Mehan points out (1996).

Step 3: closing the gap: resolving other possible causes

Once it is determined if the child’s behaviour corresponds sufficiently with the ADHD diagnostic criteria, and if the test results and rating scale scores seem to indicate ADHD-related difficulties, another equally important part of the assessment process takes place at the team conferences – the discussion and resolving of other possible causes of the observed impulsivity, hyperactivity and lack of concentration. The amount of time and effort that the psychiatric team put into these discussions mark them out as important. Furthermore, they illustrate the point made initially that it is not straightforward to infer the ADHD diagnosis directly from the behavioural symptoms, as the symptoms can be caused by a number of alternative conditions (WHO 2017). The following transcript excerpt is from the case conference regarding Anne, where the psychiatric professional comments on her case.
...she does not seem to be on the autism spectrum based on these descriptions. It is not as if she is not able to be in a relationship (…) You know, she actually has good, like, close relations, though she gets so chaotic when together with peers that it just doesn’t work out for her. But she has the basic ability to communicate and be in mutual social interplay with others. (Anne’s case, team conference, August 2016.)

In this excerpt, the team discusses one aspect of the recorded problems with Anne; she gets into many conflicts with peers. Two potential explanations are considered simultaneously; the conflicts are due to a) a lack of ability to ‘be in mutual social interplay’ in ways characteristic of the autism spectrum disorder diagnosis, or b) they are due to her ‘chaotic’ way of being together with peers in ways characteristic of the ADHD diagnosis. Both diagnoses have a set of characteristic behaviours that Hester refers to as category-predicated behaviours (1998, 133), and at surface, they can potentially have the same expressions, namely conflicts. The psychiatric professional introduces a further set of characterizations of Anne’s abilities, she has a ‘basic ability to communicate’ and ‘be in mutual social interplay’ and she is ‘able to be in a relationship’. The vocabulary of all three characterizations has a direct link to the vocabulary of the autism spectrum disorder diagnosis, which is characterized by abnormalities in communication and failures to develop mutual peer relationships and social interaction (WHO 2017). This works like a category contrast (Hester 1998, 139), when the characterizations of Anne’s abilities are held up against the category-predicated abilities of the alternative cause, the autism spectrum disorder. Notice the use of double-negation in ‘it is not as if she is not able to’, which marks the communicative purpose of creating a contrast. Notice also that the two explanations put up against one another are both personalizing; it is for example not considered that the recurrent conflicts could be due to contextual factors like problematic peers or stressful environments. The scope of possibilities considered is in this manner demarcated by the available psychiatric categories.

The structure of the above argument is similar in the other cases in this study: In Mette’s case, sleep problems as well as anxiety are considered as causes. She receives sleep medication for several months, and the anxiety symptoms are treated with good results. However, as her inattentiveness continues, ADHD is diagnosed. In Alma’s case, family relations are considered by gathering information about the family interaction patterns through a home visit, until these can be ruled out as causes. Sleep problems are considered as well, but an interview about sleep routines indicates no problems. Finally, relational problems with peers are considered as cause, but as the school observations seem to reveal that she has a basic ability to participate but lacks concentration in her interplay, the team concludes on a diagnosis of ADHD. This form of reasoning is prevailing in this part of the assessment process, and can be characterized as a negative form of reasoning, as it works by arguing what is not the cause of the behaviour. These recurrent discussions of other candidate causes take up a lot of time at the meetings and seem to be of great importance to the team members. The cause of the behaviour is contested repeatedly, discussed and challenged, and there is no in-advance-agreement that the case will end up with diagnosing ADHD, as the uncertainties are kept alive throughout the meetings.

What does the negative form of reasoning reveal about assigning ADHD? Most importantly, it shows that the actual cause of a disturbed behaviour is never directly visible and that it cannot be directly approached and inspected by observation. The team can only say that when the disturbed behaviour is not due to autism spectrum disorder, lack of sleep, anxiety, family or relational problems etc., then it is an individual and neurological disturbance of attention, and ADHD can be diagnosed. ADHD as a psychiatric diagnosis is defined by a set of symptoms, but the symptoms are not in themselves enough, as the discussions of the possible causes show. The psychiatric professionals do not see the cause of the symptomatic behaviours but infer it using this negative form of reasoning.

Furthermore, in order to infer the cause, the psychiatric professionals need to rely on a set of premises regarding children’s development, as a set of ‘members-taken-for-granted-knowledge-in-action’ (Fitzgerald 2012, 305). The following excerpt from an interview after Anne’s team conference illustrates an instance of this type of premise:
Researcher: Um ... one of the first things that you mentioned [addressing the psychiatric professional] was that there are no worries in relation to the younger brother.
Psychiatric professional: Yes.
Researcher: Is that important to mention in relation to Anne?
Psychiatric professional: Well, I think so. This is often where we discuss if this is a diagnosis or if it is something like [the psychiatrist] mentioned, confined to inefficient parenting practices. And you can say they have actually got the same package or upbringing or care from their parents. But they are so different, as it is actually the younger brother who manages naturally, like every other child, right?
Researcher: Yes.
Psychiatric professional: And that might indicate, well, there is something more like a psychiatric condition in it. (Anne’s case, team conference, August 2016).

Here, the idea that siblings receive ‘the same package or upbringing or care’ is a necessary help-premise in order to write off the possibility that the disturbed behaviour is due to upbringing. In a case where two children in the same family with ‘the same upbringing’ develop differently, and one of them has attention problems but the other does not, then this indicates to the psychiatric professionals that the problems are not the result of parenting practices but are confined to the individual. This type of premise is not unproblematic but nonetheless necessary in the negative form of reasoning. Furthermore, in a manner similar to the findings of Mehan, Hertweck, and Meihls (1986), it becomes evident that the psychiatric team members operate with dichotomies when discussing if the child’s problem is due to an individual condition or due to family interplay and upbringing. Rather small pieces of information suffice to disconfirm one of the sides of the dichotomy (the fact that the brother ‘manages naturally’). Though it seems perfectly plausible that it could be the case that both sides of the dichotomy could have explanatory value (that the child’s problems are caused by individual neurological conditions as well as family interplay), this is not considered, nor part of the conclusion. As in the study of Mehan, Hertweck, and Meihls (1986), this form of reasoning can be called ‘the elimination of competing hypotheses’. However, it is also more than just a series of hypotheses put up against one another, two at a time. Rather, it seems to be a progressing series of similar dichotomies, with an individual, neurological explanation (ADHD) on the one side every time, and varying alternative causes on the other side. In the case of Alma: Is it family confined problems – or ADHD? Is it sleep problems – or ADHD? Is it relational problems with peers – or ADHD? When the outside choices of the dichotomies (family, sleep, relational issues) receive negative or no evidence, they are discounted, until ADHD remains.

**Step 4: categorization and institutional consequences**

Concurrent with Hester (1991), Mäkitalo writes, ‘[i]n institutional practices, categorization initiates action’ (2014, 27), and in all the cases here, the treatment is discussed shortly after the diagnosing. The following relates to Anne’s case:

Psychiatrist: If we give it a 90.1 (...) Is that not a fair description of the difficulties at hand?
Psychiatric professional: Yes, I think it is. And what are you thinking in relation to treatment?
Psychiatrist: I think we should give her some medicine.
Psychiatric professional: Yes.
Psychiatrist: They have already provided a lot of support, placement in a special educational unit, structure, and a family consultant at home.
Psychiatric professional: Yes.
Psychiatrist: It is extensive support. (...) And of course we also need to offer the parents an ADHD parenting course. (Anne’s case, team conference, August 2016).
Metaphorically, this could be said to constitute the moment of *sacrament* at the psychiatric clinic. When the psychiatrist announces ‘we give it a 90.1’ or 90.0 (the ADHD diagnosis numbers in the official ICD diagnosis manual (WHO 2017), the child in question is diagnosed with ADHD because all the institutional antecedents are fulfilled and any lack of clarity has been sufficiently dealt with.

Notice that the *mode of representation* in the above excerpt from the diagnosis moment is a description, ‘[i]s that not a fair description of the difficulties at hand?’ In the psychiatric clinic, this use of the term is often recorded: It is a set of descriptions of behaviours, which furthermore correlates with the use of the term in the official diagnosis manuals.

However, the term ADHD is also often used in another sense inside and outside the psychiatric clinic. In December 2016, Mette and her mother attended a meeting at the psychiatric clinic and were told that the test results showed Mette has ADHD. Afterwards, walking towards the hospital exit, the following conversation took place:

Researcher: Were you surprised that [the psychiatrist] told you that the tests show that you have (…) ADHD?

Mette: No. I don’t care.

Mette’s mother: We have been discussing it at home, right, Mette? You are still the very same person even though you have come to know that you have ADHD. But perhaps it can explain some things, like why you sometimes find it difficult to concentrate and things like that. (Mette’s case, response meeting, December 2016).

In this excerpt, the term ADHD is used in another way, constituting another *mode of representation* (Mehan 1996). Here, it is an *explanation*, and to a large degree, this is also how the term is used in the schools that were part of the ethnographic fieldwork. The term provides an explanation of why some children cannot concentrate and are impulsive and overactive.

A third use of the term ADHD seems to be a *pragmatic mode of representation*, considering that the term perhaps can provide help for a child. This use of the term seems to be at play in the following excerpt from an interview with the team members right after Alma’s case was considered and an ADHD diagnosis made:

Researcher: When you reach this conclusion it is based on the overall picture, right?

Psychiatrist: Exactly.

Researcher: Is anything like … more important?

Psychiatrist: Well, I think I actually do it because I think I hear about a girl who is overburdened in many contexts, and I think, I wonder … if this can … can do it, right?

(…)

Psychiatric professional: We think we are able to help her.

Psychiatrist: Yes, that’s for sure. (Alma’s case, team conference, August 2015)

It is interesting to consider the underlying ideas about causality at play in these different modes of representation. Used to describe a set of behaviours, it is the behaviours that are the basis of the term (behaviours → ADHD). However, when it is used as an explanation, it is almost like a reversal of the causality, ADHD produces these behaviours (ADHD → behaviours). Finally, used in the pragmatic sense, the term ADHD is used to generate help and understanding (ADHD → help). The different modes of representation in these uses of the term show that ADHD is an important term in more than just one respect. In this respect, our findings differ from Hester’s (1991) finding of a fundamental ‘mundane’ form of reasoning in the diagnostic dialogues that he studies (e.g. where participants talk of ‘educational needs’ and the like as something objective and independent of the categorization). This mode only refers to the above-mentioned explanatory mode of representation, not to the descriptive one, nor the pragmatic one. As Wertsch (1998) notes, people tend to pursue many different goals at the same time while performing their everyday practices. Sometimes the term can
help parents and children understand what is going on, sometimes it can provide useful explanation for a teacher who finds a child to be overactive in class and sometimes it can constitute a pragmatic term providing help, understanding and indulgence.

Concluding comments

This study has examined the procedures and institutional tools used when making an ADHD diagnosis in a psychiatric clinic, and it has analysed aspects of the dialogues between the staff members. Three institutional tools were found to be essential in the diagnostic work of the psychiatric clinic:

(1) A set of tools for gathering information focused on ADHD behaviour, as the psychiatric clinic is working from a hypothesis of a suspected ADHD diagnosis.

(2) A set of norms, implicit or explicit, numerical or verbal, that make it possible to evaluate the child's behaviour, and

(3) A negative form of reasoning deployed through discussions to exclude other possible causes of the disturbed behaviour.

The analysis showed that the psychiatric clinic needs a working hypothesis in order to begin processing an ‘NB-ADHD’ case. This focus was very clear in the gathering of information with its strong focus on determining the occurrence of ADHD behaviour. It was pointed out that there is a risk of misinterpretation, for example recording something as an instance of impulsive behaviour even though it is intentional and meaningful behaviour (the example of Mette adjusting the light level on the computer screen during test session). How is it possible to distinguish these two types of behaviour from one another, if not by mere interpretation of the visible behaviour (Wells 1999, 4)? Further research ought to investigate the ways in which the professionals in their practical work distinguish types of behaviour from one another, and discuss this issue further.

The different uses of the term and concept of ADHD should be researched further (Brinkmann 2014; Singh 2011). How is the term ADHD used as a conceptual resource in different contexts of children's everyday lives? Does the use of ADHD shift from primarily being a description to primarily being an explanation as it travels from the clinic to school, and what would this imply?

More research is needed on the necessary premises of the discussions deployed in the negative mode of reasoning that is so significant. What are the bases of the premises that make it possible to rule out numerous alternative causes of lack of attention? Is it possible to make these premises explicit, and will they withstand critical scrutiny? Furthermore, the recurrent use of dichotomies structuring the discussions of the psychiatric staff should be further researched. Does this way of communicating artificially cut off some of the complexity of children’s problems?

Finally, it seems necessary to point to the narrow scope and methodological limitations of a case study like this one. It has a small sample, and the presence of a researcher during sessions and conferences may potentially affect the outcome. Furthermore, it is advised not to generalize across countries and diverse organizational contexts, as this case study investigates a specific Danish site. Nonetheless, the main findings and the similarity to main findings in American (Mehan et colleagues), UK (Hester) and Swedish (Hjörne & Säljö) studies strengthen the overall conclusion of the presence of a set of procedures and resources in the institutional categorization of children’s emotional and behavioural difficulties contributing to individualization and a potentially problematic one-sidedness.

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References


Appendix

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<tr>
<th>Transcript symbols</th>
<th>Description</th>
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<tbody>
<tr>
<td>...</td>
<td>Pause</td>
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<tr>
<td>(. . .)</td>
<td>Some talk is left out</td>
</tr>
<tr>
<td>UPPER-CASE</td>
<td>Loud or animated talk</td>
</tr>
<tr>
<td>[comment]</td>
<td>Comments, e.g. gestures, short explanations</td>
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