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ARTICLE

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# Diagnosis pressure and false positives: Toward a non-reductionist, polytomic approach of child mental problems

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## ABSTRACT

This paper discusses diagnosis pressure and false positives in child mental health care. Diagnosis pressure is the pressure to give a diagnosis even though the criteria for the diagnosis are not all satisfied. Such pressure may be exerted by clients, their context, or professionals. False positives are incorrectly assigned as mental disorders. The paper discusses prevalence of diagnosis pressure and false positives, some of their causes, and advantages and disadvantages of “getting” a diagnosis. Two relevant issues are discussed, namely, categorical versus dimensional approaches of mental disorders and the mind–body relation. Instead of mental health models that are based on a disorder–no disorder dichotomy or that reduce mental problems to either the brain or society, a polytomic (multifaceted) approach is proposed in which all people with mental problems, light or severe, have a place and can get the support they need. It is argued that Daniel Dennett’s view of the relation between body and mind is fruitful such that mental-health problems can be explained at different levels of abstraction: physical, functional, intentional, and/or moral. The Network Approach is briefly discussed as a promising application of what is proposed in the article.

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## 1. Introduction

Most mental health professionals involved in diagnosing and treating children will sometimes experience pressure – exerted by people in the context of the child – to make a (particular) diagnosis even when the professional is reluctant to make that diagnosis, because she thinks it might be unwarranted: teachers ask for ADHD-medicine for pupils so they will show less disruptive behavior in the classroom; parents ask for a dyslexia diagnosis for their daughter so she gets extra time when doing exams. Professionals themselves also sometimes feel the need to make a diagnosis for which not all criteria are satisfied, because the diagnosis will give the child access to

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help. Wakefield (2016, p. 108) calls this the clinician's dilemma, and Tavaglione and Hurst (2012) argue that clinicians are sometimes morally obliged to lie to insurance companies for the benefit of their patients. A related phenomenon is that of false positives: a child is diagnosed with a mental disorder, but afterward, this diagnosis is considered to be incorrect.

In the present paper, I will first briefly discuss the prevalence of diagnosis pressure and false positives and some of their causes. I focus on false positives resulting from wanting to help the client or from how disorders are conceptualized, and not on those resulting from weak diagnostic skills or errors. I will discuss advantages and disadvantages of getting a diagnosis, and then discuss the distinction between categorical and dimensional approaches of mental disorders, which has important consequences for deciding who will get a diagnosis. All of this will bring me to an important philosophical issue underlying the above-mentioned problems, namely, the mind–body relation. I will argue that a different view on the mind–body relation than is reflected in most of the current practices and discussions might lead to a professional practice that diminishes the need for “getting a diagnosis” while at the same time satisfying some of those needs of children and their context that stimulate the desire for a diagnosis.

## 2. The prevalence of diagnosis pressure and false positives

Scientific studies regarding diagnosis pressure are scarce. In 2015, two Dutch ministries, together with 13 organizations of parents and professionals, developed a plan to better deal with the increasing numbers of children showing ADHD-like behavior (AJN, 2015). A quote says that “many professionals experience pressure of parents, schools, and others to make a diagnosis” (AJN, 2015, p. 8). Thereupon, the NVO (the Dutch professional association of pedagogues and educationalists), together with one of the ministries, organized two expert meetings concerning diagnosis pressure, as reported by Van der Horst (2017). Participants were asked to indicate on a ten-point scale the severity of the diagnosis pressure problem. In the first meeting (comprising of 13 professionals and parents), the mean score was 6.2. However, six marks were higher than 7, and four marks were lower than 6, so opinions diverged rather strongly. In the second meeting (comprising of nine scientists), the mean was 5.6, with a smaller difference of opinion.

Skellern, Schluter, and McDowell (2005; see also Skellern, McDowell, & Schluter, 2005) investigated how child psychiatrists dealt with uncertainty concerning the diagnosis of ASD. 79 pediatricians and 26 child psychiatrists (85% and 58% of the population, respectively) in Queensland, Australia, anonymously self-reported: 58% reported to have at least once given a child an ASD diagnosis without the child satisfying the criteria because this enabled them to help the child. Furthermore, 36% indicated that they

sometimes gave a diagnosis to a child in order to let the parents be eligible for financial aid.

Some studies have been conducted on false positives. Bruchmuller, Margraf, and Schneider (2012) found that 20% of 473 psychotherapists working mostly with children and adolescents gave a diagnosis of ADHD in a vignette of a child while two necessary criteria for ADHD were not met, and 15% gave such a diagnosis in a vignette while three necessary criteria were not met. Basu and Parry (2013) investigated the prevalence of autism over the years from 2000 to 2006 and found the numbers for classic autism to be fairly stable. However, the figures for Asperger syndrome and PDD-NOS were very unstable, which might suggest that other variables play a part in diagnosing these less severe disorders than just directly observable symptoms. Sciotto and Eisenberg (2007) discuss overdiagnosis of ADHD, defining overdiagnosis as when “the overall number of false positives substantially exceeds the overall number of false negatives” (p. 107). They conclude that “the most defensible conclusion” is that ADHD is frequently misdiagnosed, but that there is insufficient evidence for systematic overdiagnosing. Wakefield (2016) says, referring to a study in the United States concerning the years from 2003 to 2011, that “diagnosis has clearly become untethered from medical reality when one out of five boys nationally is diagnosed with ADHD” (p. 124).

Studies on the frequency of false positives in mental health care are methodologically difficult. Without a “hard” physical cause of a particular mental disorder, which holds for most classifications in the DSM, it is hard to diagnose the disorder beyond doubt and thus also hard to determine the number of false positives. For the same reason, reversing a once given diagnosis in the mental health domain is highly uncommon. It is easier to discover that a broken ankle is not broken after all than it is to detect that an ADHD diagnosis was unjustly made. Moreover, there is seldom feedback on such a diagnosis (for a discussion of cognitive errors in making diagnoses, see Croskerry, 2003; Norman & Eva, 2010).

### 3. Some causes of diagnosis pressure and false positives

Websites and social media popularize terms like ADHD, autism, and dyslexia and the associated symptoms, problems, and treatments. This helps clients and their context to get important information in an accessible and cheap way. However, as Wakefield (2016) states, it also increases the responsibility of those who define disorder classifications. Professional terms have devaluated (e.g., “Mark is so autistic lately, he is playing computer games all the time and never wants to go out”), and sometimes, people in the context of the child think it appropriate to tell the professional what they think is wrong with the child (e.g., Michael, 2010).

The pharmaceutical industry adds to the popularization of disorders. Batstra and Frances (2012) describe how in the United States the pharmaceutical industry sells diseases to the public. They hire celebrities to promote the latest medicine, and via “aggressive direct-to-consumer promotional campaigns, . . . promote consumer familiarity with diagnoses and drugs” (p. 475). Studies show that “advertisements for psychotropic drugs contain less text, are less likely to include specific information about the drug and its efficacy, and use more negative images portraying individuals as troubled . . . [than advertisements for other drugs]” (p. 475). Claims in advertisements are often not supported by research, and more than half of the experts involved in writing the DSM-IV had ties with the pharmaceutical industry (p. 475). According to Cosgrove and Krinsky (2012), 63% of the experts involved in writing the DSM-5 had such ties (see the numbers for the Netherlands in Vandereycken & Van Deth, 2006). All of this might result in greater familiarity with disorders and drugs, greater alleged seriousness of disorders, and greater normalization of drug use for (alleged) illnesses.

Van der Horst (2017) points to the highly refined and standardized diagnostic instruments and to risk assessment. For instance, the constant monitoring of progress in education can lead to earlier diagnosis: “if parents are invited to school for ten-minute conversations with the teacher all the time, both parents and teachers are fed-up with it at a given moment and think that a diagnosis will bring relief because it seemingly tells you what the problem is” (p. 1). As regards risk assessment: nowadays, young parents are overwhelmed with advice and warnings, so it is understandable that they are more prone to think there is something wrong when their child behaves only a little bit differently from other children.

It is important to see that the diagnostic process in the mental health domain often involves a reification, namely, in cases where an independently identifiable source for the alleged disorder is lacking – which holds for most DSM classifications. By attaching a label to a set of behaviors, the diagnostic process turns that set of behaviors into a thing: a disorder. Classifications or diagnoses such as ADHD, at least in the eyes of the general public, refer to a “discernible something” inside the patient or client. Most probably, these classifications also function as such for many professionals. The use of the word ‘disorder’ instead of, for instance, ‘autism spectrum behaviors’ reinforces this reification.

The reification involved in the diagnostic process usually implies that the “discernible something” is situated at the neurological level and is not caused by any fault of the client or her context. Notice that diagnoses were made in medicine – where these usually referred to clear biological phenomena – before they started to be made in mental health care, first in psychiatry and then also in psychology and related fields. Just like not blaming patients for having caught influenza, we do not blame them for

“having”ADHD. Wakefield and First (2003) implicitly confirm both the reification and the connotation of innocence by saying that “a disorder is something in the individual; it is not simply a bad relationship or poor role performance” (pp. 33–34).<sup>1</sup>

Diagnostic labels such as ADHD and ASD are often used both as a name for a condition and as a name for its cause: think of sayings like “Mohammed was so very inattentive when the teacher explained the assignment because he has ADHD.” If ADHD is merely a classification of a set of behaviors or symptoms, this saying amounts to: “Mohammed shows ADHD-like behavior because he has ADHD-like behavior,” which is circular. This identification of the behavior with the cause not only exemplifies but also reinforces the reification that resulted from the diagnostic process.

The reification of problematic behavior, the connotation of innocence, and the identification of condition and cause bring about most of the advantages and part of the disadvantages of getting a diagnosis.

#### **4. Advantages of getting a diagnosis**

A diagnosis not only provides the parent or teacher with one word for a complex set of behaviors shown by the child (i.e., “ADHD” instead of “not concentrated, doesn’t listen, hyperactive, never finishes anything”), it also provides an explanation for the behaviors: “Now at last we know why Sheila behaves like that! She has autism!” Moreover, this explanation lies outside their own behavior: the child “is” (born) autistic – she did not become autistic because of her upbringing by the parent; the child “has” dyslexia – she didn’t develop reading problems because of bad teaching. A diagnosis can also excuse unsubstantiated expectations: “If the child didn’t have dyslexia, she would go to university just like her sister.” In addition to these mental and social rewards, there can be other rewards, for instance, when a diagnosis gives access to financed treatment or more time for doing exams.

For the child too, getting a diagnosis can be a relief. Now, she knows (or so she thinks) where these behaviors (feelings, thoughts, low scores) come from that have made her stand apart from her peers – and these behaviors have a name. The child now also knows the problem is not her fault. Glazzard (2010) did a small survey with nine children diagnosed with dyslexia in two mainstream secondary schools and found that having a diagnosis contributed to a positive self-image: “they felt that the label gave them a way of explaining their difficulties to their peers and the word ‘dyslexia’ gave them a reason for their difficulties.” (p. 67). However, Glazzard’s participants also tell how their peers make fun of them, even when knowing the diagnosis.

## 5. Disadvantages of getting a diagnosis

Even though labels like ADHD and dyslexia are very common, children diagnosed as such often encounter exclusion by their peers (O'Driscoll, Heary, Hennessy, & McKeague, 2015) or lower expectations by their teachers. Batzle, Weyandt, Janusis, and deVietti (2010) asked nearly 300 teachers to score on a 7-point Likert scale the behavior, IQ, and personality for descriptions of children that allegedly had either no label or an ADHD label. Children with ADHD descriptions were rated significantly lower. Arkin (2013) asked 44 primary school teachers and 54 mental health professionals to rate descriptions of female adolescents with behavioral problems, with or without an ADHD label. The participants perceived adolescents with the label as having lower social acceptance and lower ability to make close friends. Ohan, Visser, Strain, and Allen (2011) did a similar study with 34 elementary school teachers and 32 elementary school children. Descriptions of children with ADHD elicited more negative emotions and the teachers were less confident that they could handle the child's problems.

Secondly, most children prefer to be "normal," even when the label is positive, like giftedness (Cross, O'Reilly, Kim, Mammadov, & Cross, 2015). Labels set children apart, not only from children without problems but also from children with "normal" problems: "Aisha has problems with reading, but you have dyslexia; John can sometimes be very boisterous, but you have ADHD; these other children have problematic behavior, you have a problematic condition. What they have can pass, what you have can't." Notice how the reification that happened in the diagnostic process plays a part here. Gambrill (2014) describes how diagnoses provide an (illusory) sense of control because they supposedly distinguish people with life problems from people who are ill. Littrell (2015) discusses this sense of control saying that, ironically, most mental disease diagnoses "carry the implication that the behavior associated with the disorder reflects the physiology to which one is fated (an absence of control)" (p. 14).

Thirdly, labels are sticky. Child and label easily coincide such that the label is the child's most prominent characteristic, as viewed by others or even by herself. There is less attention for behavior that doesn't fit the label, whereas behavior that is not related to the label will be categorized more easily as belonging to the label. Labels also are sticky because they remain with the person. Diagnoses of mental disorders hardly ever expire. Van der Horst (2017) describes a therapist who decided not to label a client with a (justified) diagnosis of schizophrenia even though it was the only way to get financed help. The therapist explained that the label would stick to the client for the rest of her life, impeding her to get a mortgage, a job, and so on.

Fourthly, a diagnosis might become a self-fulfilling prophecy. The child starts behaving more and more in accord with the diagnosis, all the more because her context treats her like someone with the diagnosis. Littrell (2015, pp. 14–15) discusses the advantages of believing to possess a free will. Studies have shown that people with an obesity diagnosis find it more difficult to stay on a diet than people without such a diagnosis, and the better school results of Asian than American children are partly attributed to the fact that the former believe that achieving comes from hard work instead of from innate intelligence (cf. the work of Dweck, e.g., Kamins & Dweck, 1999). According to Littrell, diagnoses decrease patients' feeling of having a free will because they are associated with ineluctable behavior.

Finally, diagnoses cause additional explanations for the child's deviant behavior to get out of sight. Indeed, a prerequisite for most DSM classifications is that other explanations should be excluded; but even if reading instruction was good at the time the child was diagnosed with dyslexia, a year later it can be less good. However, the inferior instruction then will not be viewed as an (additional) cause of the reading problems. Khoury, Langer, and Pagnini (2014, p. 5) state that after a diagnosis, clinicians are less likely to seek for situational explanations of the patient's problems since the diagnosis already assigned the problem to the individual. The tendency to underestimate external causes of behavior instead of internal causes is a common phenomenon found in social psychology (i.e., the *fundamental attribution error*, see for a discussion Sabini, Siepman, & Stein, 2001). Especially in mental health care, one should guard against it.

Incorrect diagnoses have additional disadvantages at the level of the child, the professionals, scientific research, and society at large. Firstly, being incorrectly diagnosed with a disorder is ethically unjust, even if this is done to avoid a greater harm. Better solutions might be possible. Secondly, the problems might incorrectly be assigned to the individual where they should be assigned to her context or the larger society: with correct diagnoses, these might be additional explanations getting out of sight; with incorrect diagnoses, these might be the only explanations for the child's problems. Thirdly, a high prevalence of false positives might decrease the amount of money available for correctly diagnosed children. Fourthly, the credibility of diagnostic labels and of the professionals who assign them might decrease when prevalence is pushed up because of many false positives. With that, the societal support for financial aid might decrease. Vinkers and Vis (2017) describe how the high number of users of antidepressants has led to the idea that depression is a fashionable disease, not to be taken too seriously. Finally, outcomes of scientific research are blurred when part of the participants in a study have incorrectly been assigned with the label in question.

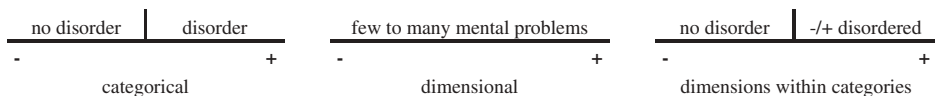


## 6. The category–Dimension discussion

A possible solution for the diagnosis pressure problem requires insight in some presuppositions underlying the above sketched phenomena. The reification of behaviors through disorder labels suggests that mental illness is an all-or-nothing phenomenon: you do have the disorder or you do not. In contrast, the so-called anti-psychiatry movement (popular around 1970–1990) suggested that most people at some moment in their life show some symptoms of some mental disorder. In its extremity, this view aborted the concept of mental disorder altogether. Thomas Szasz (2010), seen as the most prominent representative of this view, rejected the anti-psychiatry label, saying he aimed to provide socio-political criticisms against the idea that mental illnesses belong to the domain of medicine. Nowadays, the discussion concerns categorical versus dimensional approaches of mental disorders (e.g., APA, 2013; Trull & Durrett, 2005; Walters, 2013). Figure 1 presents three models of mental health and illness.

In a categorical model, people have a disorder if they have more than  $N$  problems. Below that threshold, they do not have the disorder, although they may have problems. In a dimensional model, there is no discrete line between people with and without a disorder. Either the disorder terminology is omitted, or people with zero problems do not have the disorder, and people with many problems do have it, whereas those in between are not accounted for. In the third model, within the category of people with a disorder, the severity of the disorder may vary. The models are sketched here in terms of quantitative measures, but these can be replaced or combined with qualitative measures.

The DSM–IV was mainly categorical; the DSM–5 has many categorical disorders but also several disorders modeled as dimensions within categories. For instance, in the DSM–IV, people might have autism or Asperger or PDD–NOS – all separate classifications. In the DSM–5, all people formerly diagnosed as having these disorders get Autism Spectrum Disorder as diagnosis. The APA (2013) explains that such continuum-based classifications will allow professionals to treat disordered clients with more or rather less severe symptoms differently.



**Figure 1.** Models of mental health and illness (- few, + many mental problems).

Categories are convenient and make a clear distinction between healthy and disordered people. The point where  $N$  lies can be shifted, based on new insights. However, some people fall between two stools. Generally speaking, the stricter the threshold for being assigned with a disorder, the higher the number of people with similar problems that do not satisfy the criteria. Some of them will still try to get the diagnosis from the professional. In contrast, the lower the threshold, the more people will be included, which might raise the number of false positives. Moreover, conceptually, a sharp line between disorder and no disorder often is problematic.

The dimensions-within-categories model allows for more fine-tuned therapy for people with different degrees of the disorder. However, the problematic sharp line between people with and without the disorder remains. This model has the further disadvantage that relevant information can get lost. Above, I discuss Basu and Parry (2013), who found that prevalence figures for lighter forms of autism were much more unstable than those for classic autism. In the DSM-5, this finding can easily vanish since counting lighter forms of autism within the ASD category is more complex.

The dimensional model has practical disadvantages. It does not provide handles to policy makers for making choices regarding which treatments will be reimbursed and which will not. Moreover, most professionals probably want a more fleshed-out model in which to place people with mental problems and will find the abortion of the concept of disorder hard to swallow.

In order to develop a better model, we should look at relevant underpinnings of the existing models, especially regarding the relation between mind and body.

## 7. The mind–Body relation and the diagnosis pressure problem

The relation between mind and body is highly relevant for mental health care.<sup>2</sup> Views on the mind–body relation underly the diagnosis pressure problem. I discuss here only the relevant ones.

Ryle, 1949/2002 thinks that what we call the mind is actually a set of dispositions to behave in certain ways. For instance, saying “I feel hungry” simply means that I have a tendency to pick up food and eat. Ryle’s reductionist view was criticized because not all mental states can be identified with a particular behavior, and a conceptual relation between mental states and behavior does not exclude a causal relation. Some problems with Ryle’s views were solved by approaches that viewed mental states in terms of how they are caused and what they cause, instead of what they are (e.g., Lewis, 1972). These functional views contributed to the development of the computational theory of mind of, amongst others (Fodor, 1993). Fodor

views the brain as a biological computer programmed by evolution; mental states are discrete entities in our brain that cause our behavior.

Dennett (1996) takes an in-between position. He argues that the mind does not exist as trees and tables do, but more as ideologies or trends in fashion. In line with Ryle, he thinks that mind and brain are different conceptual categories. While we can describe the brain and its processes at the sub-personal level, as parts of human beings, we describe mental states at the personal level – just like we ascribe character traits to whole persons. Brains do not think; people think – or at any rate, “think” means something different in these two sayings. Dennett’s (1973) distinction does not refute the idea that the mind originates from the brain and that brain processes cause intelligent behavior. However, he thinks that we should not identify brain processes with the mind. He suggests the possibility of different types of explanations of behavior (or *stances*, as termed by Dennett, 1973) with differing degrees of abstraction as a way to deal with the mind–body distinction. We can explain behavior purely physically (i.e., in terms of what happens in the brain, the muscles, and the physical chemistry), in terms of what humans or particular functions of the human biological system are designed to do, in terms of people’s intentions, or in terms of people’s personal moral beliefs. The more we recede from concrete physical explanations, the less accurate our predictions of behavior will be, yet the more easily predictions can be made, according to Dennett (1973). He thinks that adequate and meaningful – be it not perfect – predictions of human intelligent behavior are possible if we view them from an intentional stance: people are intentional beings.

Much of what I have described in Sections 1 to 5 reflect a reductionist view of the mind–body relation. The mind is reduced to the brain and thus to the body. A mental problem only counts as a disorder if we can reduce it to brain dysfunctioning. The assumed “discernible something” that causes the disorder (or that “is” the disorder) might be a static brain deviation or a more dynamic brain dysfunctioning; a process going wrong. Clients or their context asking for a diagnosis actually ask to be placed on the “right” side of the disorder–no disorder boundary line; that is, the side where the problems are rooted in a (now or in the near future) demonstrable brain deviation, where the problems are hence not their fault, and where insurance companies know that the client is not malingering but has “real” problems that require paid-for treatment.

Not only clients but also professionals sometimes identify “real” problems with physically demonstrable problems. The governmental financier of Dutch scientific research, NWO, welcomed research showing a minor difference in the brains of people diagnosed with ADHD (Bralten, 2015), saying that “ADHD really exists and is demonstrable in brain and DNA” (NWO, 2015). Dutch Professor Batstra put Bralten’s research into

perspective, saying that ADHD is a behavior, not an illness (Zembla, 2017). A Dutch expert on spelling problems Professor Bosman made the front pages in the Netherlands doubting the existence of dyslexia, saying it is a result of bad teaching (NOS, 2017), whereupon professional organizations protested vehemently (e.g., Expertisecentrum Nederlands, n.d.).

The view in which the mind is reduced to the brain goes best with a categorical model of disorders or with a dimensions-within-categories model (see Figure 1), such that disordered people have brain problems, whereas not-disordered people have life problems. Wakefield (2016) thinks the DSM-5 has not become as dimensional as the APA originally wanted because dimensionalization is a less “medical” (his quotation marks) approach of disorders, and the distinction between normal variation and disorder vanishes in such a system. Also, the approach of (Sullum, 2000; Szasz, 2010) is reductionist. Szasz did not reduce mental disorders to brain disorders but to conflicts between individuals and society or between individuals.

## 8. Toward a non-reductionist, polytomic approach of mental problems

I will first sketch an alternative model for categories and dimensions, then I will apply Dennett’s view to mental health problems.

Instead of a categorical, dimensional, or dimensions-within-categories model, I propose a categories-within-dimensions model of mental problems (see Figure 2).

One can label the far ends of this scale with “not innate–innate,” “temporary–persistent,” or “life-problem based–biologically based,” and so on, depending on what the scale is aimed at. The categories provide handles for treatment type and criteria for cost reimbursement. Just like in Figure 1, the line can also be qualitative, and several different dimensional lines can be applicable to a client. In this model, the degree of specialist help increases when the burden of problems for the client and her context increases, especially when, at the same time, their ability to bear that burden is lower. Professionals can help to develop criteria for reimbursement. Interventions can vary from very light (e.g., self-help groups or books) to one-to-one specialist help.



**Figure 2.** Categories within dimensions model of mental problems (– few or + many mental problems).

This model of mental problems can be combined with Denett's stances. If we view what we now term 'mental disorders' as complex mixtures of physical phenomena, functional aspects of human biology, intentional aspects of persons' behavior, and sometimes moral aspects of persons' behavior, we can develop a rich approach of mental problems and their treatment. Behavior that we now term 'ADHD' might be treated with medication (physical stance) and/or we look how and in what circumstances this behavior is functional for the child. Then, we can teach her other behavior and create circumstances in which she can more easily show such behavior. In other cases, an intentional stance will be more useful, for instance, in therapies for children with anorexia who need to be convinced that they can fight the tendency not to eat because they are beings with their own free will.

Diagnoses in which mental health problems are viewed from different levels of abstraction will be more dynamic and have less of a connotation of permanency. Furthermore, such an approach neither puts all the blame on the individual nor on her context or on society at large; this approach can see possible contributions of all these parties in the child's problems. Children are no longer disordered or have labels that might function as a stigma; they have "normal" problems, though these might be severe. Children with problems might still be bullied, but their bullying peers no longer have an easy disorder label at hand to use as a weapon.

Quite promising is the Network Approach of mental disorders, developed about a decade ago (Borsboom, 2017). This approach does not assume sets of symptoms as described in the DSM to have common causes. Rather, symptoms within a DSM category cause and reinforce each other and are nodes in a symptom network. Causal relations between nodes can be grounded in biological, psychological, and/or social processes. Conditions outside the network – in the so-called external field – might activate or deactivate (part of) the network, and this external field can be outside or inside the person (but not inside the network). A person can have a disadvantageous disposition yet show no symptoms initially. Triggers in the external field can awaken the network or produce it. The symptom-activation spreading through the network can produce feedback mechanisms that make the network self-sustaining. A consequence of this is *hyper-esis*: the event that activated the network does not deactivate it by disappearing. Interventions based on this network theory focus on symptoms, the external field, and/or the network itself.

The Network Approach is categorical – the DSM categories are the starting point – but it can be made to fit in a categories-within-dimensions model. Networks are either self-sustaining or not self-sustaining, which points to chances of breaking out of the circle, and to different degrees of problem severity. This makes it a dynamic view of mental problems; the

ability to bear the mental problems burden can be viewed as a node in the network. Mental disorders are not reduced to either the brain or body, or to society, although they are a “discernible something”: they are networks of tightly connected and mutually reinforcing symptoms. Where Dennett suggests different stances that can be taken alternatingly, the Network Approach suggests combining them as explanations for mental disorders.

Therefore, instead of models that are based on a disorder–no disorder dichotomy or which reduce mental problems to either the brain or society, I plead for a polytomic (multifaceted) approach.

## 9. Summary and conclusion

In the present paper, I have discussed advantages and disadvantages for children and their context of “getting” a mental disorder diagnosis. I have argued against a dichotomic model of people either having a disorder (and with that, recognition, financed help, innocence), or not having a disorder but “only” life problems, and against a model that reduces all mental problems to social problems. Instead, I propose an approach in which all people with mental problems, light or severe, have a place and can get the support they need. Furthermore, I have argued that Dennett’s view of the relation between body and mind is fruitful such that mental health problems can be explained at different levels of abstraction: physical, functional, intentional, and/or moral. The Network Approach seems a promising application of much that I have proposed here.

Evidently, no easy solutions are available. However, children with mental health problems will certainly profit from an approach that emphasizes labels less and looks at their problems from different angles. My proposals are at least worth further discussion.

## Notes

1. However, some disorders can have a pejorative connotation, for instance, antisocial personality disorder. I thank an anonymous reviewer for pointing this out.
2. For an overview of the mind–body discussion, see Slors, de Bruin, and Strijbos (2015).

## Disclosure statement

No potential conflict of interest was reported by the author.

## Notes on contributor

*Agnes Tellings* (PhD) studied Special Education and Philosophy of Education. She performs both empirical studies (e.g., into children’s mental lexicon development) and more

philosophical studies regarding special education. She teaches university students about both subjects.

## References

- AJN. (2015). *Gezamenlijk plan van aanpak gepaste zorg voor kinderen met druk, impulsief gedrag en aandachtsproblemen 2015 – 2016* [Collective plan suitable care for children with boisterous, impulsive behavior and concentration problems 2015–2016]. Retrieved from <https://www.passendonderwijs.nl>
- APA. (2013). *Diagnostic and statistical manual of mental disorders fifth edition*. Arlington, VA: American Psychiatric Publishing.
- Arkin, J. (2013). *What's in a name? The influence of ADHD-inattentive type label on perceived social competence as viewed by mental health professionals and teachers* (Dissertation Santa Barbara). Antioch University.
- Basu, S., & Parry, P. (2013). The autism spectrum disorder 'epidemic': Need for biopsychosocial formulation. *Australian and New Zealand Journal of Psychiatry*, 47(12), 1116–1118.
- Batstra, L., & Frances, A. (2012). Diagnostic inflation: Causes and a suggested cure. *The Journal of Nervous and Mental Disease*, 200, 474–479.
- Batzle, C. S., Weyandt, L. L., Janusis, G. N., & deVietti, T. L. (2010). Potential impact of ADHD with stimulant medication label on teacher expectations. *Journal of Attention Disorders*, 14, 157–166.
- Borsboom, D. (2017). A network theory of mental disorders. *World Psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 16, 5–13.
- Bralten, J. B. (2015). *Genetic factors and the brain in ADHD* (Dissertation). Radboud University, Nijmegen.
- Bruchmuller, K., Margraf, J., & Schneider, S. (2012). Is ADHD diagnosed in accord with diagnostic criteria? Overdiagnosis and influence of client gender on diagnosis. *Journal of Consulting and Clinical Psychology*, 80(1), 128–138.
- Cosgrove, L., & Krimsky, S. (2012). A comparison of DSM-IV and DSM-5 panel members' financial associations with industry: A pernicious problem persists. *PLoS Medicine*, 9(3), 1–4.
- Croskerry, P. (2003). The importance of cognitive errors in diagnosis and strategies to minimize them. *Academic Medicine*, 78(8), 775–780.
- Cross, J. R., O'Reilly, C., Kim, M., Mammadov, S., & Cross, T. L. (2015). Social coping and self-concept among young gifted students in Ireland and the United States: A cross-cultural study. *High Ability Studies*, 26, 39–61.
- Dennett, D. (1973). Mechanism and responsibility. In T. Honderich (Ed.), *Essays on freedom and action* (pp. 157–184). London, UK: Routledge.
- Dennett, D. (1996). *The intentional stance*. Cambridge, MA: MIT Press.
- Expertisecentrum Nederlands. (n.d.). Dyslexie bestaat. Retrieved from <http://www.expertisecentrumnederlands.nl/soorten-onderwijs/po/dyslexie-bestaat>
- Fodor, J. (1993). *The Elm and the expert*. Cambridge, MA: Bradford.
- Gambrill, E. (2014). The *diagnostic and statistical manual of mental disorders* as a major form of dehumanization in the modern world. *Research on Social Work Practice*, 24, 13–36.
- Glazzard, J. (2010). The impact of dyslexia on pupil's self-esteem. *British Journal of Learning Support*, 25, 63–69.
- Kamins, M., & Dweck, C. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35(3), 835–847.

- Khoury, B., Langer, E. J., & Pagnini, F. (2014). The DSM: Mindful science or mindless power? A critical review. *Frontiers in Psychology*, 5, 602.
- Lewis, D. (1972). Psychophysical and theoretical identifications. *Australian Journal of Philosophy*, 50, 249–258.
- Littrell, J. (2015). *Neuroscience for psychologists and other mental health professionals*. New York, NY: Springer.
- Michael, S. (2010). The know-it-all patient. *Physician Practice*. Retrieved from <http://www.physicianspractice.com/articles/know-it-all-patient>
- Norman, G. R., & Eva, K. W. (2010). Diagnostic error and clinical reasoning. *Medical Education*, 44, 94–100.
- NOS. (2017). Hoogleraren: Dyslexie is vooral gevolg van slecht onderwijs [Professors: Dyslexia mainly consequence of bad teaching]. Retrieved from <https://nos.nl/artikel/2157214-hoogleraren-dyslexie-is-vooral-gevolg-van-slecht-onderwijs.html>
- NWO. (2015). ADHD bestaat echt en is zichtbaar in hersenen en DNA. Retrieved from <https://www.nwo.nl/actueel/nieuws/2015/nihc/adhd-bestaat-echt-en-is-zichtbaar-in-hersenen-en-in-dna.html02-02-2015>
- O'Driscoll, C., Heary, C., Hennessy, E., & McKeague, L. (2015). Adolescents' beliefs about the fairness of exclusion of peers with mental health problems. *Journal of Adolescence*, 42, 59–67.
- Ohan, J. L., Visser, T., Strain, M., & Allen, L. (2011). Teachers' and education students' perceptions of and reactions to children with and without the diagnostic label "ADHD". *Journal of School Psychology*, 49, 81–105.
- Ryle, C. (1949/2002). *The concept of mind*. Chicago, IL: University of Chicago Press.
- Sabini, J., Siepmann, M., & Stein, J. (2001). The really fundamental attribution error in social psychological research. *Psychological Inquiry*, 12(1), 1–15.
- Sciutto, M. J., & Eisenberg, M. (2007). Evaluating the evidence for and against the over-diagnosis of ADHD. *Journal of Attention Disorders*, 11(2), 106–113.
- Skellern, C., McDowell, M., & Schluter, P. (2005). Diagnosis of autistic spectrum disorders in Queensland: Variations in practice. *Journal of Paediatrics and Child Health*, 41, 413–418.
- Skellern, C., Schluter, P., & McDowell, M. (2005). From complexity to category. Responding to diagnostic uncertainties of autistic spectrum disorders. *Journal of Paediatrics and Child Health*, 41, 407–412.
- Slors, M., de Bruin, L., & Strijbos, D. (2015). The Mind–Body Problem. In M. L. Slors, M. L. de Bruin, & D. Strijbos (Eds.), *Philosophy of mind, brain and behaviour* (pp. 17–60). Amsterdam: Boom.
- Sullum, J. (2000). Curing the therapeutic state: Thomas Szasz interviewed by Jacob Sullum. *Reason*. Retrieved from <https://reason.com/archives/2000/07/01/curing-the-therapeutic-state>
- Szasz, T. (2010). *The Myth of mental illness*. New York, NY: Harper and Collins.
- Tavaglione, N., & Hurst, S. A. (2012). Why physicians ought to lie for their patients. *The American Journal of Bioethics*, 12(3), 4–12.
- Trull, T. J., & Durrett, C. A. (2005). Categorical and dimensional models of personality disorder. *Annual Review of Clinical Psychology*, 1, 355–380.
- Van der Horst, J. (2017). *Rapportage expertbijekomsten 'diagnosedruk' [Reporting expert meetings 'diagnosis pressure']*. Culemborg: Quanta.
- Vandereycken, W., & Van Deth, R. (2006). *Psychiaters te koop [Psychiatrists for sale]*. Antwerpen: Garant.
- Vinkers, C., & Vis, R. (2017). *Even slikken [Just swallow]*. Amsterdam: Prometheus.



- Wakefield, J., & First, M. (2003). Clarifying the distinction between disorder and nondisorder. In K. A. Phillips & H. A. Pincus (Eds.), *Dilemmas in psychiatric diagnosis* (pp. 23–55). Washington, DC: APA.
- Wakefield, J. (2016). Diagnostic issues and controversies in DSM-5: Return of the false positives problem. *Annual Review of Clinical Psychology*, 12, 105–132.
- Walters, G. D. (2013). Dimensions vs. categories in psychiatric diagnosis. *The Journal of Nervous and Mental Disease*, 201(6), 532–533.
- Zembla. (2017). ADHD is geen ziekte maar gedrag [ADHD not an illness but behavior]. Retrieved from <https://zembla.bnnvara.nl/nieuws/adhd-is-geen-ziekte-maar-gedrag>