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UNIVERSITY OF RIJEKA
FACULTY OF HUMANITIES AND SOCIAL SCIENCES

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M.A. program in Philosophy and History

The criminal responsibility of persons within the autistic spectrum

MASTER THESIS

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Contents

Sažetak

Ovaj rad iz filozofske perspektive istražuje jesu li visokofunkcionalni autisti kazneno odgovorni za svoje zločine s naglaskom na obranu neuračunljivošću. Prema hrvatskom Kaznenom zakonu, ali i kaznenim zakonima usvojenim u mnogim drugim državama, kaznena odgovornost osobe je podrivena uslijed neuračunljivosti kada su zadovoljena dva uvjeta. Prvi uvjet može se nazvati zahtjevom za nesposobnošću. U njemu se navodi da osoba u trenutku počinjenja zločina iskazuje kognitivne ili voljne nesposobnosti relevantne za kaznenu odgovornost. U drugom, nazovimo ga zahtjevom za mentalnim poremećajem, navodi se da ispričavajuće nesposobnosti postoje uslijed mentalnog poremećaja.

Što se tiče primjene uvjeta mentalnog poremećaja na visokofunkcionalne autiste, filozofski je izazov ponuditi zadovoljavajuću teoriju mentalnog poremećaja. Argumentiram da je zahtjev za mentalnim poremećajem opravdan zakonski uvjet ekskulpacije. Bavljenje pitanjem mogu li autisti biti oslobođeni odgovornosti zbog neuračunljivosti tako zahtjeva istraživanje imaju li oni mentalni poremećaj. Argumentiram da je Wakefieldova teorija mentalnog poremećaja kao štetne disfunkcije uvjerljiva u svrhu tog istraživanja. Argumentiram da popis osnovnih psiholoških sposobnosti koji je ponudio George Graham adekvatno razjašnjava pojam štete koji je u Wakefieldovoj teoriji ostao prilično nerazrađen. Argumentiram da se o pitanju je li visokofunkcionalni autizam poremećaj treba odlučivati od slučaja na temelju štete koju uzrokuje.

Što se tiče primjene zahtjeva za nesposobnošću na visokofunkcionalne autiste, filozofski je izazov objasniti kako empirijski neuropsihološki podaci o visokofunkcionalnim autistima mogu biti povezani sa zakonskim zahtjevima koji se tiču ispričavajućih nesposobnosti. Upotrebljavam teoriju kaznene odgovornosti koju su ponudili Hirstein et al., koja se temelji na izvršnim funkcijama kako bih povezao ove dvije domene. Tako tvrdim da kaznena odgovornost autista može biti smanjena uslijed oštećenja izvršnih funkcija, ali da ne mogu biti oslobođeni odgovornosti. Argumentiram da pojam prisile, koji je razradio Carl Elliott u raspravi o moralnoj odgovornosti osoba s voljnim poremećajima, također može biti primijenjen i u slučajevima kaznene odgovornosti autista.

Ključne riječi: Mentalni poremećaj; Visokofunkcionalni autizam; Kaznena odgovornost; Ubrojivost; Pokret neuroraznolikosti; Štetna disfunkcija; Izvršne funkcije; Prisila

Abstract

This thesis investigates, from a philosophical perspective, whether high-functioning autists are legally responsible for their crimes, with a focus on the legal defense by insanity. According to the Croatian Criminal Code, but also criminal codes adopted in many other countries, the legal responsibility of the person is undermined due to insanity when two conditions are satisfied. The first can be called the incapacity requirement. It states that a person, at the moment of committing the crime, exhibits cognitive or volitional incapacities, which are relevant for criminal responsibility. The second, let us call it the mental disorder requirement, states that the exculpatory incapacities are due to the presence of a mental disorder.

Regarding the application of the mental disorder requirement to high-functioning autists, the philosophical challenge is that of offering a satisfactory account of mental disorder. I argue that mental disorder requirement is a justified legal condition of exculpation. Thus, addressing the issue whether functioning autists can be excused due to insanity requires investigating whether they have a mental disorder. I argue that Wakefield's harmful dysfunction theory of mental disorder is a plausible account of mental disorder to be used in this investigation. I argue that the list of basic psychological capacities offered to George Graham adequately clarifies the notion of harm that is left rather underdeveloped in the Wakefield account. I argue that the question of whether high-functioning autism is a disorder should be decided on a case-by-case basis, depending on an assessment of the harm caused by it.

Regarding the application of the incapacity requirement to high-functioning autists, the philosophical challenge is that of explaining how the empirical neuropsychological data about high-functioning autists can be related to legal requirements concerning exculpating incapacities. I use the theory of criminal responsibility offered by Hirstein et al., which is based on executive functions to bridge these two domains. I thus claim that criminal responsibility of autists may be diminished due to impairments in executive functions but that they cannot be excused. I argue that the notion of duress, elaborated by Carl Elliott in the discussion of the moral responsibility of the people with volitional disorders, can also be applied in cases of criminal responsibility of autists.

Keywords: Mental disorders; High-functioning autism; Criminal responsibility; Accountability; Neurodiversity movement; Harmful dysfunction; Executive functions; Duress

Introduction

As a volunteer at the Office for Students with Disabilities at the University of Rijeka, I met a student whose behavior was uncommon. He had no visible disability, so I was very curious to find out about his problems. He was often unable to stick to the topic of the conversation and he tended to speak mostly about his life. He did not show much interest in the life of others, and he often interrupted others while speaking. I asked him about his difficulties, and he told me that he is autistic. He acknowledged that this causes problems for him. For instance, he starts to write answers in exams immediately after he gets the questions, before even thinking about possible answers, which is the main reason why he failed some exams. He admitted that he needs to slow down and be more careful during exams. I then started to wonder how autism affects responsibility. In the case of my acquaintance, the issue is whether it is fair to mark him down for certain performances. Moreover, and more dramatically, what should be the response of law to serious offences committed by autistic individuals? Some have argued that autistic individuals should be exculpated based on the insanity defense (e.g., Katz and Zemishlany 2006). Broadly speaking, this defense involves the claim that the offender, when committing the crime, did not have either cognitive or volitional capacities relevant for the criminal responsibility.

The main thesis of this work is that insanity defense should not be applied to autistic offenders by default, but that their responsibility can be diminished in certain cases. To defend this conclusion, I offer a general framework for thinking about the responsibility of autistic offenders. There are two general tenets of this framework. First, the mental disorder requirement is central in insanity defenses, which means that offender must suffer a mental disorder to be exculpated from responsibility. Second, executive functions represent cognitive and volitional capacities which are relevant for criminal responsibility (Hirstein et al. 2018). Executive functions are higher brain processes which enable engagement in complex and nonroutine actions.

In the thesis, I proceed as follows. In the first chapter, I describe the diagnosis of autism in the fifth version of the Diagnostic and Statistical Manual (from now on indicated with DSM 5) (APA 2013) and explain why I focus on the responsibility of high-functioning autists in this thesis. Moreover, I offer a clarification of the insanity defense by relying mostly on Croatian

law. I offer arguments in favor of the idea that having a mental disorder is a necessary condition for insanity defense.

Consequently, in the second chapter, I consider whether autistic individuals suffer a mental disorder. To answer this question, an account of mental disorder is needed. I argue that the hybrid account offered by Jerome Wakefield, across numerous papers (e.g., 1992, 2007, 2014) is an appropriate account of mental disorder. I discard arguments that have advanced some supporters of the neurodiversity movement, according to which autism is a natural variation instead of being a mental disorder. I argue that severe autism is a mental disorder, while in the case of high-functioning autism disorder status should be established on a case-to-case basis and depends on whether or not condition is harmful for its subject. I contend that the harm component in the harmful dysfunction account is vague and argue that the concept of harm is well captured by means of clinically significant capacities as listed by George Graham (2010). I assert that the concept of harm is both objective and subjective at the same time because on the one hand, capacities offered by Graham are indispensable to all people, irrespective of their sociocultural background or personal values and goals, while on the other hand, the assessment of performance of these capacities is determined by both sociocultural norms as well as personal values and goals. Considering the mental disorder requirement and the claim that only some high-functioning autists suffer mental disorder, only some of them can be exculpated based on insanity defense.

Following above considerations, in the third chapter, I investigate whether those high-functioning autists who suffer mental disorder have cognitive and volitional capacities required for criminal responsibility. The law doesn't state the exact psychological capacities that are relevant for criminal responsibility nor the method of how their performance is properly empirically assessed. Because of that, there is a need for a bridging principle between our folk understanding of responsibility and neuroscience. I argue that the executive function theory of responsibility offered by Hirstein et al. (2018) is an adequate solution to this problem. Given that claim, I turn to the discussion of autists´ responsibility offered by Kenneth Richman (2018), which is based on the analysis of executive functions impairments in autism. Although Richman is interested in moral responsibility, while I am interested in criminal responsibility, I argue that his discussion is relevant for criminal responsibility as well. In fact, the same cognitive and volitional capacities underpin both his account of moral responsibility and a plausible account of criminal responsibility. I contend that he has correctly concluded that high-functioning autist should be held responsible by default, but he is mistaken in claiming that

high-functioning autist can be exculpated. Instead, I argue that these autists are at least partially responsible because they are conscious of their cognitive and volitional impairments due to normal or high IQ and can apply many techniques to overcome some cognitive and volitional peculiarities associated with autism. I argue that criminal responsibility of autists is well captured by the concept of duress originally offered by Carl Eliott (1996: chapter 3). Elliott uses the concept of duress to capture moral responsibility of people who suffer volitional disorders because they are compelled to choose between acting in accordance with morally undesirable impulses and desisting from it, which causes significant distress. I argue that autists are often faced with duress because using these strategies causes psychological distress, while not using them increases the risk of autists breaking the law. However, this duress is not, as in many other cases, necessarily exculpatory.

1. Preliminary remarks about autism and criminal responsibility

1.1. Introduction

This chapter introduces the notion of autistic spectrum and basic notions associated with legal responsibility that are needed to address the problem whether or not offenders with autism are legally responsible for their crimes. First, I describe the symptomatology and classification of autism as stated in DSM-5. I also determine the class of autists whose responsibility is discussed in this thesis. Then I present components of guilt according to the Croatian Criminal Code, with a special focus on how they are involved in the insanity defense. Broadly speaking, according to this defense a person is exculpated for a crime if, when committing the crime, she had diminished or lacked certain cognitive or volitional capacities due to a mental disorder.

Before proceeding further, I want to clarify issues regarding the terminology which refers to people with autism in this thesis. I use identity-first language (i.e., "autists") instead of person-first language (i.e., "people with autism"). By doing so I have no intention to violate their dignity as people. As I mention later in the discussion of the neurodiversity movement, many autists think about autism as a part of their identity which they are proud of, and they prefer identity-first language (Brown 2013). Furthermore, according to studies, the use of person-first language increases stigmatization, which I would like to avoid (Gernsbacher 2017).

1.2. Autism

According to the fifth version of the Diagnostic Statistical Manual (From now on DSM-5), autism spectrum disorder is a neurodevelopmental disorder characterized by a lack of empathy, deficit in verbal and nonverbal communication, difficulties in understanding and maintaining human relationships, limited range of interests, repetitive behavior, and problems in adjusting behavior to different circumstances (APA 2013: 299.00; F84.0). Symptoms are divided into two categories: (1) Social Communication and (2) Restricted and Repetitive Behaviors. The DSM differentiates three levels of symptom severity: level 1 ("Requiring support"), level 2 ("Requiring substantial support") and level 3 ("Requiring very substantial support"). These levels represent environmental alterations necessary for normal everyday living.

Level 1 includes autists who live independently and have a satisfactory quality of life despite problems in social communication and struggles adapting to changes (e.g., starting and proceeding with conversation and lower interest in social interaction). These obstacles require behavioral therapy. Level 2 encompasses autists with social impairments, decreased verbal and nonverbal communication abilities and slight behavioral inflexibility (e.g., difficulties in dealing with changes, limited interest, and lower reactivity to social cues). They need assistance and therapy to achieve a good quality of life. Level 3 covers autists with minimal social interactions, who mostly lack the ability to speak. They have significant problems in everyday functioning and adapting to environmental changes.

In previous versions of the DSM, the terms *Asperger syndrome,* and *Pervasive Developmental Disorders – Not Otherwise Specified* were used to mark autism of level 1 and *Rett syndrome* and *Childhood disintegrative disorders* to mark level 3 autism. In the newest edition, these categories were put on a single spectrum. From this it can be noticed that autism is a heterogeneous disorder, including people with severe learning and verbal impairments as well as high-functioning ones with outstanding IQ. There are many differences between autistic individuals and every autist is specific.

In this thesis, I use the term autism to refer to autists with mild autistic traits and without intellectual impairments. These individuals are often called high-functioning autists, because they have capacities to be integrated into society and can engage with other individuals, unlike low-functioning autists who tend to be taken care of in special institutions due to severe behavioral, psychological, or social impairments.

In this work I focus on high-functioning autists, insofar they may commit criminal acts. I argue that in contrast to high-functioning autists, low-functioning ones should not be held responsible for the harm they cause due to their low intellectual abilities, inflexibility of behavior, and extremely diminished capacities for social interaction (Feather 2016). The question of responsibility of high-functioning autists, on the other hand, is perplexing. They appear, at least at a first glance, to possess capacities required for moral and legal responsibility, but at the same time they manifest certain behavioral difficulties, problems with social interactions, and so on.

In the next section, I introduce the notion of criminal responsibility in general, but also, some aspects of guilt according to the Croatian Criminal Code that I will use as a framework for thinking about the responsibility status of autists in what follows.

1.3. Criminal responsibility and the insanity defense

When addressing the notion of responsibility, it is important to appreciate the distinction between moral and legal, or criminal responsibility. Criminal and moral responsibility are not the same. Some legal act (for example abortion) may be morally wrong and, *vice versa*, some morally right act may be illegal (for example hiding the Jews during the Third Reich). In the following, I focus on criminal responsibility. Let us address this latter notion by considering first an important distinction.

In his book *Punishment and Responsibility: Essays in the Philosophy of Law*, H.L.A. Hart (1968) distinguished between two kinds of responsibility: (1) capacity responsibility and (2) legal liability responsibility (Hart 1968: 221). Capacity responsibility refers to a general capacity to apprehend and obey the law. As such, it represents a necessary precondition for legal liability responsibility. The latter refers both to mental state ascriptions to the defendant by the law (intent or negligence in relation to the criminal act) and the relation "between a person and harm, or the presence of some relationship … between different persons" (Hart 1968, 221). For example, if person A intentionally murders person B, person A is the offender and person B is the victim, which is the relationship between persons and the intent represents a relation between mental states of person A and the murder which is a criminal act. These elements constitute responsibility in this case, i.e., legal-liability responsibility. So, legal liability responsibility is responsibility in singular cases in contrast to capacity responsibility, that we have seen is a general ability for criminal responsibility. According to Hart, the following abilities are indispensable for capacity responsibility:

> understanding, reasoning, and control of conduct: the ability to understand what conduct legal and moral rules require, to deliberate and reach decisions concerning these requirements; and to conform to decisions when made. (Hart 1968: 227)

In other words, to be legally responsible, the subject must possess both cognitive and volitional capacities. These capacities can be more explicitly related to the law as follows:

> Very generally, high-level cognitive or reasoning capacities allow persons to understand the demands of the law and the relationship between their behavior and the law, and volitional capacities allow persons to conform their behavior to the law's demands. (Hirstein et al. 2018: 81)

For example, a kleptomaniac knows that theft is prohibited by the law, and that if caught she might be punished for stealing, she might also be aware that the chances of getting caught are extremely high. However, if she steals because she cannot control her behavior due to a strong urge to do so, then she should not be held responsible for this behavior.

This kind of exculpation can be based on considerations concerning fairness. For instance, David Brink and Dana Nelkin (2013) contend that blame and punishment are appropriate only if the person had the "fair opportunity to avoid wrongdoing" (Brink and Nelkin 2013, 284). If a person cannot control her behavior due to strong urges, then we can say that she does not have the fair opportunity to avoid wrongdoing and thus should not be blamed for this behavior. According to Brink and Nelkin (2013), a person who possesses no cognitive or volitional capacities lacks "normative competence" and, therefore, is not responsible.

According to the Croatian Criminal Code, there are four components of culpability: (1) accountability, (2) intention or negligence, (3) awareness of illegality or possibility of that awareness and (4) absence of excusing reasons (Grozdanić et al. 2013: 131). This thesis focusses on accountability of high-functioning autists. Thus, I will mostly focus on the first aspect of culpability.

Accountability is best described in terms of Hart's capacity responsibility. This involves the capacity to understand the requirements of the law and the ability to control one's behavior in accordance with them. According to Article 325, paragraph 1 of the Criminal Procedure Act, in case of suspicion that the defendant's mental capacity is excluded or diminished, the expert witness testimony is compulsory. Psychiatric examination is conducted if the defendant meets one of the following criteria: (1) there is evidence about treatment of the defendant in a psychiatric institution, (2) evidence about mental illness of defendant´s close relatives, (3) incapacity of the defendant for military service due to mental illness, (4) chronic alcoholism or drug abuse, (5) recidivism, (6) cruelly or ruthlessly committed act without motive, (7) behavior that is unusual for mentally sane people and so on (Grozdanić et al. 2013: 134). If the testimony of the expert witness is unclear, incomplete, or contradictory by itself or with explored circumstances, the same or other expert witness conducts the examination again. The same procedure applies when there is suspicion that the expert witness was biased, or exceeded the domain of his expertise, or used old-fashioned methods, or methods that are false by general knowledge, or if the respective discipline is not sufficiently recognized by experts and so on. If the testimony of the witness expert remained unsatisfactory after all possibilities

have been exhausted, the court concludes that the facts about the defendant´s psychiatric condition are not known and apply the rule *in dubio pro reo* which means that all facts which are in favor of the defendant would be considered as established, while all facts which are to the detriment of the defendant would be neglected (Grozdanić et al. 2013: 135). For example, if the court should decide between accountability and diminished accountability, defendant would be considered unaccountable because it exculpates her.

There are three methods to establish accountability: biological, psychological, and biopsychological or the mixed method (Grozdanić et al. 2013: 136). The biological method is concerned only with establishing an abnormal psychiatric condition, but not with the influence of these conditions on psychological functions. According to this method, the offender is not accountable if mental illness, temporary mental disorder, insufficient mental development, or some other severe mental disorder is present at the time of the criminal act. The presence of such a condition is sufficient to exculpate someone from responsibility. This method is not applied in a wide range of law systems because it completely leaves the decision about legal insanity to expert witnesses.

In contrast to the biological method, the psychological method is concerned only with relevant psychic incapacities, but not with their causes. This method is not accepted in the criminal law because it does not appreciate enough the psychiatric expertise regarding the establishment of the relevant incapacities, which leads to legal uncertainty.

The most widespread method is the biopsychological or mixed method. According to this method, the presence of a certain mental condition should be established, then the court investigates the influence of this condition on cognitive and volitional capacities of the defendant at the time of the crime. In other words, according to this method, to be exculpated from criminal responsibility, the defendant should be both diagnosed with certain mental condition and exhibit a lack of cognitive or volitional capacities caused by this condition. The advantage of such an approach is its reliability due to the implementation of both the biological and psychological criteria for establishing the relevant incapacities and the fact that judges have more influence on decisions about insanity or diminished responsibility of a defendant than in cases of the pure biological method (Grozdanić et al. 2013: 137).

According to Article 24, paragraph 2 of the Croatian Criminal Code, there are four types of condition that qualify someone for unaccountability: (1) mental illness or psychosis (2) temporary mental disorder, (3) insufficient mental development and (4) any other severe mental

disorder (Grozdanić et al. 2013: 137). Mental illnesses are impairments of the central neural system (the brain) which cause dysfunctions of most mental functions and lead to loss of the contact with reality. Examples of psychoses are dementia, schizophrenia, bipolar disorder and so on. Temporary mental disorder is a temporary disorder of most mental functions which lasts as long as its cause persists. Paradigmatic examples of such conditions are alcohol or drug abuse, hypnosis, sleepwalking, poisoning, very strong affective states and so on. Mental deficiency represents the cases of mental retardation i.e., IQ lower than 70. Finally, other severe mental health difficulties are conditions that do not belong to any of the categories mentioned above, such as psychopathy, OCD, disorders of the drive (e.g., pedophilia). These conditions can only lead to unaccountability in exceptional cases, and they have little significance in forensic psychiatry (Grozdanić et al. 2013: 138).

Given the degree of accountability, the Croatian legal system, as many others, recognizes diminished accountability as a condition in-between accountability and unaccountability. It is important to note that diminished accountability is not by itself a basis for mitigation of sentence, although it can be considered as a mitigating circumstance according to the general rule of sentence deliberation (Grozdanić et al. 2013: 139). Only substantially diminished accountability is a facultative base for mitigation of sentence, i.e., imposing a sentence above the prescribed minimum for a criminal act in question (Grozdanić et al. 2013: 140). This rule does not apply in the case of self-induced unaccountability because in such a case the offender has intentionally or negligently brought himself by his own acts to state of being unaccountable. Although the offender was not accountable when committing a crime, he is guilty because he has been accountable when he put himself in the state of unaccountability (Grozdanić et al. 2013: 142). Paradigmatic examples of self-induced unaccountability are alcohol and drug abuse.

Although the disorder requirement is widely accepted in different legal systems, there are mixed views about it in the philosophical and legal literature. Some philosophers argue against the disorder requirement in the insanity defense. However, I think this requirement plays an important role when thinking about criminal responsibility of the offender. The presence of a mental disorder represents an epistemic guarantee "that (i) there are internal states relevant for the explanation of the criminal act (ii) which are not something the agent is responsible for" (Malatesti et al. 2020). Such a guarantee can be provided only by psychiatrists, psychologists and experts in other relevant sciences which aim to explain the decision-making incapacities that were present when the crime was being committed. The mental disorder

requirement in the insanity defense enables the connection between science and law which can be used in an epistemically responsible way to ensure the existence of the relevant incapacities when the crime was committed. For example, if a psychiatrist identifies Alzheimer's disease in a particular case, this may imply that the offender, when committing the crime, has not been aware of what he was doing, which can then be used as evidence of diminished responsibility (Malatesti et al. 2020). Similarly, the diagnosis of paranoid schizophrenia might suggest the presence of decision-making incapacities, that are common in the cases of such disorders, and might play a role when thinking about whether a person should be held responsible for a crime. However, Bortolotti et al. (2014) noted that the presence of a mental disorder should not automatically exculpate someone. The ascription of a mental disorder is relevant only when the associated incapacities affect the offender's capacity responsibility.

Finally, relying on the biopsychological method keeps the courts up to date with the progress made in the sciences of mind. There are new findings in neuropsychology concerning decision-making mechanisms which are relevant for responsibility, and which are distinctive for certain mental disorders (Bechara 2005; Kalis et al. 2008; Paulus 2007). According to various scientific studies, there are remarkable decision-making impairments in the cases of first-episode schizophrenia, which suggest the diagnosis of the disorder might be useful in assessment of the defendant´s criminal responsibility (see Candilis et al. 2008; Cattapan-Ludewig et al. 2008; Sevy et al. 2007).

1.4. Conclusion

In this chapter I have argued that mental disorder is the necessary component of the insanity defense. This is important because if autism is a mental disorder, it might provide solid legal grounds for criminal exculpation. Bearing this conclusion in mind, the question whether autism is the mental disorder is discussed in the next chapter.

2. Is autism a mental disorder?

2.1. Introduction

In this chapter, I first present the claims of the supporters of the neurodiversity movements who recently argued that autism is not a disorder (Blume 1998; Meyerding 1998; Sinclair 1993; Armstrong 2015; Chapman 2019; Jaarsma and Welin 2012; Ortega 2009). I show that to evaluate these arguments, the concept of mental disorder in general should be defined, or at least clarified. Thus, we must engage in the central debate in philosophy of psychiatry concerning the definition of the concept of mental disorder (see Cooper 2007, chapter 3; Malatesti and Jurjako 2016; Radden 2019). The key problem in this debate is how to determine when mental states and behaviors represent a symptom of a mental disorder. I argue that Wakefield's harmful dysfunction account (from now on HD) of mental disorder (1992, 1999, 2000) is a satisfactory account of mental disorder that overcomes several difficulties of antagonistic account. Then, I proceed to present arguments offered by Jerome Wakefield, David Wasserman and Jordan Conrad (2020) against the claims of the neurodiversity movement that are based on the HD. Although I agree with the authors' rebuttal of the arguments of the proponents of the neurodiversity movement, I question their claim that high-functioning autism is likely not a disorder. I argue that a general conclusion on this matter cannot be decided in advance for all cases. It should be decided on a case-by-case basis by focusing on whether and how high-functioning autists are harmed by their condition.

Finally, I argue that the harm component of Wakefield´s account is too coarse-grained for such decisions, and, thus, it should be better elaborated. I contend that the list of basic psychological capacities offered by George Graham (2010) is an appropriate framework for the suggested case-by-case assessment of harm. Besides that, I think that Graham´s conceptualization of harm further refutes skepticism about autism being a disorder.

2.2. The neurodiversity movement against the medicalization of autism

From the medical perspective described in DSM-5, autism is a mental disorder. However, proponents of the neurodiversity movement oppose such a view. According to the claims of many autists (Blume 1998; Meyerding 1998; Sinclair 1993) and academics (Armstrong 2015; Chapman 2019; Jaarsma and Welin 2012; Ortega 2009), autism involves a normal human variation in brain functioning. Many of the claims endorsed by the neurodiversity movement are often based on the backdrop of a family of views that usually fall under the *social model of disability*. Thus, in what follows, I overview the main claims underlining this model.

Authoritative publications on disability distinguish between impairment and disability. On the one hand, impairments are seen as "problems in body function or structure such as a significant deviation or loss" (World Health Organization 2001: 10). On the other hand, in various documents such as the *International Classification of Functioning, Disability and Health*, the U.N. *Standard Rules on the Equalization of Opportunities for People with Disabilities*, the *Disability Discrimination Act* (U.K.), and the *Americans with Disabilities Act* (U.S.), disability is construed as "(1) a physical or mental characteristic labeled or perceived as an impairment or dysfunction … and (2) some personal or social limitation associated with that impairment" (Wasserman et al. 2016).

There are two principal perspectives on disability: the medical and the social model. According to the medical model, the physical or mental incapacities of people cause the barriers that limit their daily functioning. In contrast, the social model emphasizes society's role in limiting the daily functioning of people considered to have a disability. Thus, the focus, instead of being on the characteristics of the person, as in the medical model, is on the inappropriate environment and social organization (Wasserman et al 2016). For example, it is not the bodily or physical impairments which render most buildings in Rijeka inaccessible for wheelchair users, but the absence of ramps and elevators.

Some of the claims made by the supporters of the neurodiversity movement are also related to claims made by the supporters of movements for civil rights, such as the movement for LGBT rights, as well as with the antipsychiatry movement. Both the neurodiversity and antipsychiatry movement agree that psychiatry is often used as a means of oppression of people whose behavior does not fit with the prevailing social norms and values. However, in contrast to the antipsychiatry movement, the neurodiversity movement does not contest psychiatry in

general as it usually acknowledges that severe autism should be treated and thus considered a mental disorder (for more about this topic, see Graby 2015).

Finally, Wakefield et al. (2020: 502) correctly note that the neurodiversity movement is a social movement aiming to change policies toward autists, rather than offering a well-articulated philosophical position in the debate whether autism is a disorder. It is important to keep in mind that the main aim of the neurodiversity movement is to combat stigma. This motivates the most radical proponents of the neurodiversity movement to even deny the disorder status of the whole autism spectrum. So, claims of neurodiversity movement might be "biased" from the perspective of philosophical analysis, which is based on logic, conceptual analysis, and empirical evidence, because philosophers are not motivated by any political and rhetorical reasons. Although it might seem that philosophers then undermine the neurodiversity movement because of differences in both methodology and goals between philosophy and activism, I think that aims of neurodiversity movement such as destigmatization and equal rights of autists are very desirable. Nonetheless, I think that the denial of disorder status is not the right approach to achieve these goals. I strongly believe that it is consistent to claim that autism is a mental disorder and at the same time to demand equal rights and to fight for destigmatization. I think that philosophers can offer theoretical frameworks and arguments for reconciliation between the medical perspective on autism and the neurodiversity movement.

However, before examining the claims of the supporters of the neurodiversity movement, we need a general framework within which we might evaluate them. Relevant for our context is a framework that can help us to decide whether a condition is a mental disorder. Thus, in what follows, I turn to this issue.

2.3. An account of mental disorder

Accounts of mental disorder are usually classified into three categories: naturalism, normativism and hybrid accounts (see Kingma 2013; Malatesti and Jurjako 2016; Radden 2019). According to naturalist accounts, the notion of mental disorder should be defined exclusively in terms of notions that belong to natural science. So, anatomy, physiology, or biological function (e.g., dysfunction in a neural or psychological mechanism) might ground the relevant standards of normality or health from which mental disorder departs. In contrast to naturalists, normativists contend that mental disorders just involve deviations from personal, social, epistemic, legal and moral norms. Hybrid theories construe mental disorders as

involving both naturalistic components (for example, dysfunctions in some physical or psychological systems) and normative components that refer to deviations from normative standards.

The plausibility of naturalism lies in the fact that history of science suggests that bodily medicine has provided us with successful explanations, predictions, and treatments of various medical conditions by relying on scientific notions (Malatesti and Jurjako 2016: 154). For example, the discoveries of Robert Koch and Louis Pasteur in the middle of the 19th century about the microorganisms that cause illnesses have been a turning point in medicine. This advancement showed that biological or chemical descriptions of natural causes that were interfering in the anatomy physiology or functionality of the organism enabled the development of successful drugs and treatment of illnesses (Malatesti and Jurjako 2016: 155).

However, naturalistic criteria are not sufficient to determine the disorder status. Let us consider, for example, the case of biological dysfunction. Although some condition, let us say homosexuality, might be, for the sake of argument, biologically dysfunctional, we will not consider it as a disorder, unless it is also harmful to the subject or the society. Similarly, a statistically significant deviance from norms of anatomy or physiology is not sufficient to confer a disorder status to a condition insofar it is not harmful. Thus, it appears that mental disorders cannot be defined exclusively in naturalistic terms (Malatesti and Jurjako 2016, 163). Therefore, a reference to norms and values in the definitions of mental disorders cannot be avoided. Normativism is the position that relies on this insight.

Normativists acknowledge the fact that the concept of mental disorder is value-laden and susceptible to social, moral, legal, and epistemic norms. Thus, normativists can easily capture the claim that homosexuality is not a disorder because it is not harmful to a person. However, purely normative accounts, that assume that only departure from norms are relevant for the notion of disorder, are problematic insofar they might imply skepticism about the existence of mental disorder of the type advocated by Thomas Szasz (see for example Szasz 1960). Szasz argued that mental disorders are deviations from social, moral, and epistemic norms, and, as such, they are not real disorders because real disorders are deviations from the norms of the anatomy and physiology of the human body, which are objective. Consequently, if mental disorders are not objective disorders of the brain, then they do not exist. At most, they could be considered as problems of living. Take the example of drapetomania which was "discovered" by Samuel Adolphus Cartwright (1851), and which allegedly caused Afro-

American slaves to run away from slaveholders. It is obvious that drapetomania is not a mental disorder. At most, it presents a deviation from norms and values which are contingent and grounded on the limited perspective of slaveholders and supporters of slavery.

Normativists, such as Megone (1998), Fulford (1989) and Bolton (2013), can respond to the objection in two ways. They can claim that in the cases of quasi-disorders subjects diagnosed with them do not present any etiological unity, or they can assert that these individuals depart from morally unjustifiable norms. I think that both responses are problematic. Etiological unity is not an adequate criterion for mental disorder because there are conditions which are plausibly mental disorders, although their etiology is not yet known. Furthermore, it is not clear why a mental disorder should have a unique etiology. The same mental disorder can be caused by different causes in different cases. The second response is not appropriate because it demands from us to justify norms on which mental disorder status rests. Such a demand overcomplicates the discussion because the topic of morally (un)justifiable norms is highly debatable and controversial. It is not clear which norms are morally justifiable and which are not. These considerations altogether bring me to the conclusion that we must consider whether a hybrid approach would be better than purely naturalist or normativist accounts.

Jerome Wakefield, in numerous papers (e.g., 1992, 2007 2014), has developed one of the most influential hybrid accounts of mental disorder. The core of the account is summarized in the following oft-cited quote:

> A condition is a disorder if and only if (a) the condition causes some harm or deprivation of benefit to the person as judged by the standards of the person's culture (the value criterion), and (b) the condition results from the inability of some internal mechanism to perform its natural function, wherein natural function is an effect that is part of the evolutionary explanation of the existence and structure of the mechanism (the explanatory criterion). (Wakefield 1992: 384)

Wakefield uses the theory of natural function inspired by Larry Wright (1973). According to this theory, natural function of some system is determined by its evolutionary history, i.e., by natural selection, which "designed" this system to perform a particular function. For example, the function of the heart is to pump blood because the organisms that had hearts outlived those that did not have them.

Wakefield thinks that it is necessary that some condition is both harmful and caused by a dysfunctional physical or psychological mechanism. The following two examples illustrate these two components. Even if there is a dysfunction in the case of homosexuality, this condition is not a disorder because it is not harmful to individuals who have it. In the case of the antisocial personality disorder (ASPD), a person with ASPD is harmed because their behavior often gets them into trouble for which they spend much time in prison, but such a condition would not be a disorder unless we are able to show that it is caused by a psychological or biological dysfunction.

There are two reasons why Wakefield's account is preferable to pure naturalism and pure normativism. The first one is its explicit inclusion of the notion of harm, which I take to be indispensable for thinking about the nature of a disorder. It is uncontestable, in fact, that the key role of medicine (but not the only one) is to cure or treat disorders. But if some condition is not harmful, there is, *prima facie*, no reason to cure or treat it, and, thus thinking of it as a disorder. Of course, there are cases of medical intervention when there is no disorder, but the aim of intervention is to prevent potential harm in the future by improving health in the present. The second reason consists in the fact that Wakefield's account is close to how the medical profession already thinks about the concept of mental disorder, as it is captured by the dominant psychiatric diagnostic manuals, such as e.g., DSM and ICD (Murphy 2006: 35; cf. Amoretti and Lalumera 2019).

In the next section, we can finally move back to the main problem of this chapter. There, I examine whether high-functional autism is a mental disorder according to the Wakefield's account.

2.4. The harmful dysfunction view and neurodiversity

Neurodiversity advocates contend that the "autistic essence" confers many advantages, while, at the same time, many of the harms usually associated with autism as such are not part of this condition. These harms are, instead, contingently associated with it. Baron-Cohen offered the following instance of this kind of argument:

> Some will object that a child with autism who has epilepsy is not an example of neurodiversity but rather he or she has a disorder. And they are right. Epilepsy is a sign of brain dysfunction and causes disorder (fits) and should be medically treated. But epilepsy, while commonly co-occurring with autism, is not autism itself.

> Others may say that a child who has language delay or severe learning difficulties is not an example of neurodiversity but has a disorder, and I would support their demand for treatments to maximise the child's potential in both language and learning. But again, although commonly co-occurring these are not autism itself. (Baron-Cohen 2017: 744)

However, Wakefield et al. (2020: 507) note correctly that the idea of autism including an essence does not take seriously enough the heterogeneity of ASD. In contrast to the essentialist perspective, they concur with Daniel Weiskopf that autism is more properly construed as "a network category defined by a set of idealized exemplars linked by multiple levels of theoretically significant properties" (2017: 175). Thus, autism as a category is not coherent enough to be considered as "an adaptive trait or a distinct perceptual and cognitive style" that could make plausible the claim that autists have a shared essence distinct from possible accompanied physical, psychological or social impairments (Wakefield et al. 2020: 507).

Another argument used by the members of the neurodiversity movement is based on Uta Frith's "weak coherence" theory (Frith 1989). According to this account, autists have a diminished capacity to incorporate data into a coherent whole. Autists are often obsessed with details but misunderstand relations between them and their contextual meaning. For example, an autist could remember all the details of a story without understanding the meaning of the whole story (Frith 1989; Happė 1999). Interestingly, Frith thinks this might be perceived as an exceptional ability to operate with local data, rather than a handicap. Similarly, advocates of the neurodiversity movement see weak coherence as resulting from a natural biological variation (Baron-Cohen 2009). In addition, it has been discovered that autists perform better on some cognitive tasks than the neurotypicals. For instance, in some situations, unlike the neurotypicals, autists are immune to optical illusions due to reduced context sensitivity (Doherty et al.: 2010).

However, Wakefield et al. (2020) argue correctly that context insensitivity is often harmful, and people normally grow out of it. For instance, children with underdeveloped perceptual abilities are also more immune to optical illusions, indicating that people may be more prone to optical illusions as their perceptual capacities mature. Here it is important to note that sensitivity to context seems to be a necessary component of psychological maturing because difficulties in this sense can be life-threatening. Wakefield et al. (2020) illustrate this

with the case of an autistic young adult who, while on a cruise ship, jumped overboard because he wanted to take a swim (McLaughlin and Sutton 2018). Engaging in this type of behavior might be explained by the abnormal understanding of the situation which then cannot inhibit impulses that, in other situations, would be recognized as detrimental. It can be concluded that context insensitivity can be more harmful than beneficial when it comes to autistic traits.

But, in any case, it should be noted that there is a relation between the level of functioning and impairments in context sensitivity. The level of functioning and impairments in context sensitivity are inversely proportional which means that more severe impairments in context sensitivity imply lower level of functioning and *vice versa*. If there would be a balance between the lack of contextual understanding and functioning, then autism could be considered as beneficial natural variation. However, Wakefield et al. (2020: 509) note that there are many open empirical issues surrounding this claim. It is not clear whether lower context sensitivity is advantageous enough to be evolutionary "designed". Thus, it is undecided whether it is distinctive for autists or a natural variation in general population and whether autists possess some other capacities which might render lower context sensitivity beneficial.

There are autists with special capacities often referred to as "savant abilities", such as outstanding memory for some types of events, calendrical calculation, precise drawing, and so on, which is why some proponents of the neurodiversity movement think about autism as a special but natural way of brain-functioning. However, Wakefield et al. (2020; 510) argue that the savant abilities argument is unpersuasive from the perspective of the harmful dysfunction analysis, because in most cases harm caused by autism is more severe than the benefits brought by savant abilities. Different disorders can bring about some advantages, such as Chron´s disease, which decreases weight, but this does not change the fact that autism and Chron´s disease are in other respects harmful conditions.

It might be argued that, at some point in the past. savant capacities were beneficial enough to autists to be evolutionary selected regardless of their deleterious aspects. Thus, it might be argued that the apparent deficiencies of autism are, when thought from the perspective of evolutionary trade-offs, offset by their beneficial features, similarly to how the negative aspects of morning sickness are offset by their usefulness for preserving healthy pregnancy. So, savant capacities might be functional and overall not harmful after all.

Wakefield et al. (2020: 510) argue plausibly that for such a claim to be true, there should be a tight relationship and a suitable equipoise between the benefits and harms of autism. For

example, if some benefit inescapably leads to adverse consequences, or if some designed trait impedes the development of other traits. Wakefield et al. (2020: 510) indicate that this way of thinking about autism is not plausible for three reasons. First, only 10–25 percent of autists exhibit savant talents and skills (Happé 2018; Meilleur et al. 2014). Second, collaboration and social interaction are needed to put in effect these capacities, which is not possible in the case of severe autism. Third, savantism can be related to different brain illnesses and brain damage such as frontotemporal dementia (Miller et al. 1998; Treffert 2009). Thus, autistic talents are not necessarily the result of beneficial evolutionary trade-offs.

Wakefield et al. (2020: 511) correctly conclude that some cases of high-functioning autists might be seen as exemplifying natural neurodiversity. However, these cases are exceptions which fully fit with the idea that lower-functioning autism represents a genuine disorder. Before moving on to discuss further arguments offered by the neurodiversity advocates, let me comment on question whether or not autism involves dysfunction.

Although definitive biological markers of autism are not yet known. I think that the fact that each of the current theories can successfully explain some of autistic features with a reference to a dysfunction in the brain is a sufficient reason to expect that autism is underpinned by a biological dysfunction of some kind. I think it might even be that all the theories at the table are true to some extent and that none of them should be entirely rejected. To formulate a comprehensive theory of autism is a very hard task. Requiring that only such a comprehensive theory constitutes a proof of dysfunction is too demanding due to the heterogeneity of autism.

Furthermore, we do not need to know exactly which dysfunctions are present in autism to think that there is a dysfunction of some sort. Imagine a case of a man who had been poisoned with a mysterious and unknown substance, and scientists do not know which one it is, although they recognize clear signs of poisoning. The same thing can be said in the case of autism; we know there is a dysfunction, but we cannot specify it.

This argument can be clarified and supported by relying on the distinction between personal and sub-personal explanations, which is essential for Rachel Cooper's (2007) refutation of Thomas Szasz´s skepticism about mental disorder. Personal-level explanations refer to someone's mental states such as beliefs and desires that explain their behavior (Cooper 2007 18). For example, if I want to have good marks and believe that I will achieve them by studying, then this explains why I study so hard. On the other hand, sub-personal-level explanations include references to biological and (neuro)cognitive mechanisms. As we have

seen, Szasz thinks that a behavior is caused by a mental disorder only if it is caused by a brain lesion. In other words, the requirement is that, in the case of mental disorders, we must rely exclusively on sub-personal explanations of the behavior. Cooper argues that this criterion is too demanding because, for some behaviors caused by a mental disorder, we cannot provide such an explanation, but still, it can be plausibly assumed that they are caused by a disorder. In fact, we can still think that they are so caused because we cannot *rationally* explain them (Cooper 2007 18–19). The fact that we cannot give a personal level explanation shows that there is a high chance that this behavior is caused by an underlying disorder and that there is an adequate sub-personal explanation underpinning it, even if we cannot provide it now. Thus, the fact that we cannot explain it in terms of wishes and beliefs why autists exhibit extreme behavioral rigidity suggests that they suffer a mental disorder. Even if we do not yet know all the biological and psychological mechanisms responsible for this failure of applying personal level explanations, such a failure points to the existence of sub-personal level explanations.

Another set of arguments provided by the neurodiversity movement is to assume that autism is essential to personal identity because autism is the only cause that confers special mental capacities and a specific world comprehension to autists. Since autism affects the mental life of a person (beliefs, wishes and emotions) and mental life is considered to be a vital part of personal identity, autists conceive autism as essential for their personal identity, in contrast to physical disability which is not essential for personal identity of people with physical disabilities.

However, as noted well by Wakefield et al. (2020: 512), the identity possessed by autists has nothing to do with the question whether autism is a disorder or not. The sense of identity can make a treatment harder, but a condition can be treated without that person losing her identity. Even in the case of accepting that autism is a vital part of someone´s identity, this would not change the fact that autism is a disorder.

According to Robert Chapman (2016) and Simon Cushing (2018) autism is a socially constructed category given the heterogeneity and great expansion of it in DSM through time. As stated by Jennifer Sarrett (2016) and Berend Verhöff (2012), instead of alleged autistic essence, what autists have in common are properties which have arisen because of them being stigmatized as autists, which for them means that it makes more sense to view autism as a culture rather than a disorder. Some authors, such as Joseph Straus (2013), also argue that such

autistic community and culture should be appreciated and maintained. The fact that autists form their own communities and culture suggests that autism is not a mental disorder.

However, Wakefield et al. (2020: 512) plausibly contend that, although society has influenced the formation of autism as a category, this does not tell us anything about whether autism is caused by a dysfunction or whether it is harmful. Furthermore, they assert that the existence of autistic communities has nothing to do with the illness status, since there are many communities of people who share political and religious beliefs, taste in music and movies, dietary habits, etc. The fact that people who share autistic traits have decided to establish a community does not imply anything about the disorder status of autism. Finally, they argue that regard for the autistic community and culture is fully consistent with the idea of providing help to ameliorate the disorder on which the community is based. This can be seen in the case of communities of individuals afflicted by different major illnesses. Wakefield et al. (2020: 512 – 513) mention cases of natural diversity among people (e.g., Western European monastic culture or Yiddish culture in the United States) which disappeared as a result of assimilation. It is possible to appreciate the decision of people who accepted the dominant culture while, at the same time, feel remorse because of the cultural extinction, which occurred as a result of assimilation. The same thing might happen with the Deaf community in case of progress in treatment, which would be widely accepted by deaf people and such a process would not be morally contestable.

Wakefield et al. (2020: 513) correctly note that, although belonging to such communities might mitigate harm, it does not remove it. Members of these communities are still in an unfavorable position outside of their respective subculture. They contend this is:

> analogous to medical treatment continuously required to prevent symptoms; in both cases, the lack of apparent harm does not challenge the judgment of disorder because the potential for harm remains and is only mitigated by continuous intervention. (Wakefield et al. 2020: 513)

Finally, the most radical proponents of neurodiversity movement argue that autism is not harmful at all. Such an approach assumes that capacities of autists should be taken as a starting point when assessing their well-being (Robeyns 2016). According to this argument, many autistic conditions would not be regarded as harmful if harm is assessed in accordance with capabilities which autists possess. However, it is obvious that this approach does not work in cases of severe autism. Wakefield et al. (2020: 513) correctly conclude that the inability to

communicate and form an emotional attachment to others and feeling of sensory overload in public places can seriously impede well-being, however it is conceived.

The proponents of neurodiversity movement argue that most harms associated with autism are caused by unfriendly environments, which are designed for people with typical brain functioning, just like people with physical impairments are excluded from a society because social environments are designed for people without physical impairments. Harms suffered by autists are not a consequence of autism as such. They are, rather, consequences of prejudice and stigmatization and the organization of the social environment or even physical space.

The same sort of argument was applied to the case of homosexuality when it was removed from DSM-III's list of disorders (Jaarsama and Welin 2012). In this respect. there is a distinction between harms caused immediately by a dysfunction and harms resulted from a reaction of the society to the condition. This distinction was introduced by Robert Spitzer, who played a key role in de-pathologizing homosexuality in DSM. Together with Paul Wilson, he defined disorder as being "regularly and intrinsically associated with subjective distress" or "impairment" which means that "the source of the distress or impairment in functioning must be the condition itself and not with the manner in which society reacts to the condition" (Spitzer and Wilson 1975: 829; Spitzer and Endicott 1978, 18).

In the case of homosexuality, it is obvious that harm is caused by misconceptions and inappropriate reactions from other members of society. Proponents of the neurodiversity movement argue, in the same way that, disadvantageousness of autism is partly caused by misconceptions about autism and absence of adjustment (Dominus 2019). Wakefield et al. (2020: 514) correctly notice two difficulties with such an application of the social model to autism. The first problem is the misuse of the difference between direct/indirect or intrinsic/extrinsic harms. There are disorders which are socially related, but they are nevertheless disorders, such as aphasia which consist of communication incapacity. Since it is plausible to think that the language ability is an evolutionary selected capacity required for social interaction and social interaction is indispensable for well-being, harm resulting from autism cannot be greatly ameliorated. It is caused by a biological dysfunction which leads to the negative consequences in social relationships.

However, the level of social detriments is influenced both by the perception of autism in the society and by the way society treats them. This influence is higher than in the case of aphasia. In the case of a cheap social price that would be paid to decrease negative impacts of

autism, it is sensible to expect society to adjust to the needs of autists. Chong-Ming Lim (2017) asserts that there are several aspects that should be considered when assessing whether the adjustments are sensible or not, such as finances and demands from non-autists to change their behavior, fundamental conventions, and values. Wakefield et al. (2020: 514) correctly conclude that in any case, it is not sensible to change our social conventions in a way that we do not pay attention to emotional cues, contexts and conversational implicatures, etc.

Wakefield et al. (2020: 515) plausibly argue that the second problem regarding attempts to reconcile autism with the social model of disability is the great heterogeneity of autistic conditions. It is plausible that only high-functioning autism fits well with the social model. Detriments in cases of high-functioning autism could be successfully treated in contrast to those in cases of severe autism.

Wakefield et al. (2020: 504) contend that moderate neurodiversity is a plausible position. Moderate neurodiversity acknowledges the disorder status of classic severe autism but rejects to qualify higher levels of autism, like high-functioning autism and Asperger´s syndrome, as disorders. This position is in-between strong neurodiversity, which is the claim that the whole autism spectrum is not a mental disorder, and weak neurodiversity which represents the claim that the present classification of autism should remain unchanged. According to weak neurodiversity, milder cases, such as "other specified neurodevelopmental disorder" should not be classified as types of autism.

I agree with Wakefield, Wasserman and Conrad that the arguments of neurodiversity advocates are not plausible, but I disagree with their view that high-functioning autism is not a mental disorder. I think that, due to the heterogeneity of autistic conditions, we cannot give one ultimate answer to the question whether high-functioning autism is a disorder or not. Any general claim on this matter would be inappropriate, both because of our present lack of knowledge and conceptual issues regarding the definition of high-functioning autism and low-functioning autism. There are no clear criteria on how to precisely distinguish between these two categories and as Wakefield et al. (2020: 505) noted "we should expect disagreement and uncertainty in many cases".

I think that there are both cases of high-functioning autism which represent a disorder and those which do not, and that in each case individual assessment of functioning should be made. In other words, it should be determined whether autistic condition is harmful in a relevant way in each case and if it is harmful, to what extent. Since the disorder status of high-

functioning autism should be determined in a case-by-case manner, I think that Wakefield's concept of harm is too vague to perform this task. In his seminal paper, in fact, his account is that harm is something negatively judged by our society (Wakefield 1992). Thus, it should be made more fine-grained. In the next section I define the notion of harm more precisely and argue for what I believe to be a valuable tool for harmfulness assessment in cases of high-functioning autism.

2.5. The notion of harm

I adopt the view according to which some condition is harmful to a subject if it heavily interferes with the well-being and functioning of that subject. The list of basic psychological capacities offered by George Graham (2010: 147 – 148) represents a particularly good elaboration of what is relevant for the notion of harm because they are:

> not derived from our individually variable desires or capacities, but from competencies that we are bound to value and need, regardless of which specific goals we possess and pursue. (Graham 2010: 147)

His list includes the following capacities: 1) Bodily/spatial self-location, 2) Historical/temporal self-location, 3) General self/world comprehension, 4) Communication, 5) Care, commitment and emotional engagement, 6) Responsibility for self and 7) Recognition of opportunities or "affordances" (Graham 2010: 147 – 149). Graham thinks these capacities are basic psychological capacities because they pass the veil of ignorance test originally offered by John Rawls (1971). Rawls uses the veil of ignorance as a hypothetical situation to discover basic principles of justice, which are agreed upon by free, equal, and rational people who do not know anything about their gender, race, nationality and socioeconomic status. Analogously, Graham (2010, 139 – 42) uses this model to construe his list of basic psychological capacities and wonders which capacities are universally needed for a decent life by all people, regardless of their specific condition.

I think that this approach to conceptualization of harm ensures objectivity of the relevant values in ascribing psychiatric disorder in such a way that it somewhat refutes skepticism about mental disorder as expounded by Tomas Szasz because Graham list consists of capacities which are universally needed by all people in their lives, regardless of specific sociocultural circumstances and personal values and goals. Now, I will summarize Graham´s

descriptions of capacities which I consider to be relevant for the discussion of harm in case of autism.

1) Communication. To be able to communicate with each other about ourselves and the world, we must possess sufficient listener and speaker competences in some system of communication (e.g., the mother tongue). In interactions with others, we assess the soundness of others´ utterances, but to do this, we first need to understand their meaning. Communication is an important source of information, and it connects people with each other (Graham 2010: 148).

2) Care, commitment and emotional engagement. People are usually committed to and take care of things and people they consider important in life and as a consequence, they feel bad if things or people they care about are in some way endangered, or feel happy if they are not (Graham 2010: 148 – 149).

3) Responsibility for self. We are able to take care for ourselves, which means that we can control our behavior by forming intentions, assessing the impulses and inhibitions, making practical decisions and self-reflective choices. We are able to conform our behavior to our decisions and choices; mostly we do not behave impulsively (Graham 2010: 149).

4) Recognition of opportunities or "affordances". We are able to recognize different possible choices we can make in the process of decision-making. Although many people feel great deal of anxiety about making decisions, people usually want to take a certain direction in life and alter it. They are aware of different paths opened to them (Graham 2010: 149).

Following the symptomatology of autism from DSM-5 which was described in section 1. 2., we can plausibly say that capacities of communication and emotional engagement are impaired in autism. I think that capacities underpinning responsibility for self and recognition of opportunities might also be impaired because autists show repetitive behavior, and they possess a limited range of interests. Repetitive behavior might be caused by an inability to control impulses and inhibitions.

Baron-Cohen (2011) argued that the lack of empathy exhibited by autists is not dangerous, neither for them nor for others. However, I think that the fact that the lack of empathy is not dangerous does not mean it is not harmful for autists. Due to the lack of empathy, autists have difficulties recognizing the needs and mental states of other people expressed by different social cues, such as facial expressions and tone of voice. This impairs their functioning in standard social situations.

I think we should distinguish between two questions here: 1. What are the capacities whose impairment causes a harmful condition which can be characterized as a mental disorder? 2. To what degree does a person need to possess these capacities to claim that her condition is not harmful? The first question represents what I call the objective aspect of the concept of harm because it is answered by delineating the capacities all people need to have.

On the other hand, the required degree to which people need to possess these capacities and their assessment depends on sociocultural norms. For example, in a society which cherishes ideals of extreme individualism and independence, lower abilities of communication and emotional engagement showed by high-functioning autists would not be harmful at all, or at least would be harmful to a much lesser extent than it would be in the society where such ideals are not cherished. It also depends on personal values and goals of individuals, so this aspect of the concept of harm can be construed as subjective. Such analysis implies that not all cases of high-functioning autism are disorders, and that individual assessment in relation to a context of living and functioning should be made.

The objective aspect of the concept of harm is important because it delineates mental disorders from problems of living. It is not the case that any harmful condition should be characterized as a mental disorder, nor that any capacity is impaired in a mental disorder. As mentioned above, mental disorders are conditions in which universally needed capacities are impaired. In contrast to this, a possible list of the capacities relevant in the cases of problems of living would depend entirely on specific goals and values, which differ greatly from a person to person and would never be completed due to such heterogeneity.

2.6. Conclusion

In this chapter, I have concluded that severe autism is a mental disorder. I have also argued that a general conclusion about the disorder status of high-functioning autism cannot be drawn due to the heterogeneity of autism. I have claimed that in every case of high-functioning autism a specific evaluation of harm should be offered to determine the disorder status of that condition. I further elaborated that the concept of harm relevant for the hybrid theory of mental disorder can be construed as having subjective and objective aspects. On the one hand, the objective aspect refers to an impairment in a core psychological capacity that is universally shared among people and is necessary for their well-being. On the other hand, the subjective aspect refers to the assessment of performance of these capacities, which is based on a sociocultural

background of values. The distinction between objective and subjective aspects of harm in cases of mental disorder ensures the demarcation between mental disorders and problems of living. Furthermore, it reconciles two features of mental disorders which seem incompatible at the first glance: objectivity of mental disorders and value-ladenness of mental disorders.

3. Executive functions, responsibility, and high-functioning autism

3.1. Introduction

In the previous chapter, I have concluded that the class of autists is behaviorally and cognitively heterogeneous. Thus, whether an autist is disordered should be decided on a case-by-case basis. However, having a disorder is usually not a sufficient ground for exculpation. In fact, as we saw in chapter 1, the law states that a disorder can exculpate a person only if it disrupts cognitive or volitional capacities that underpin criminal responsibility. In this chapter, I thus investigate whether the cognitive deficits that would typically grant the disorder status to an autist might also underpin incapacities that are relevant for exculpation. To address this issue, however, we must tackle the complex problem concerning the relation of legal practices with empirical data.

The law does not specify what the exact mental capacities that underpin criminal responsibility are, and, consequently, how their presence/absence can be empirically investigated. Forensic psychiatry, both in its theoretical and practical dimensions, routinely addresses the issue of establishing how to determine the presence of exculpatory incapacities (Schell-King and Finneran 1982; O´Sullivan 2018). However, it is also important to offer conceptual and foundational investigations of the general problems involved in forensic science. This is needed when facing the controversial cases whether an entire class of individuals as autists are criminally responsible. Thus, it is worth exploring the issue whether or not we can offer a general bridging principle that can connect the legal conceptions of the capacities underpinning criminal responsibility and the relevant mental capacities as they are empirically studied. To overcome this problem, I rely on the executive functions theory of responsibility offered by William Hirstein, Katrina L. Sifferd, and Tyler K. Fagan (2018). I then offer a brief description of scientific evidence which suggest impairment of various executive functions in autism. After that, I examine the discussion offered by Kenneth Richman of how peculiar aspects of executive functions associated with autism affect the moral responsibility of autists. Finally, I explain how the conclusions drawn by Richman in the moral domain are relevant for the discussion on whether and to what extent autists should be held criminally responsible.

3.2. Executive function theory of responsibility

Some authors on criminal responsibility discussed what can be called the "interface problem" between the law and the empirical sciences of the mind, with a special emphasis on neuroscience (Francken and Slors 2018). On the one hand, our understanding of criminal responsibility is based on common sense psychological concepts such as beliefs, wishes, and intentions. On the other hand, science relies on causal explanations spanning from cognitive mechanisms to explanations in terms of neurons, synapses, and electric impulses (Bermudez 2005, chapter 2). The problem is how to translate and connect the (neuro)scientific data with the folk-psychological concepts which underlie our understanding of criminal responsibility. In this section, I present and endorse the solution to this interface problem as offered by Hirstein et al. (2018).

According to Hirstein et al. (2018: 186), executive functions underpin cognitive and volitional capacities, which are relevant for criminal responsibility. Accordingly, mental disorders which undermine criminal responsibility are those that cause impairments of executive functions. Executive functions are processes which are thought to be implemented in a neural network based in prefrontal lobes of the brain (Hirstein et al. 2018: 18). They play a key role in dealing with new situations and complex tasks, unlike everyday routines, which we tend to perform automatically. Executive functions enable us to make plans, form intentions and habits and alter them, take control of behavior by considering data from emotions, memory, senses, and motivational states. Emotions, memory, and perception play a role in processes underlying executive functions, but should not be confused with them (Hirstein et al. 2018: 19). Executive functions have a role in correcting perception and memory deficits and selecting emotions which influence our behavior. However, our ability to do this is not absolute (Hirstein et al. 2018: 20). People with severe visual impairment cannot simply start seeing things better, but once they become aware of this impairment, they can adjust their behavior accordingly (e.g., to be more careful in traffic).

Although there is no single agreed upon list of executive functions, there seems to be a consensus among the experts that the list should at least include the following mental capacities (Hirstein et al. 2018: 24 – 27):

1) Attention. Some authors call it vigilance (e.g., Niendam et al. 2012), while others call it monitoring. People whose attentional capacities are impaired are incapable of sticking with the

topic of conversation, or listen carefully to a story told to them (Wilson et al. 1998). Attention is crucial for recognition of social cues and producing adequate reactions in social interactions.

2) Monitoring of perceptions, memories and emotions. We cannot take our perceptions, memories and emotions for granted. They often need to be examined. For example, due to my visual impairments, it often appears to me that I see a person I know, but then it turns out to be another person who looks like her. Baddeley and Wilson (1988) have discovered that people with impaired executive functions tend to make up data to fill in the gaps in their autobiographical memory, while people with intact executive functions honestly acknowledged they have forgotten the relevant information (Parkin 1984, Moscovitch and Melo 1997). This can be very dangerous if people are not aware of their memory deficits and their tendency to confabulate. On the other hand, people with memory loss whose executive functions are intact can become aware of their deficit, which allows them to adjust their behavior accordingly.

3) Monitoring of behavior. According to Stuss and Alexander, "Monitoring is the process of checking the task over time for 'quality control' and adjustment of behavior" (Stuss and Alexander: 2007 909). Monitoring of behavior is inherent to intentional and non-routine actions because, as such, they require additional concentration to be performed properly. Monitoring of behavior is present in dangerous and risky actions and it is relevant in establishing criminal responsibility. Lack of this capacity could indicate that action is not purposeful (e.g., sleepwalking, seizures and hypnosis). Monitoring includes causal relations between present conscious states and executive processes, and it can also put a stop to deliberate acts and initiate planning processes.

4) Working memory. Working memory is traditionally conceived as a kind mnemonic store or buffer, which means that working memory is not an executive function but an executive resource. However, authors who take working memory to be an executive function include in this concept both mnemonic stores and brain spheres that manage them (see Milner 1982; Goldman-Rakic 1996; Levy and Goldman-Rakic 2000; Curtis and D'Esposito 2003).

5) Planning and goal setting. Realization of complicated activities demands foresight and anticipation of alternative courses of action. Long term plans usually consist of smaller tasks which meaningfully follow one another. For example, if you wish to build an academic career in philosophy, you must first get a BA degree, then an MA degree, then a PhD degree, and so on. People with impaired executive functions are unable to realize long term plans and live from hand to mouth. They exhibit utilization behavior, a type of behavior that is expressed

through grabbing and using objects in the surrounding environment, even when this is inappropriate. For example, if you leave your sandwich in front of them, they would take it and eat it. They do what they have been used to do with objects around them and are unable to conform their behavior to the current circumstances.

6) Inhibition. Inhibition is a capacity to "deliberately inhibit dominant, automatic, or prepotent responses when necessary" (Miyake et al. 2000: 57). All people sometimes think about doing something unethical or unlawful, but they are usually inhibited from acting on such considerations. Impairment of inhibition leads to the inability to desist from actions which they know to be wrong or undesirable. Thus, people who suffer from disinhibition are usually not held responsible for their actions.

7) Task switching. Task switching is a capacity to shift focus between different activities and successfully perform each of them. For example, when a sound of Facebook Messenger interrupts me in reading a book, I can successfully pick up where I left off. This capacity is particularly important in performing complex tasks. There are different terms in the literature denoting this ability, such as cognitive flexibility (Niendam et al. 2012), dual-task performance (Baddeley 1998) or mental set shifting (Hofmann, Schmeichel, and Baddeley 2012).

Some scholars argue that decision-making is also an executive function. However, decision-making is too complex to be an executive function alone. It can be analyzed in terms of the other executive functions listed above. Decision-making is the role of executive functions, it is what executive functions enable us to do (Hirstein et al. 2018: 28). Executive functions are activated when decision-making is required, such as in nonroutine situations.

There is a disagreement between scientists about whether all or most of executive functions can be dysfunctional, or there can be cases when only some executive functions are dysfunctional while others are intact. It appears that both types of cases are possible, which depends upon which area of the brain is impaired. Since this thesis is primarily focused on questions of responsibility and not on neuroscientific issues, this should be enough for the purposes of the thesis (for more about this topic, see Stuss and Alexander 2007; Duncan and Owen 2000: Gilbert and Burgess 2008).

According to Hirstein et al., a person, who they call Jo, is legally responsible only if:

1. Jo has a minimal working set of executive functions (MWS), and

2. Jo performed the act or omission, and/or caused the consequence, or failed to act to prevent it, and

3. Jo's executive processes either played an appropriate role in bringing about the action, omission, or consequence or should have played an appropriate role in preventing it. (Hirstein et al. 2018: 87)

It should be noted that all three conditions are necessary for criminal responsibility. The first condition demands that the person possesses a certain degree of overall executive function to be the proper target of responsibility assessments. Some people are naturally better at performing certain executive functions (e.g., planning), while others are bad at performing them. Nonetheless, we should possess a basic level of executive functions in order to function in a society, just like all cars on the road, regardless of differences, should satisfy minimal safety standards to be driven (Hirstein et al. 2018: 57). It is also important to note that the level of executive function which someone possesses is not written in stone; improvement of executive functions is supported by education systems, media, peers, family and, in some cases, by the judiciary. Furthermore, if executive function is impaired, it may be corrected by therapeutic intervention, medication, even surgery, as well as compensated by using some other brain processes. For example, someone with a memory deficit can use notes and be aware that certain memories are not trustworthy. Hirstein et al. (2018: 59) again use the car analogy to describe a case of corrected executive function. Imagine that your car brakes do not function properly, forcing you to use emergency brakes, which are not made to be used while driving, so you must adjust your driving style to it.

Criterion 2 demands that there is a relation between an offender´s acts or omissions which caused criminal harm and his or her mental states (Hirstein et al. 2018: 87). According to this criterion, we are responsible both for bad outcomes of our acts, as well as for bad outcomes that can be sensibly anticipated and prevented by doing something (Hirstein et al. 2018: 64). For example, if person A knows that person B plans to murder person C, person A can inform the police about it and prevent the murder.

Criterion 3 is concerned with types of relations between offender´s executive activity and his criminal responsibility, such as direct and indirect intent or advertent or inadvertent negligence (Hirstein et al. 2018: 87). It states that in "positive" cases, performance of one or more executive functions must causally lead to an action (Hirstein et al. 2018: 66). Causal history is especially important; the level of culpability is much higher if someone has been

driving at full speed and bumped into a crowd, in contrast to cases when someone´s attention has not been properly focused, so they accidentally pressed the wrong pedal (Hirstein et al. 2018: 65). The subject in the first case is much more blameworthy because he planned the action, with the aim of hurting or killing somebody, formed the intention, and finally executed it.

The level of executive activity is, *ceteris paribus*, proportional to blameworthiness. But there are cases when executive functions are engaged, but the subject is not responsible for her action due to the false representation of someone or something (Hirstein et al. 2018: 66). Imagine a case where a hunter mistakenly killed his colleague because he mistook him for a bear. It was dark and raining, and the killed colleague did not wear hunting clothes. In this case, our hunter is only partially culpable because he should not have used his gun unless he had seen his target clearly or he should have checked whether his colleague has been wearing appropriate clothes and so on. Now imagine that an activist wearing very realistic bear costume was killed. In such a case, the hunter would not be culpable because there is no way he could have distinguished the person wearing a bear costume from a real bear (Hirstein et al. 2018: 66).

Since this thesis addresses the question of the responsibility of high-functioning autists in general, which means that I don´t discuss singular cases, in what follows, I discuss the question whether autists satisfy the first criterion of responsibility. The remaining two criteria concern specific circumstances in singular cases and therefore are not relevant for the purposes of the thesis. Since executive functions are the capacities relevant for criminal responsibility, in the next section I present scientific data about impairments of executive functions in the case of autism.

3.3. Impairments of executive functions in high-functioning autism

In this section, I describe the impairments of each executive function in high-functioning autism:

1) Inhibition. Autists´ difficulties in social interaction can be explained in terms of inhibitory problems since the inhibition is capacity required to choose adequate responses during social interactions (Geurts et al. 2014: 125 – 126). Inhibition is required when we need to use less common meaning of the word, unlike the meaning we usually use. Thus, problems with inhibition might explain why autists often do not understand figuratively used expressions

(Geurts et al 2014: 126). Repetitive behavior might also be caused by inhibitory difficulties since autists are often not able to control their behavior, although they are aware of its negative outcomes (see Langen et al. 2012). Current findings indicate that autists have problems with resistance to distractor interference which is one type of inhibition (see Adams and Jarrold 2012; Christ et al. 2011; Geurts et al. 2008). In other words, they have difficulties disregarding irrelevant (interfering) details.

2) Working memory. Autists manifest difficulties with working memory as inability to follow instructions, despite being correctly comprehended. This made scientists think that there is a problem with transfer and utilization of information (Geurts et al. 2014: 127). Impaired working memory might cause problems in social interactions because working memory has an important role in retaining, processing and noticing different social cues, such as facial expressions, tone of voice and body language (Geurts et al. 2014: 127; Causton-Theoharis et al. 2009). Autists exhibit great difficulties with working memory when they face more than one task at the same time or when they should perform few complicated or intricated tasks one after another, because their working memory is overloaded. According to Willcut et al. (2008), both verbal and visual-spatial working memory of autists are impaired. The evidence suggests that there is a correlation between impairments in visual-spatial working memory and autism (Geurts et al. 2014: 128: see Verté et al. 2006). Autists often rely on pictures or symbols to show usual everyday activities or assignments which should be executed (Ganz et al. 2011). Such visual presentation of information helps autists to unburden working memory. Finally, it should be noted that working memory affects and interacts with other executive functions (Geurts et al. 2014: 128; see Stoet and Lopez 2010).

3) Cognitive flexibility. Autism is often explained in terms of cognitive flexibility deficits because autists show inflexible, stereotypical and repetitive behavior. According to Monsell (2003), cognitive flexibility is the key capacity required to shift perspectives in social interactions. However, it is very hard to empirically prove the existence of a relation between cognitive flexibility and symptoms of autism, and there is inconsistency between findings in different studies, which is still unexplained (Geurts et al. 2014: 129 – 130; see also Geurts et al. 2009). Some studies suggest impairments in cognitive flexibility in autism (e.g., Hughes et al. 1994; Ozonoff et al. 2004; Reed and McCarthy 2012), while other indicate that there are no such impairments (e.g., Corbett et al. 2009; Goldberg et al. 2005; Happé and Frith 2006).

4) Planning. Autists often have planning difficulties, such as making a schedule of daily duties or managing a household (Geurts et al. 2014: 130). Planning problems might also contribute to difficulties in social interactions and communications. Autists often need help from their family to make arrangements for social activities and to maintain social contacts (Geurts et al. 2014). Planning usually requires performance of other executive functions, such as working memory and inhibition (Geurts et al. 2014: 131 see Newman et al. 2003; Welsh et al. 1999; Zinke et al. 2010). The evidence suggesting impairments of planning is consistent (Bennetto et al., 1996; Lopez et al. 2005; Griebling et al. 2010), but it is difficult to compare data found in different studies due to differences in measurement methods, characteristics of participants and results (see Geurts and Bringmann 2011; Hill 2004).

5) Monitoring of behavior. There is evidence which suggests that autism is related to decreased error processing and lower correction of behavior after a mistake is committed (Sokhadze et al. 2010; see Russell and Jarrold 1998). Appropriate error processing ensures the best possible behavior, so it can be concluded that inappropriate correction of behavior and deficits in response monitoring might lead to limited and repetitive behavior, which is distinctive for autism (Sokhadze et al. 2010). Incapacity to properly assess a mistake which was made and to learn from it might explain rigid and repetitive behavior. However, some studies report no deficits in monitoring of behavior (see Hill and Russell 2002).

6) Monitoring of perceptions, memories, and emotions. Autists might show difficulties with emotion regulation and they might not be able "to identify and describe feelings" (Torrado et al. 2017; see Berthoz and Hill 2005). Autists might also exhibit problems with monitoring their memories (Grainger and Williams 2014; Wilkinson 2010; Cooper et al. 2016) as well as with reality monitoring. Reality monitoring is a capacity to distinguish "between internal and external sources of information" (Cooper et al. 2016: 2186; see Johnson et al. 1993). Thoughts and imagination exemplify the internal sources of information, while perceptual processes represent the external sources of information (Simons et al. 2008). Participants in reality monitoring test are required to answer the question "whether stimuli were previously presented on a monitor screen or whether the participants imagined the stimuli for themselves" or they need to tell "whether they, or another person, performed a particular operation on the stimuli" (Simons et al. 2008: 447). These two versions of reality monitoring test reflect the difference between two kinds of reality monitoring. In the first case, there is only one agent ("participant perceived or imagined"), while in the second case there are two agents ("participant or another person took an action") (Simons et al. 2008: 447). In the literature, the first case is often called

"perceived-imagined" reality monitoring or "perceived/imagined" status, while the second case is called "self - other" reality monitoring or "self/other status" (Cooper et al. 2016; Simons et al. 2008). Some studies show that self–other reality monitoring is impaired in autism (Lind and Bowler 2009; Maras et al. 2013; Russell and Jarrold 1999), while according to other researchers, self-other reality monitoring is intact (Farrant et al. 1998; Hill and Russell 2002; Zalla et al. 2010). The studies which examine both perceived - imagined reality monitoring and self-other reality monitoring are rare. According to Hala et al. (2005) and Cooper et al. (2016) both sorts of reality monitoring are impaired.

7) Attention. Some researchers contend that peculiarity of attention capacity in autism leads to autistic behavior and cognition (Allen and Courchesne, 2001; Keehn et al, 2013). According to these authors, weak central coherence can be explained by attention deficits. Keehn et al. (2013) argue that autists are focused on details because they have problems turning their attention from it. Allen and Courchesne (2001) think that excessively pinpointed attention precludes making of the coherent whole from complex stimuli. Keehn et al. (2013) assume that this problem might lead to unusual degree of excitement, which might in turn cause problems in executive functions because the focus is put on how to decrease excessive excitement. Allen and Courchesne, (2001) and Keehn et al. (2013) argue that attention is vital for understanding the mental states of others and development of social skills.

In the next section, I present Kenneth Richman´s discussion of moral responsibility and explain its relevance for the discussion of criminal responsibility. I then apply the executive functions theory of responsibility in the discussion of criminal responsibility of autists. I rely on scientific research about impairments of executive functions, which I have presented in this section. I assess how respective impairments affect the criminal responsibility of autists.

3.4. Executive functions and the responsibility of autists

Before presenting Richman´s discussion of responsibility of autists, I will explain how his discussion is relevant here, given that Richman is interested in moral responsibility, while I am interested in criminal responsibility.

Richman relies on the so-called reason-responsive accounts of moral responsibility. In short, according to these theories, a person is responsible for an action if she is able to guide

her behavior by relevant reasons. John Martin Fischer and Mark Ravizza summarized the essence of this account in the following paragraph cited by Richman:

> In the case of receptivity to reasons, the agent (holding fixed the relevant mechanism) must exhibit an understandable pattern of reasons-recognition in order to render it plausible that his mechanism has the "cognitive power" to recognize the actual incentive to do otherwise. In the case of reactivity to reasons, the agent (when acting from the relevant mechanism) must simply display some reactivity, in order to render it plausible that his mechanism has the "executive power" to react to the actual incentive to do otherwise. (Fischer and Ravizza 1998: 75)

This account requires that the agent possesses both the capacity to recognize the relevant reasons for action (receptivity to reasons) and the capacity to act accordingly (reactivity to reasons). Richman also notes that "normative competence", introduced by Brink and Nelkin (2013), includes the ability to perceive reasons and to behave in accordance with them. Normative competence is, therefore, equivalent to the capacity to be reason-responsive. As it was mentioned in the first chapter, normative competence underpins cognitive and volitional capacities that are relevant for criminal responsibility. This means that the capacities underpinning reason-responsiveness are also equivalent to cognitive and volitional capacities relevant for criminal responsibility. Thus, Richman´s analysis of moral responsibility can also be related to the analysis of criminal responsibility. In other words, the discussions about moral responsibility and criminal responsibility, in important respects represent, the same discussion.

Hirstein et al. (2018) have also come to the same conclusion about the relationship between reason-responsiveness and capacities relevant for criminal responsibility. They started from folk concepts of responsibility reflected in the reason-responsiveness theory of moral responsibility, and they reconciled it with the notion of executive functions that involves capacities relevant for criminal responsibility.

Before proceeding, it should be noted that there is a distinction between the discussion about capacities which are relevant both for moral and criminal responsibility, and the discussion about what actions are both morally and legally justified. As explained in the first chapter, there is no equivalence between moral and legal status of some action. I am not interested in the question of moral and legal status of specific actions but in the question of capacities relevant for criminal responsibility. The reason-responsiveness theory used by Richman is about what capacities a person must possess to be an appropriate target of moral

judgement. To repeat, I argue that the same capacities are necessary for both moral and criminal responsibility and, consequently, that all claims made by Richman about moral responsibility are also relevant for criminal responsibility. Now, I can present the discussion of responsibility of autists offered by Kenneth Richman.

Richman mentions several types of cases in which responsibility of autists can be diminished or completely absent. In the first type, the autist might not perceive some state of affairs. For instance, the autist may not perceive that her child is in danger or she might not perceive that her friend is sad (Richman 2018: 28). Richman (2018: 29) thinks that this inappropriate behavior might be explained by a failure of cognitive capacities due to difficulties updating working memory. I think that Richman is right. Moreover, I think that this behavior might also be explained by attention difficulties and difficulties with monitoring of perceptions and emotions.

Richman (2018: 29) states that in the second type of cases, the autist might perceive some state of affairs, but does not see it as a reason for action because he does not recognize the available options for action. In such a situation, the autist does not recognize some state of affairs as the reason for action because he mistakenly believes there is nothing he can do. Richman does not offer an example, but I believe that the following example depicts this case; imagine two people being alone on the beach. Person A begins to drown, but person B fails to see available options for action due to a panic attack and does nothing to save A. I think such a failure might be caused by the impairment in cognitive flexibility and attention. In this case, the attention of autists might be overly focused on the fact that the person is drowning, instead of being focused on how to save her.

In another type of case, an autist sees the relevant reasons for action and is able to respond to them, but makes the wrong decision. Richman (2018: 28) uses an example of a person whose house is burning, and she decides to take with her a valuable comic book collection instead of helping other members of her family to get out. In this case A recognized that helping the other members of the family was a relevant alternative action, but wrongly sorted out her priorities. According to Richman (2018: 28), autists may not be culpable in this case due to "restricted and repetitive interests and activities" (Happe et al. 2006: 1218) and difficulties with inhibition (Robinson et al. 2009), which prevent them from forming the appropriate hierarchy of reasons. I agree with Richman and would also like to add that impairments in planning and cognitive flexibility might explain such a behavior because in this

case the person needs to form a plan how to safely leave the house and what belongings to take with her.

Finally, an autist might see the relevant reasons for the action and be motivated to act accordingly, but fails to act because he struggles to select a suitable option. Richman (2018: 28 – 29) argues that this case represents a failure of practical reason because A possesses both the goal to act in accordance with the relevant reasons and the will to go for it, but there is a "difficulty in the processing of information to make a decision" (Grisso et Apelbaum 1998). Richman (2018: 29) thinks that this might be caused by impairments in cognitive flexibility (see Russo et al 2007) and task initiation (see Carmo et al 2017). Impairments in cognitive flexibility cause problems with capacity "to compare the consequences of competing potential actions" (Richman 2018: 29). I agree with Richman, but I think that the impairment in the planning capacity also plays an important role. In this sort of case, autists might set an appropriate goal, but have problems choosing appropriate methods to achieve that goal. For example, autists might decide to look for a job in order to earn money, which is a rational decision motivated by rational reasons, but they might have difficulties choosing between looking for a job in newspaper advertisements, randomly asking strangers in the street and looking for a job at the unemployment office.

Richman concludes that autists are more prone to these mistakes and thus can be excused *more often* due to impairments in executive functions. However, he contends that the same type of excuses (which were mentioned above) can be applied both to autists and non-autists. For instance, there is evidence that non-autists sometimes make these mistakes due to fatigue, stress or loneliness (Diamond 2013). In this regard, he adds that "there is every reason to believe that autistic adults want to be held accountable, and also want to be excused when autism has made them reason blocked" (Richman 2018: 30). So, according to Richman (2018: 30 – 31), the claim is that socially integrated autists should be considered as accountable by default, but they can be excused in particular situations when impairments in cognitive or volitional capacities become relevant.

3.5. Should autists be legally excused more than neurotypical individuals?

I agree with Richman that socially engaged autists should be considered as accountable by default, and I also agree that their responsibility can be *diminished or mitigated* due to impairments in volitional capacities. Nonetheless, I argue that high-functioning autists should

not be *excused* due to impairments in cognitive and volitional capacities. Excuses in the context of criminal responsibility can be understood as follows:

> Excuses, such as the insanity defense, deny culpability or responsibility, claiming that the agent acted wrongly but was not responsible for her wrongdoing. (Brink and Nelkin 2013: 290)

As it can be seen from the above definition, excuse for an action means that a person is not responsible for that action at all. I think that high-functioning autists cannot be excused because of two reasons. First, as noted earlier, Hirstein et al. (2018: 87) contend that a subject might[1] be responsible only if she possesses a minimally working set of executive functions. I think that it is plausible that high-functioning autists have a minimally working set of executive functions because they are integrated into society and exhibit only mild autistic traits. Although they have the minimally working set of executive functions, I think that responsibility of autists can be diminished due to impairments in executive functions, which were described in section 3. 3. In other words, I think the autists have below-average working set of executive functions compared to non-autists, which is a good reason for mitigating their responsibility in many circumstances. Second, I think that autists cannot be excused due to normal or even outstanding IQ, which makes them aware of their impairments to some extent.[2] Such awareness makes them responsible to some extent because they are able to use different techniques to compensate for their impairments, such as faking facial expressions, learning social scripts in advance, maintaining eye contact by force, and pretending that they understand problems of others (Boren 2017; Hull et al 2017; Lai et al. 2019).

However, Hull et al. (2017) note that using those strategies may affect autistic identity and well-being in a negative way, causing frustration and loneliness. Thus, it could be argued that autists should often not be held responsible for their actions because we cannot demand from them to rely on these strategies which are harmful to them.

I am aware that it is extremely hard and unpleasant for autists to use such strategies. I think that using these compensatory strategies may often be experienced by autists as duress. Carl Elliott characterizes duress as a situation when "the person is faced with the choice

[1] It should be kept in mind that having the minimal working set of executive functions is not sufficient for the criminal responsibility. There are two more conditions that must also be fulfilled, but which are not relevant for the topic of this thesis, as I explained in section 3. 2.

[2] It is important to have in mind that IQ is not connected with impairments of executive functions, as I have mentioned in the previous section. So, cognitive and volitional capacities relevant for responsibility (i.e., executive functions) can be impaired despite very high IQ.

between (1) acting on desires that he finds morally repellent and shameful and, (2) refraining, which causes him considerable distress" (Elliott 1996: 48). However, it is important to note that duress is "a choice between undesirables" (Elliott 1996: 46) and that "the person who has acted under duress typically would strongly prefer not to be faced with the choice he must make" (Elliot 1996: 47). So, in the case of duress, "there is at least some element of decision" (Elliot 1996: 46). This entails at least some degree of accountability too. That is why I think that the responsibility of autists will often be diminished, but not entirely absent. According to Eliott, (1996, chapter 3), classic examples of duress include kleptomania, voyeurism, exhibitionism, fetishism, pedophilia, gambling, and pyromania. It should be noted that Elliott applies the concept of duress only in the context of moral responsibility of people who suffer from volitional disorders, such as those mentioned above. He does not discuss the responsibility of autists in any sense and he is also not interested in criminal responsibility, although he briefly discusses the question of the utility of the legal punishment in the cases of the offenders suffering from volitional disorders (see Elliott 1996, chapter 3). However, I argue that Elliott´s concept of duress should be applied in discussion of the criminal responsibility of autists.

Autists are forced to choose between two bad alternatives; on the one hand, they can behave in accordance with their autistic nature, thereby risking breaking the law, or, on the other hand, they can attempt to suppress their autistic behavior and suffer because of it. Whatever they do, they are responsible because they made the decision. Here it is important to note that not only people with mental disorders face situations of duress, but also all other people, such as doctors who often cannot save the lives of all the patients due to lack of required resources. Doctors facing such a situation are still responsible, but their responsibility is diminished as well as the responsibility of autists, considering the toughness of decision they had to make.

The crucial assumption which underlies the idea of duress in the cases of autism is that autistic nature is the preponderant cause of the criminal acts committed by autists, or at least that it increases the risk of committing them. There is evidence that nonsexual violent behavior is frequent in the cases of autism, such as assault and serial killing (see Mawson et al. 1985; Murrie et al. 2002; Silva et al. 2005). It seems that repetitive behavior and limited interests are the main autistic traits related to criminal offences of autists (Haskins and Silva 2006: 380). There is the case of a man obsessed with driving busses and trains and who was apprehended due to driving without legal permission (see Tietz 2002). Repetitive behavior and limited interests are also related to thieving and collecting behavior (see Chen et al. 2003), as well as

with various forms of stalking (see Stokes and Newton 2004). Furthermore, the most widespread crime connected with autism is arson (Haskins and Silva 2006: 381). There are two cases of autists setting the fire because they were fixated on observing the fire, as well as the one case of an autist who burned down the radio station because he could not listen to his favorite channel due to problems with the signal (see Barry-Walsh and Mullen 2004). Murrie et al. (2002) mention the case of a man who set some people on fire in revenge because he was bullied in childhood. However, the victims of his act had no relation with the people who were bullying him, of which he was not aware. He was encouraged by the case of arson from the news. The houses he set on fire appeared to him as similar to the houses of his abusers. Finally, Haskins and Silva (2006) describe the case of a chemistry teacher who inappropriately touched shoulders of his female students. Generally speaking, it has been noticed that autists who commit crimes of sexual abuse treat their victims as pure objects, thereby entirely dehumanizing them (see Silva et al. 2004). As it can be seen, the cases mentioned above belong to the same sort of cases which Elliott characterizes as duress in his discussion of moral responsibility. However, it should be noted that there is a little but important difference between duress in the context of criminal and moral responsibility. In the context of the moral responsibility, as noted by Elliot, the offender attempts to avoid acting on morally undesirable desires, while in the context of the criminal responsibility, she attempts to avoid acting on desires which are undesirable from the perspective of the law. Morally undesirable desires and desires which are undesirable from the perspective of the might overlap, but not necessarily.

It is important not to confuse duress with common situations in which someone is undecided because she needs to make a tough decision. In the latter case the available options have both advantages and disadvantages that are balanced, while in the case of duress, all of the available options have only disadvantages and necessarily lead to suffering of the person who made the decision under duress.

It could be argued that autists are not under duress, instead they suffer from irresistible impulses, which would again provide grounds for not holding them responsible. The lawyers of autistic defendants would likely endorse this claim to get exculpation for their clients. However, there is a general problem with establishing whether someone suffers from irresistible impulses. As correctly noted by Eliott (1996: 41 – 42), there is a problem distinguishing cases where the offender tried to guide his will or, in other words, inhibit his impulses, but failed to do so from the cases where he didn´t even want or try to do it. Even the people who possess strong impulses cannot reliably determine if their impulses are irresistible

or not. Furthermore, I think that understanding of autism as causing irresistible impulses could lead to premature exculpation for literally any action. This is the reason why conceiving autism as causing literally irresistible impulses is inappropriate. Therefore, I think that Elliot´s (1996) understanding of it in terms of duress is plausible. An advantage of such an approach is twofold; it precludes the possibility of exculpating autists for any action due to alleged irresistible impulse, but at the same time it acknowledges problems of autists with impulse control and the impact of these problems on responsibility.

Finally, there is Richman´s claim that autists want to be considered accountable but want to be exculpated when autism affects their reason-responsiveness. But if autists want to be exculpated from criminal responsibility based on autism, they might be forced to acknowledge the disorder status of autism, although they strongly believe that high-functioning autism is not a disorder. In other words, demands for exculpation or diminished responsibility due to autism are incompatible with the claims of neurodiversity movement that high-functioning autism is not a disorder. However, autists might be excused due to other reasons mentioned earlier, which can also exculpate non-autists, such as fatigue, stress or loneliness.

3.6. Conclusion

In this chapter, I have claimed that high-functioning autists should not be excused, despite possible impairments in cognitive and volitional capacities relevant for criminal responsibility because they have normal or even higher IQ, which ensures that they are aware of their impairments so they can rely on various strategies to compensate for them. I have argued that Carl Elliot´s concept of duress represents an appropriate framework to understand the criminal responsibility of high-functioning autists.

4. Conclusion

In this thesis, I discussed the criminal responsibility of high-functioning autists. More precisely, I discussed the accountability of high-functioning autists within the Croatian Criminal Code. I started with an outline of accountability component as envisaged by Croatian Criminal Code, and I discussed the disorder requirement for exculpation posed by the law. I argued that the disorder requirement is relevant for exculpation.

Then I have addressed influential claims of the neurodiversity movement advocates who argue that autism is not a disorder. I have claimed that Wakefield et al. (2021) are right when they claim that arguments of the neurodiversity movement are not plausible from the perspective of harmful dysfunction account of mental disorder. However, I argued that the harm component of the respective account should be more precisely defined and that the list of basic psychological capacities offered by George Graham provides an appropriate framework for conceptualizing harm. I have argued that the notion of harm has objective and subjective aspects and that the disorder status of autism should be determined on a case-by-case basis.

Finally, in chapter 3, I have relied on the executive function theory of responsibility offered by Hirsten et al. as a "bridge" between our common sense psychological understanding of responsibility and neuroscience. I have discussed Richman´s claims about the responsibility of autists. On the one hand, I agree with him that autists should be considered responsible by default. On the other hand, I disagree that autists can be exculpated in particular cases. I argued that, despite of impairments in executive functions, autists can only be regarded as having diminished responsibility due to the impairments usually associated with autism This is because high-functioning autists are aware of their impairments due to normal or higher IQ and can rely on various techniques to partially compensate for their impairments. I have claimed that the responsibility of autists may often be reduced when they do not conform to social rules because confirming to social rules might often be experienced as duress. They might feel as being coerced to choose between two unpleasant possibilities, and in response they can try to hide their autistic nature using different methods which is damaging for them, or they can give up using them, and therefore increase the chance of getting into trouble with the law. However, the discussion is far from over and further investigation is needed. In any case, both philosophy and empirical sciences of the mind can provide the court with useful insights which would help the judges to make right decisions in the cases that involve autistic individuals.

References

Allen, G., and E. Courchesne. 2001. “Attention Function and Dysfunction in Autism.” *Frontiers in Bioscience: A Journal and Virtual Library* 6 (February): D105-119. https://doi.org/10.2741/allen.

American Psychiatric Association. 2013. *Diagnostic and statistical manual of mental disorders: DSM-5*. Arlington, VA: American Psychiatric Association.

Adams, Nena C., and Christopher Jarrold. 2012. “Inhibition in Autism: Children with Autism Have Difficulty Inhibiting Irrelevant Distractors but Not Prepotent Responses.” *Journal of Autism and Developmental Disorders* 42 (6): 1052–63. https://doi.org/10.1007/s10803-011-1345-3.

Amoretti, M. Cristina, and Elisabetta Lalumera. 2019. “Harm Should Not Be a Necessary Criterion for Mental Disorder: Some Reflections on the DSM-5 Definition of Mental Disorder”. *Theoretical Medicine and Bioethics* 40 (4): 321–37. https://doi.org/10.1007/s11017-019-09499-4.

Armstrong, Thomas. 2015. “The Myth of the Normal Brain: Embracing Neurodiversity”. *AMA Journal of Ethics* 17 (4): 348–52. https://doi.org/10.1001/journalofethics.2015.17.4.msoc1-1504.

Baddeley, A. 1998. “The Central Executive: A Concept and Some Misconceptions.” *Journal of the International Neuropsychological Society: JINS* 4 (5): 523–26. https://doi.org/10.1017/s135561779800513x.

Baddeley, Alan, and Barbara Wilson. 1988. “Frontal Amnesia and the Dysexecutive Syndrome.” *Brain and Cognition* 7 (2): 212–30. https://doi.org/10.1016/0278-2626(88)90031-0.

Baron-Cohen, Simon. 2009. "Autism: The Empathizing – Systemizing (E-S) Theory". *The Year in Cognitive Neuroscience:* Ann. N.Y. Acad. Sci. 1156, pp. 68-80.

———. 2011. *Zero degrees of empathy: a new theory of human cruelty*. London: Allen Lane.

———. 2017. “Editorial Perspective: Neurodiversity – a Revolutionary Concept for Autism and Psychiatry”. *Journal of Child Psychology and Psychiatry* 58 (6): 744–47. https://doi.org/10.1111/jcpp.12703.

Barry-Walsh, Justin B, and Paul E Mullen. 2004. “Forensic Aspects of Asperger’s Syndrome.” *The Journal of Forensic Psychiatry & Psychology* 15 (1): 96–107. https://doi.org/10.1080/14789940310001638628.

Bechara, Antoine. 2005. “Decision Making, Impulse Control and Loss of Willpower to Resist Drugs: A Neurocognitive Perspective.” *Nature Neuroscience* 8 (11): 1458–63. https://doi.org/10.1038/nn1584.

Bennetto, L., B. F. Pennington, and S. J. Rogers. 1996. “Intact and Impaired Memory Functions in Autism.” *Child Development* 67 (4): 1816–35.

Bermúdez, José Luis. 2005. *Philosophy of Psychology: A Contemporary Introduction*. London: Routledge.

Berthoz, Sylvie, and Elisabeth L. Hill. 2005. “The Validity of Using Self-Reports to Assess Emotion Regulation Abilities in Adults with Autism Spectrum Disorder.” *European Psychiatry* 20 (3): 291–98. https://doi.org/10.1016/j.eurpsy.2004.06.013.

Blume, Harvey. 1998. “Neurodiversity”. The Atlantic. 30 September 1998. https://www.theatlantic.com/magazine/archive/1998/09/neurodiversity/305909/. Accessed 15th April.

Bolton, Derek. 2013.. “What is mental illness?” In *The Oxford Handbook of Philosophy and Psychiatry*, edited by K. W. M. Fulford, Martin Davies, Richard G. T. Gipps, George Graham, John Z. Sadler, Giovanni Stanghellini and Tim Thornton, 434-50. Oxford: Oxford University Press.

Boren, Ryan. 2017. *Autistic Burnout: The Cost of Masking and Passing.* https://boren.blog/2017/01/26/autistic-burnout-the-cost-of-coping-and-passing/. Accessed 30th May 2021.

Bortolotti, Lisa, Matthew R. Broome, and Matteo Mameli. 2014. “Delusions and Responsibility for Action: Insights from the Breivik Case.” *Neuroethics* 7 (3): 377–82. https://doi.org/10.1007/s12152-013-9198-4.

Brink, David O. and Dana K. Nelkin. 2013. “Fairness and the architecture of responsibility”. In *Oxford Studies in Agency and* Responsibility, edited by David Shoemaker, 284–313. Oxford: Oxford University Press

Brown, Lydia. 2013. *Identity-first language*; https://autisticadvocacy.org/about-asan/identity-first-language/. Accessed 25th April 2021.

Candilis, Philip J., Kenneth E. Fletcher, Cynthia M.A. Geppert, Charles W. Lidz, and Paul S. Appelbaum. 2008. "A Direct Comparison of Research Decision-Making Capacity: Schizophrenia/Schizoaffective, Medically Ill, and Non-Ill Subjects." *Schizophrenia Research* 99 (1–3): 350–58. https://doi.org/10.1016/j.schres.2007.11.022.

Carmo, Joana C., Elsa Duarte, Cristiana Souza, Sandra Pinho, and Carlos N. Filipe. 2017. Brief report: Testing the impairment of initiation processes hypothesis in autism spectrum disorder. *Journal of Autism and Developmental Disorders*: 1–5.

Cartwright, Samuel A. 1851. "Report on the Disease and Physical Peculiarities of the Negro Race". *The New Orleans Medical and Surgical Journal*, 89–92.

Cattapan-Ludewig, Katja, Stephan Ludewig, Nadine Messerli, Franz X. Vollenweider, Antonia Seitz, Joram Feldon, and Martin P. Paulus. 2008. "Decision-Making Dysregulation in First-Episode Schizophrenia:" *The Journal of Nervous and Mental Disease* 196 (2): 157–60. https://doi.org/10.1097/NMD.0b013e318162aa1b.

Causton-Theoharis, Julie, Christine Ashby, and Meghan Cosier. 2009. "Islands of Loneliness: Exploring Social Interaction through the Autobiographies of Individuals with Autism." *Intellectual and Developmental Disabilities* 47 (2): 84–96. https://doi.org/10.1352/1934-9556-47.2.84.

Chapman, Robert. 2016. "Autism Isn't Just a Medical Diagnosis — It's a Political Identity". Medium. 2016. https://medium.com/the-establishment/autism-isnt-just-a-medical-diagnosis-it-s-a-political-identity-178137688bd5. Accessed 20th April 2021.

———. 2019. "Neurodiversity Theory and Its Discontents: Autism, Schizophrenia, and the Social Model of Disability". In *The Bloomsbury Companion to Philosophy of Psychiatry*, edited by S. Tekin and R. Bluhm, 371–90. London: Bloomsbury Academic.

Chen, P. S., S. J. Chen, Y. K. Yang, T. L. Yeh, C. C. Chen, and H. Y. Lo. 2003. "Asperger's Disorder: A Case Report of Repeated Stealing and the Collecting Behaviours of an Adolescent Patient." *Acta Psychiatrica Scandinavica* 107 (1): 73–75; discussion 75-76. https://doi.org/10.1034/j.1600-0447.2003.01354.x.

Christ, Shawn E., Lindsay E. Kester, Kimberly E. Bodner, and Judith H. Miles. 2011. "Evidence for Selective Inhibitory Impairment in Individuals with Autism Spectrum Disorder." *Neuropsychology* 25 (6): 690–701. https://doi.org/10.1037/a0024256.

Cooper, Rachel V. 2007. *Psychiatry and Philosophy of Science*. Stockfield: Acumen.

Cooper, Rose A., Kate C. Plaisted-Grant, Simon Baron-Cohen, and Jon S. Simons. 2016. "Reality Monitoring and Metamemory in Adults with Autism Spectrum Conditions." *Journal of Autism and Developmental Disorders* 46: 2186–98. https://doi.org/10.1007/s10803-016-2749-x.

Corbett, Blythe A., Laura J. Constantine, Robert Hendren, David Rocke, and Sally Ozonoff. 2009. "Examining Executive Functioning in Children with Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder and Typical Development." *Psychiatry Research* 166 (2–3): 210–22. https://doi.org/10.1016/j.psychres.2008.02.005.

Curtis, Clayton, and Mark D'Esposito. 2003. "Curtis CE, D'Esposito M. Persistent Activity in the Prefrontal Cortex during Working Memory. Trends Cogn Sci 7: 415-423." *Trends in Cognitive Sciences* 7 (October): 415–23. https://doi.org/10.1016/S1364-6613(03)00197-9.

Cushing, Simon. 2018. "Has Autism Changed?" In *The Social Constructions and Experiences of Madness*, edited by Monika dos Santos and Jean-Francois Pelletier, 75–94. Leiden: Brill.

Diamond, Adele. 2013. Executive functions. *Annual Review of Psychology* 64: 135–168.

Doherty, Martin J., Nicola M. Campbell, Hiromi Tsuji, and William A. Phillips. 2010. "The Ebbinghaus Illusion Deceives Adults but Not Young Children". *Developmental Science* 13 (5): 714–21. https://doi.org/10.1111/j.1467-7687.2009.00931.x.

Dominus, Susan. 2019. "Open Office". *The New York Times Magazine*. Retrieved from https://www.nytimes.com/interactive/2019/02/21/magazine/autism-office-design.html.

Duncan, John, and Adrian M. Owen. 2000. “Dissociative Methods in the Study of Frontal Lobe Function.” In *Attention and Performance* 18, edited by Stephen Monsell and Jon Driver, 566–76. Cambridge, MA: MIT Press.Francken, Jolien C., and Marc Slors. 2018. “Neuroscience and Everyday Life: Facing the Translation Problem.” *Brain and Cognition* 120 (Supplement C): 67–74. https://doi.org/10.1016/j.bandc.2017.09.004.

Elliott, Carl. 1996. *The Rules of Insanity Moral Responsibility and the Mentally Ill Offender*. New York: SUNY Press.

Farrant, A., M. Blades, and J. Boucher. 1998. “Source Monitoring by Children with Autism.” *Journal of Autism and Developmental Disorders* 28 (1): 43–50. https://doi.org/10.1023/a:1026010919219.

Feather, K. A. (2016). “Low functioning to high-functioning autism: A prescriptive model for counselors working with children across the spectrum.” *Ideas and research you can use: VISTAS 2016.* Fischer, John Martin, and Mark Ravizza. 2000. *Responsibility and Control: A Theory of Moral Responsibility*. 1. paperback ed. Cambridge Studies in Philosophy and Law. Cambridge: Cambridge Univ. Press.

Francken, Jolien C., and Marc Slors. 2018. “Neuroscience and Everyday Life: Facing the Translation Problem.” *Brain and Cognition* 120 (February): 67–74. https://doi.org/10.1016/j.bandc.2017.09.004.

Frith, Uta. 1989. *Autism: Explaining the Enigma*. Malden, MA: Blackwell Pub.Fulford, K. W. M. 1989. *Moral Theory and Medical Practice*. Cambridge: Cambridge University Press.

Ganz, Jennifer B., John L. Davis, Emily M. Lund, Fara D. Goodwyn, and Richard L. Simpson. 2012. “Meta-Analysis of PECS with Individuals with ASD: Investigation of Targeted versus Non-Targeted Outcomes, Participant Characteristics, and Implementation Phase.” *Research in Developmental Disabilities* 33 (2): 406–18. https://doi.org/10.1016/j.ridd.2011.09.023.

Gernsbacher, Morton A. 2017. "Editorial Perspective: The Use of the Person-First Language in Scholarly Writing May Accentuate Stigma". *Journal of Child Psychology and Psychiatry* 58:7.

Geurts, Hilde.M., and Bringmann, Laura. 2010. Planning in autisme: Een kwalitatieve en kwantitatieve analyse. *Wetenschappelijk Tijdschrift Autisme*, 1, 4–17.

Geurts, Hilde, Marieke de Vries, and Sanne Bergh. 2014. "Executive Functioning Theory and Autism." In *Handbook of Executive Functioning*, edited by Sam Goldstein and Jack A. Naglieri, 121–41. New York: Springer. https://doi.org/10.1007/978-1-4614-8106-5_8.

Geurts, Hilde M., Mariolein Luman, and Catharina S. van Meel. 2008. "What's in a Game: The Effect of Social Motivation on Interference Control in Boys with ADHD and Autism Spectrum Disorders." *Journal of Child Psychology and Psychiatry, and Allied Disciplines* 49 (8): 848–57. https://doi.org/10.1111/j.1469-7610.2008.01916.x.

Geurts, Hilde M., Sander Begeer, and Lex Stockmann. 2009. "Brief Report: Inhibitory Control of Socially Relevant Stimuli in Children with High-functioning Autism." *Journal of Autism and Developmental Disorders* 39 (11): 1603–7. https://doi.org/10.1007/s10803-009-0786-4.

Gilbert, Sam J., and Paul W. Burgess. 2008. "Executive Function." *Current Biology: CB* 18 (3): R110-114. https://doi.org/10.1016/j.cub.2007.12.014.

Goldberg, M. C., S. H. Mostofsky, L. E. Cutting, E. M. Mahone, B. C. Astor, M. B. Denckla, and R. J. Landa. 2005. "Subtle Executive Impairment in Children with Autism and Children with ADHD." *Journal of Autism and Developmental Disorders* 35 (3): 279–93. https://doi.org/10.1007/s10803-005-3291-4.

Goldman-Rakic, Patricia S. 1996. "Regional and Cellular Fractionation of Working Memory." *Proceedings of the National Academy of Sciences* 93 (24): 13473–80. https://doi.org/10.1073/pnas.93.24.13473.

Graby, Steve. 2015. “Neurodiversity: Bridging the Gap between the Disabled People”s Movement and the Mental Health System Survivors” Movement?” In *Madness, Distress and the Politics of Disablement*, edited by Helen Spandler, Jill Anderson, and Bob Sapey, 231–43. Policy Press. https://doi.org/10.2307/j.ctt1t898sg.

Graham, George. 2010. *The Disordered Mind: An Introduction to Philosophy of Mind and Mental Illness*. Abingdon, Oxon; New York, NY: Routledge.

Grainger, Catherine, David M. Williams, and Sophie E. Lind. 2014. “Metacognition, Metamemory, and Mindreading in High-Functioning Adults with Autism Spectrum Disorder.” *Journal of Abnormal Psychology* 123 (3): 650–59. https://doi.org/10.1037/a0036531.

Griebling, Jessica, Nancy J. Minshew, Kimberly Bodner, Robin Libove, Rahul Bansal, Prasad Konasale, Matcheri S. Keshavan, and Antonio Hardan. 2010. “Dorsolateral Prefrontal Cortex Magnetic Resonance Imaging Measurements and Cognitive Performance in Autism.” *Journal of Child Neurology* 25 (7): 856–63. https://doi.org/10.1177/0883073809351313.

Grisso, Thomas, and Paul S. Appelbaum. 1998. *Assessing competence to consent to treatment: A guide for physicians and other health professionals*. New York: Oxford University Press

Grozdanić, Velinka, Marissabell Škorić, and Igor Martinović. 2013. *Kazneno pravo: opći dio* (Eng. *Criminal Law: The General Part*). Rijeka: Faculty of Law.

Hala, Suzanne, Carmen Rasmussen, and Annette M. E. Henderson. 2005. “Three Types of Source Monitoring by Children With and Without Autism: The Role of Executive Function.” *Journal of Autism and Developmental Disorders* 35 (1): 75–89. https://doi.org/10.1007/s10803-004-1036-4.

Happé, Francesca. 1999. “Autism: Cognitive Deficit or Cognitive Style?” *Trends in Cognitive Sciences* 3 (6): 216–22. https://doi.org/10.1016/s1364-6613(99)01318-2.

———. 2018. “Why Are Savant Skills and Special Talents Associated with Autism?” *World Psychiatry* 17 (3): 280–81.

https://doi.org/10.1002/wps.20552.

Happé, Francesca, and Uta Frith. 2006. “The Weak Coherence Account: Detail-Focused Cognitive Style in Autism Spectrum Disorders.” *Journal of Autism and Developmental Disorders* 36 (1): 5–25. https://doi.org/10.1007/s10803-005-0039-0.

Hart, Herbert. L. A. 1968. Punishment and Responsibility: Essays in the Philosophy of Law. New York: Oxford University Press.

Haskins, Barbara G., and J. Arturo Silva. 2006. “Asperger’s Disorder and Criminal Behavior: Forensic-Psychiatric Considerations.” *The Journal of the American Academy of Psychiatry and the Law* 34 (3): 374–84.

Hill, Elisabeth L. 2004. “Evaluating the Theory of Executive Dysfunction in Autism.” *Developmental Review* 24 (2): 189–233. https://doi.org/10.1016/j.dr.2004.01.001.

Hill, Elisabeth L., and James Russell. 2002. “Action Memory and Self-Monitoring in Children with Autism: Self versus Other.” *Infant and Child Development* 11 (2): 159–70. https://doi.org/10.1002/icd.303.

Hirstein, William, Katrina Sifferd, and Tyler Fagan. 2018. *Responsible Brains: Neuroscience, Law, and Human Culpability*. Cambridge, Massachusetts: The MIT Press

Hofmann, Wilhelm, Brandon J. Schmeichel, and Alan D. Baddeley. 2012. “Executive Functions and Self-Regulation.” *Trends in Cognitive Sciences* 16 (3): 174–80. https://doi.org/10.1016/j.tics.2012.01.006.

Hughes, Claire, James Russell, and Trevor W. Robbins. 1994. “Evidence for Executive Dysfunction in Autism.” *Neuropsychologia* 32 (4): 477–92. https://doi.org/10.1016/0028-3932(94)90092-2.

Hughes, Jonathan A. 2021. "Does the heterogeneity of autism undermine the neurodiversity paradigm?" *Bioethics* 35: 47 - 60. https://doi.org/10.1111/bioe.12780.

Hull, Laura, K. V. Petrides, Carrie Allison, Paula Smith, Simon Baron-Cohen, Meng-Chuan Lai, and William Mandy. 2017. “‘Putting on My Best Normal’: Social Camouflaging

in Adults with Autism Spectrum Conditions." *Journal of Autism and Developmental Disorders* 47 (8): 2519–34. https://doi.org/10.1007/s10803-017-3166-5.

Jaarsma, Pier, and Stellan Welin. 2012. "Autism as a Natural Human Variation: Reflections on the Claims of the Neurodiversity Movement". *Health Care Analysis* 20 (1): 20–30. https://doi.org/10.1007/s10728-011-0169-9.

Johnson, Marcia K., Shahin Hashtroudi, and D. Stephen Lindsay. 1993. "Source Monitoring." *Psychological Bulletin* 114 (1): 3–28. https://doi.org/10.1037/0033-2909.114.1.3.

Kalis, Annemarie, Andreas Mojzisch, T. Sophie Schweizer, and Stefan Kaiser. 2008. "Weakness of Will, Akrasia, and the Neuropsychiatry of Decision Making: An Interdisciplinary Perspective." *Cognitive, Affective, & Behavioral Neuroscience* 8 (4): 402–17. https://doi.org/10.3758/CABN.8.4.402.

Kanner, Leo. 1943. "Autistic Disturbances of Affective Contact". *Nervous Child* 2: 217–50.

Katz, Nachum and Zvi .Zemishlany. 2006.. „Criminal responsibility in Asperger's syndrome". *The Israel journal of psychiatry and related sciences*. 43. 166-73.

Keehn, Brandon, Ralph-Axel Müller, and Jeanne Townsend. 2013. "Atypical Attentional Networks and the Emergence of Autism." *Neuroscience and Biobehavioral Reviews* 37 (2): 164–83. https://doi.org/10.1016/j.neubiorev.2012.11.014.

Kingma, Elselijn. 2013. "Naturalist Accounts of Mental Disorder". In *The Oxford Handbook of Philosophy and Psychiatry*, edited by K. W. M. Fulford, Martin Davies, Richard G. T. Gipps,

Lai, Meng-Chuan, Michael V. Lombardo, Bhismadev Chakrabarti, Amber Nv Ruigrok, Edward T. Bullmore, John Suckling, Bonnie Auyeung, et al. 2019. "Neural Self-Representation in Autistic Women and Association with 'Compensatory Camouflaging.'" *Autism: The International Journal of Research and Practice* 23 (5): 1210–23. https://doi.org/10.1177/1362361318807159.

Langen, Marieke, Alexander Leemans, Patrick Johnston, Christine Ecker, Eileen Daly, Clodagh M. Murphy, Flavio Dell'acqua, Sarah Durston, AIMS Consortium, and Declan G. M. Murphy. 2012. "Fronto-Striatal Circuitry and Inhibitory Control in Autism: Findings from Diffusion Tensor Imaging Tractography." *Cortex; a Journal Devoted to the Study of the Nervous System and Behavior* 48 (2): 183–93. https://doi.org/10.1016/j.cortex.2011.05.018.

Lekić Barunčić, Kristina. 2019."Epistemička nepravda, autizam i pokret neuroraznolikosti (Eng. Epistemic Injustice, Autism and the Neurodiversity Movement". *Filozofska istraživanja* 39(1): 171-188. https://doi.org/10.21464/fi39113.

Levy, Richard and Patricia. S. Goldman-Rakic. 2000. "Segregation of Working Memory Functions within the Dorsolateral Prefrontal Cortex." *Experimental Brain Research* 133 (1): 23–32. https://doi.org/10.1007/s002210000397.

Lim, Chong-Ming. 2017. "Reviewing Resistances to Reconceptualising Disability". *Proceedings of the Aristotelian Society* 117(3): 321–331.

Lind, Sophie, and Dermot Bowler. 2010. "Episodic Memory and Episodic Future Thinking in Adults with Autism." *Journal of Abnormal Psychology* 119 (November): 896–905. https://doi.org/10.1037/a0020631.

Lopez, Brian R., Alan J. Lincoln, Sally Ozonoff, and Zona Lai. 2005. "Examining the Relationship between Executive Functions and Restricted, Repetitive Symptoms of Autistic Disorder." *Journal of Autism and Developmental Disorders* 35 (4): 445–60. https://doi.org/10.1007/s10803-005-5035-x.

Malatesti, Luca, and Marko Jurjako. 2016. "Vrijednosti u psihijatriji i pojam mentalne bolesti (Eng. Values in Psychiatry and the Concept of Mental Illness)". In *Moralni, politički i epistemološki odgovori na društvene devijacije (Eng. Moral, Political, and Epistemological Responses to Antisocial Deviation)*, edited by Snježana Prijić-Samaržija, Luca Malatesti, and Elvio Baccarini, 153–81. Rijeka: University of Rijeka.

Malatesti, Luca, Marko Jurjako, and Gerben Meynen. 2020. "The Insanity Defence Without Mental Illness? Some Considerations". *International Journal Of Law And Psychiatry* 71: 101571. doi:10.1016/j.ijlp.2020.101571.

Maras, Katie L., Amina Memon, Anna Lambrechts, and Dermot M. Bowler. 2013. “Recall of a Live and Personally Experienced Eyewitness Event by Adults with Autism Spectrum Disorder.” *Journal of Autism and Developmental Disorders* 43 (8): 1798–1810. https://doi.org/10.1007/s10803-012-1729-z.

Mawson, D., A. Grounds, and D. Tantam. 1985. “Violence and Asperger’s Syndrome: A Case Study.” *The British Journal of Psychiatry: The Journal of Mental Science* 147 (November): 566–69. https://doi.org/10.1192/bjp.147.5.566.

McLaughlin, Eliott C., and Joe Sutton. 2018. “Autistic Man Who Went Overboard on Carnival Cruise Was Traveling with Special Needs Group”. CNN. 2018. https://www.cnn.com/2018/12/20/us/autistic-man-overboard-carnival-cruise/index.html. Accessed 10th April 2021.

Megone, Christopher. 1998. “Aristotle’s Function Argument and the Concept of Mental Illness.” *Philosophy, Psychiatry, and Psychology* 5 (3): 187–201.

Meilleur, Andrée-Anne S., Patricia Jelenic, and Laurent Mottron. 2015. “Prevalence of Clinically and Empirically Defined Talents and Strengths in Autism”. *Journal of Autism and Developmental Disorders* 45 (5): 1354–67. https://doi.org/10.1007/s10803-014-2296-2.

Meyerding, Jane. 2014. “Thoughts on Finding Myself Differently Brained”. *Autonomy, the Critical Journal of Interdisciplinary Autism Studies* 1 (3).

Miller, B. L., J. Cummings, F. Mishkin, K. Boone, F. Prince, M. Ponton, and C. Cotman. 1998. “Emergence of Artistic Talent in Frontotemporal Dementia”. *Neurology* 51 (4): 978–82. https://doi.org/10.1212/WNL.51.4.978.

Milner, Brenda Atkinson, Donald Eric Broadbent, and Lawrence Weiskrantz. 1982. “Some Cognitive Effects of Frontal-Lobe Lesions in Man.” *Philosophical Transactions of the Royal Society of London. B, Biological Sciences* 298 (1089): 211–26. https://doi.org/10.1098/rstb.1982.0083.

Miyake, A., N. P. Friedman, M. J. Emerson, A. H. Witzki, A. Howerter, and T. D. Wager. 2000. “The Unity and Diversity of Executive Functions and Their Contributions to

Complex 'Frontal Lobe' Tasks: A Latent Variable Analysis." *Cognitive Psychology* 41 (1): 49–100. https://doi.org/10.1006/cogp.1999.0734.

Monsell, Stephen. 2003. "Task Switching." *Trends in Cognitive Sciences* 7 (3): 134–40. https://doi.org/10.1016/s1364-6613(03)00028-7.

Moscovitch, M., and B. Melo. 1997. "Strategic Retrieval and the Frontal Lobes: Evidence from Confabulation and Amnesia." *Neuropsychologia* 35 (7): 1017–34. https://doi.org/10.1016/s0028-3932(97)00028-6.

Murrie, Daniel, Janet Warren, Marianne Kristiansson, and Park Dietz. 2002. "Asperger's Syndrome in Forensic Settings." *International Journal of Forensic Mental Health* 1 (April): 59–70. https://doi.org/10.1080/14999013.2002.10471161.

Murphy, Dominic. 2006. *Psychiatry in the Scientific Image*. Cambridge, Mass.: The MIT Press.

Newman, Sharlene D., Patricia A. Carpenter, Sashank Varma, and Marcel Adam Just. 2003. "Frontal and Parietal Participation in Problem Solving in the Tower of London: FMRI and Computational Modeling of Planning and High-Level Perception." *Neuropsychologia* 41 (12): 1668–82. https://doi.org/10.1016/s0028-3932(03)00091-5.

Niendam, Tara A., Angela R. Laird, Kimberly L. Ray, Y. Monica Dean, David C. Glahn, and Cameron S. Carter. 2012. "Meta-Analytic Evidence for a Superordinate Cognitive Control Network Subserving Diverse Executive Functions." *Cognitive, Affective & Behavioral Neuroscience* 12 (2): 241–68. https://doi.org/10.3758/s13415-011-0083-5.

Ortega, Francisco. 2009. "The Cerebral Subject and the Challenge of Neurodiversity". *BioSocieties* 4 (4): 425–45. https://doi.org/10.1017/S1745855209990287.

O'Sullivan, Owen P. 2018. "Autism Spectrum Disorder and Criminal Responsibility: Historical Perspectives, Clinical Challenges and Broader Considerations within the Criminal Justice System." *Irish Journal of Psychological Medicine* 35 (4): 333–39. https://doi.org/10.1017/ipm.2017.13.

Ozonoff, Sally, Ian Cook, Hilary Coon, Geraldine Dawson, Robert M. Joseph, Ami Klin, William M. McMahon, et al. 2004. "Performance on Cambridge Neuropsychological Test Automated Battery Subtests Sensitive to Frontal Lobe Function in People with Autistic Disorder: Evidence from the Collaborative Programs of Excellence in Autism Network." *Journal of Autism and Developmental Disorders* 34 (2): 139–50. https://doi.org/10.1023/b:jadd.0000022605.81989.cc.

Parkin, A. J. 1984. "Amnesic Syndrome: A Lesion-Specific Disorder?" *Cortex; a Journal Devoted to the Study of the Nervous System and Behavior* 20 (4): 479–508. https://doi.org/10.1016/s0010-9452(84)80053-2.

Paulus, Martin P. 2007. "Decision-Making Dysfunctions in Psychiatry—Altered Homeostatic Processing?" *Science* 318 (5850): 602–6. https://doi.org/10.1126/science.1142997.

Radden, Jennifer. 2019. "Mental Disorder (Illness)". In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Winter 2019. Metaphysics Research Lab, Stanford University. https://plato.stanford.edu/archives/win2019/entries/mental-disorder/. Accessed 27th April 2021.

Rawls, John. 1971. *A Theory of Justice*. Cambridge, MA: Harvard University Press

Reed, Phil, and Julia McCarthy. 2012. "Cross-Modal Attention-Switching Is Impaired in Autism Spectrum Disorders." *Journal of Autism and Developmental Disorders* 42 (6): 947–53. https://doi.org/10.1007/s10803-011-1324-8.

Richman, Kenneth A. 2018. "Autism and Moral Responsibility: Executive Function, Reasons Responsiveness, and Reasons Blockage." *Neuroethics* 11 (1): 23–33. https://doi.org/10.1007/s12152-017-9341-8.

Robeyns, Ingrid. 2016. "Conceptualising Well-Being for Autistic Persons". *Journal of Medical Ethics* 42 (6): 383–90. https://doi.org/10.1136/medethics-2016-103508.

Robinson, Sally, Lorna Goddard, Barbara Dritschel, Mary Wisley, and Patricia Howlin. 2009. Executive functions in children with autism spectrum disorders. *Brain and Cognition* 71: 362–368.

Russell, James, and Christopher Jarrold. 1998. "Error-Correction Problems in Autism: Evidence for a Monitoring Impairment?" *Journal of Autism and Developmental Disorders* 28 (3): 177–88. https://doi.org/10.1023/A:1026009203333.

Russell, James, and Christopher Jarrold. 1999. "Memory for Actions in Children with Autism: Self versus Other." *Cognitive Neuropsychiatry* 4 (4): 303–31. https://doi.org/10.1080/135468099395855.

Russo, Natalie, Tara Flanagan, Grace Iarocci, Darlene Berringer, Philip David Zelazo, and Jacob A. Burack. 2007. Deconstructing executive deficits among persons with autism: Implications for cognitive neuroscience. *Brain and Cognition* 65: 77–86.

Sarrett, Jennifer C. 2016. "Biocertification and Neurodiversity: The Role and Implications of Self-Diagnosis in Autistic Communities". *Neuroethics* 9 (1): 23–36. https://doi.org/10.1007/s12152-016-9247-x.

Schell-King, M., and M. R. Finneran. 1982. "The Role of Forensic Psychiatry and the Insanity Defense." *Perspectives in Psychiatric Care* 20 (2): 54–64.

Sevy, Serge, Katherine E. Burdick, Hema Visweswaraiah, Sherif Abdelmessih, Meredith Lukin, Eldad Yechiam, and Antoine Bechara. 2007. "Iowa Gambling Task in Schizophrenia: A Review and New Data in Patients with Schizophrenia and Co-Occurring Cannabis Use Disorders." *Schizophrenia Research* 92 (1–3): 74–84. https://doi.org/10.1016/j.schres.2007.01.005.

Silva, J. Arturo, Gregory B. Leong, and Michelle M. Ferrari. 2004. "A Neuropsychiatric Developmental Model of Serial Homicidal Behavior." *Behavioral Sciences & the Law* 22 (6): 787–99. https://doi.org/10.1002/bsl.620.

Silva, Judisitha, Gregory.B. Leong, R.L. Smith, E. Hawes, and Michelle .M. Ferrari. 2005. "Analysis of Serial Homicide in the Case of Joel Rifkin Using the Neuropsychiatric

Developmental Model." *American Journal of Forensic Psychiatry* 26 (January): 25–55.

Simons, Jon S., Richard N. A. Henson, Sam J. Gilbert, and Paul C. Fletcher. 2008. "Separable Forms of Reality Monitoring Supported by Anterior Prefrontal Cortex." *Journal of Cognitive Neuroscience* 20 (3): 447–57. https://doi.org/10.1162/jocn.2008.20036.

Sinclair, Jim. 1993. "Don"t Mourn for Us". *Our Voice* 1 (3). http://www.autreat.com/dont_mourn.html.

Sokhadze, Estate, Joshua Baruth, Ayman El-Baz, Timothy Horrell, Guela Sokhadze, Thomas Carroll, Allan Tasman, Lonnie Sears, and Manuel F. Casanova. 2010. "Impaired Error Monitoring and Correction Function in Autism." *Journal of Neurotherapy* 14 (2): 79–95 https://doi.org/10.1080/10874201003771561.

Spitzer, Robert L., and Jean Endicot. 1978. "Medical and Mental Disorder: Proposed Defi-Nition and Criteria". In *Critical Issues in Psychiatric Diagnosis*, edited by Robert L. Spitzer and Donald F. Klein, 15–24. New York: Raven Press.

Spitzer, Robert L., and Paul T. Wilson. 1975. "Nosology and the Official Psychiatric Nomenclature". *Comprehensive Textbook of Psychiatry* 2.

Stoet, Gijsbert, and Beatriz López. 2011. "Task-Switching Abilities in Children with Autism Spectrum Disorder." *European Journal of Developmental Psychology* 8 (2): 244–60. https://doi.org/10.1080/17405629.2010.492000.

Stokes, Mark, and Naomi Newton. 2004. "Autism Spectrum Disorders and Stalking." *Autism: The International Journal of Research and Practice* 8 (3): 337–39.

Straus, Joseph N. 2013. "Autism as Culture". *The Disability Studies Reader* 4: 460-484.

Stuss, Donald T, and Michael P Alexander. 2007. "Is There a Dysexecutive Syndrome?" *Philosophical Transactions of the Royal Society B: Biological Sciences* 362 (1481): 901–15. https://doi.org/10.1098/rstb.2007.2096

Szasz, Thomas S. 1960. "The Myth of Mental Illness". *American Psychologist* 15 (2): 113–18. https://doi.org/10.1037/h0046535.

Tietz, Jeff. 2002. “The boy who loved transit: how the system failed an obsession. The Atlantic Monthly 304:43–51.

Torrado, Juan C., Javier Gomez, and Germán Montoro. 2017. “Emotional Self-Regulation of Individuals with Autism Spectrum Disorders: Smartwatches for Monitoring and Interaction.” *Sensors (Basel, Switzerland)* 17 (6): 1359. https://doi.org/10.3390/s17061359.

Treffert, Darold A. 2009. “The Savant Syndrome: An Extraordinary Condition. A Synopsis: Past, Present, Future”. *Philosophical Transactions of the Royal Society B: Biological Sciences* 364 (1522): 1351–57. https://doi.org/10.1098/rstb.2008.0326.

Verhöff, Berend. 2012. “What Is This Thing Called Autism? A Critical Analysis of the Tenacious Search for Autism”s Essence”. BioSocieties 7 (4): 410–32. https://doi.org/10.1057/biosoc.2012.23.

Verté, Sylvie, Hilde M. Geurts, Herbert Roeyers, Jaap Oosterlaan, and Joseph A. Sergeant. 2006. “Executive Functioning in Children with an Autism Spectrum Disorder: Can We Differentiate within the Spectrum?” *Journal of Autism and Developmental Disorders* 36 (3): 351–72. https://doi.org/10.1007/s10803-006-0074-5.

Wakefield, Jerome C. 1992. “The Concept of Mental Disorder. On the Boundary between Biological Facts and Social Values”. *The American Psychologist* 47 (3): 373–88.

———. 2007. “The Concept of Mental Disorder: Diagnostic Implications of the Harmful Dysfunction Analysis”. *World Psychiatry* 6 (3): 149–56.

———. 2014. “The Biostatistical Theory Versus the Harmful Dysfunction Analysis, Part 1: Is Part-Dysfunction a Sufficient Condition for Medical Disorder?” *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine* 39 (6): 648–82 https://doi.org/10.1093/jmp/jhu038.

Wakefield, Jerome C., David Wasserman, and Jordan A. Conrad. 2020. “Neurodiversity, Autism, and Psychiatric Disability”. The Oxford Handbook of Philosophy and Disability. 2 July 2020.

https://doi.org/10.1093/oxfordhb/9780190622879.013.29.

Wasserman, David, Adrienne Asch, Jeffrey Blustein, and Daniel Putnam. 2016. “Disability: Definitions, Models, Experience”. In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. https://plato.stanford.edu/archives/sum2016/entries/disability/. Accessed

Weiskopf, Daniel A. 2017. “An Ideal Disorder? Autism as a Psychiatric Kind”. *Philosophical Explorations* 20 (2): 175–90 https://doi.org/10.1080/13869795.2017.1312500.

Welsh, M. C., T. Satterlee-Cartmell, and M. Stine. 1999. “Towers of Hanoi and London: Contribution of Working Memory and Inhibition to Performance.” *Brain and Cognition* 41 (2): 231–42 https://doi.org/10.1006/brcg.1999.1123.

Willcutt, Erik G., Edmund J. S. Sonuga-Barke, Joel T. Nigg, and Joseph A. Sergeant. 2008. “Recent Developments in Neuropsychological Models of Childhood Psychiatric Disorders.” *Biological Child Psychiatry* 24: 195–226 https://doi.org/10.1159/000118526.

Wilkinson, Desirée A., Catherine A. Best, Nancy J. Minshew, and Mark S. Strauss. 2010. “Memory Awareness for Faces in Individuals with Autism.” *Journal of Autism and Developmental Disorders* 40 (11): 1371–77 https://doi.org/10.1007/s10803-010-0995-x.

Wilson, Barbara A., Jonathan J. Evans, Hazel Emslie, Nick Alderman, and Paul Burgess. 1998. “The Development of an Ecologically Valid Test for Assessing Patients with a Dysexecutive Syndrome.” *Neuropsychological Rehabilitation* 8 (3): 213–28 https://doi.org/10.1080/713755570.

World Health Organization, ed. 2001. *International Classification of Functioning, Disability and Health: ICF*. Geneva: World Health Organization.

Wright, Larry. 1973. “Functions”. *Philosophical Review* 82 (2): 139–68. https://doi.org/10.2307/2183766.

Zalla, Tiziana, Elena Daprati, Anca-Maria Sav, Pauline Chaste, Daniele Nico, and Marion Leboyer. 2010. “Memory for Self-Performed Actions in Individuals with Asperger Syndrome.” *PLoS ONE* 5 (10): e13370. https://doi.org/10.1371/journal.pone.0013370.

Zinke, Katharina, Eva Fries, Mareike Altgassen, Clemens Kirschbaum, Lucia Dettenborn, and Matthias Kliegel. 2010. “Visuospatial Short-Term Memory Explains Deficits in Tower Task Planning in High-Functioning Children with Autism Spectrum Disorder.” *Child Neuropsychology: A Journal on Normal and Abnormal Development in Childhood and Adolescence* 16 (3): 229–41. https://doi.org/10.1080/09297040903559648.