

Asperger's Syndrome, Obsessive-Compulsive **Disorder and Attention Deficit Comorbidity**

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Abstract

Background: Asperger's syndrome, obsessive-compulsive disorder (OCD), and attention deficit disorder with or without hyperactivity disorder (ADHD) are conditions affecting a large portion of the population with different prevalence following studies. Purpose: These are invalidating conditions that take a high toll both from the human and the social point of view. It is our experience that these three conditions are often associated, and we try to offer in this paper a clinical view of their association. Method: This paper explores their correlations based on our clinical experience, and we propose some clinical and therapeutical paths to alleviate the situation of these patients. **Results**: We suggest that it is essential to understand how the frequent simultaneous presence of these three conditions, admittedly at different degrees of intensity, may have a mutually reinforcing effect on hampering the patient's social insertion and increasing their psychological and physical exhaustion. Conclusions: Awareness of this comorbidity may facilitate early diagnosis and treatment, improving the clinical outlook and reducing human and societal costs.

Keywords

Asperger's Syndrome, Obsessive-Compulsive Disorder (OCD), Attention Deficit Disorder with or without Hyperactivity Disorder (ADHD)

1. Introduction

In our clinical practice (242 active patients on file on January 1, 2022), we follow 28 patients (11.6%) diagnosed with Asperger's syndrome, and since 2016 we have evaluated about 50 patients.

We recall that Asperger's syndrome, obsessive-compulsive disorder (OCD),

and attention deficit disorder with or without hyperactivity disorder (ADHD) are conditions affecting a large portion of the population, with a prevalence that, in spite of several epidemiological studies, is not clearly defined (ADHD Institute, 2022; Fawcett et al., 2020; Fombonne, 2009; Polanczyk et al., 2007; Sasson et al., 1997; Song et al., 2021; WHO, 2022; Wikipedia, 2022).

These patients often have significant obsessive-compulsive (OCD) symptoms associated with attention deficit disorder with or without hyperactivity disorder (ADHD). In dealing with these patients, we have been struck by the almost universal occurrence of the simultaneous presence of this symptomatologic triad (Asperger's syndrome, ADHD, and OCD).

To make ourselves easily understandable to patients when describing this situation, we use a well-known metaphor, and we speak of the "three little piglets": Asperger's syndrome, ADHD, and OCD. In our experience, with different degrees in different patients, these are always present simultaneously. For conciseness, we will refer to the person affected by the Triple Diagnosis as a TDP patient in the following.

In the following, we will use either the masculine or the feminine without distinguishing, except when it has a specific clinical reason.

The reasons these patients mention when consulting mainly concern exhaustion and problems in professional life and studies, e.g., burnout, mobbing, school failure, and disorders at the level of social interaction. But mostly, these patients come to us complaining of depression, anxiety, sleep disorders, diagnoses of a depressive state, and even borderline personality disorders.

The persistence of chronic depressive symptoms, fatigue, and blunting of affects has often led us to a more detailed study of their ancient and more recent anamnesis. These analyses have highlighted periods of withdrawal, exhaustion, and difficulty managing social ties (McDougle et al., 1995; Russell et al., 2005; Ruta et al., 2010; Turner-Brown et al., 2011; Wu et al., 2014).

Consequently, we have begun to consider from a different angle DTP people's behavioral troubles, such as eating disorders, self-injurious behaviors, and episodes of aggressiveness, especially with the destruction of material that had previously evoked diagnoses such as depression, anxiety, and even borderline personality disorders.

2. What Our Evaluating Psychologists Tell Us

ADHD and Asperger's syndromes, as previously described in ICD-10 (World Health Organization, 1993), are considered in ICD-11 differential diagnoses (World Health Organization, 2019: p. 11). Autism spectrum disorder with intellectual development disorder and lack of functional language (6A02.5) and attention deficit hyperactivity disorder (6A05) are included in the neurodevelopmental disorder family. Another mental or behavioral disorder should not be evoked to explain attention deficit and hyperactivity disorder symptoms, nor should they be related to the effect of any psychoactive substance or medication.

ASD and ADHD are essentially hereditary and share with OCD a disabling vulnerability related to anxiety (American Psychiatric Association, 2013; McDougle et al., 1995; Russell et al., 2005; Ruta et al., 2010).

Neuropsychological evaluations lead us—in many cases—to diagnose, sometimes very late (between 35 - 50 years), Asperger's syndrome associated with ADHD and highlight symptoms of compulsive and obsessive type. We talk about the "three little piglets," especially when giving patients a telling picture of their difficulties.

These facts lead us to question whether people with Asperger's syndrome and ADHD would not be at greater risk of developing pathologies around chronic fatigue because of their neurobiology.

In this population, we often find obsessive disorders with the possibility of a complete OCD diagnosis, which has a strong traumatic component (in a broad sense) that we will discuss later.

One could hypothesize that a reciprocal amplification occurs between Asperger's psychic functioning, ADHD, OCD (related in part to genetics), and environmental phenomena that impact the psyche and the epigenetic mechanisms.

As Oades points out (Oades, 2010) "[in attention deficit disorders] The widespread innervation through the CNS by fibers containing serotonin (5-HT) means that, as cause or effect, it is likely that 5-HT is involved where function in these domains is impaired." Concerning ADHD, the genetics of this disorder would influence the functioning of some neurotransmitter systems such as serotonin. Indeed, it seems that the presence of this neuromodulator would be disturbed either at the level of the processes of reuptake or by an interruption of its availability. Similarly, studies on autism spectrum disorders conducted in neuroscience and neurobiology suggest the presence of abnormalities in the serotonergic system and, more specifically, in the circuits of the front-limbic zone (Cadman et al., 2015; Derksen et al., 2020; Girgis et al., 2011; Zandt et al., 2007).

The development of OCD, or at least some obsessive aspects, would be due to greater vulnerability to the consequences of trauma in all its possible forms. In other words, people with Asperger's syndrome and ADHD may "imprint" more in themselves the traces of trauma or what is experienced as traumatic. Since the world is perceived as very chaotic, it would become more traumatic. This aspect could also be related to the hypersensitivity that these people present, which would make them more receptive to their environment and its variations. In addition, this form of sensitivity implies a risk of saturation of the sensory channels, thus no longer allowing optimal processing of stimulations, which can become stressful and an additional factor facilitating the insurgence of traumatic memorization processes. Obsessive disorders result from this pathogenic situation and an inadequate attempt to remedy it. Patients with Asperger's syndrome who develop OCD may have experienced early trauma related to their functioning. Indeed, a child with autism spectrum disorder and ADHD, in addition to the chaotic experience of reality, can sometimes provoke aggressive reactions from people with an educational role or peers, given the inadequacy of reactions

and the great need for supervision. This type of traumatic experience, especially if it is repetitive, can become a source of great anxiety that is also difficult to put into words for a person with a developmental disorder with great difficulty naming his affects.

Given the hypersensitivity characteristic of the clinical picture, we can suppose that a reciprocal amplification occurs between neurobiological vulnerabilities, psychic functioning, and the reactions of the environment, often leading to the development of serious somatizations. Moreover, experiencing repeated and chaotic traumatic situations increases vulnerability to anxiety-depressive disorders and other diseases in a vicious circle.

For example, functional digestive disorders can be a consequence of a childhood anxious environment, with a parent who is very little or not at all attentive to the child's needs and who himself has poorly understood anxieties. An absent and overworked father with obsessive symptoms and an erased mother can be a source of constant anxiety and push the child—and then the adult—to take refuge in OCD, acting as a screen, unfortunately itself pathogenic.

In the anamnesis, we find the patient's appreciation of abuse or educational violence around which particular suffering is anchored, leading to psychosomatic symptoms, inflammatory diseases, unidentifiable functional disorders, and significant fatigue (Fisher et al., 2013; Hebron et al., 2015; Pebole et al., 2021; Schechter, 2022; Sofronoff et al., 2011; Wan et al., 2022; Wikipedia, 2018).

Neurobiologically, obsessive-compulsive disorder is often reported in people with ASD, but repetitive behaviors and intrusive, recurrent thoughts are present in both conditions and are difficult to differentiate (Postorino et al., 2017). Determining whether some people with ASD have a clinical condition that warrants a separate diagnosis of OCD is a challenge for clinicians, and there is an ongoing debate about the nature of repetitive behaviors in ASD compared to those observed in OCD (Scahill et al., 2014; Scahill & Challa, 2016).

Bullying at school or by friends, or actual abuse (physical, psychological, and sexual) can also be considered. And given the "naïve" side of people with developmental disabilities and their desire to stay connected "at all costs," they can accept anything in their illusion to preserve a social and affective bond. Associated with these aspects, these people tend not to be able to rationally rebel when in abusive relationships but to develop behavioral disorders such as agitation and impulsivity related to ADHD or the obsessions-compulsions of OCD.

Regarding the evaluation of Asperger's syndrome, we use a battery of tests developed by Baron-Cohen and his colleagues to assess the presence of Asperger's syndrome. Indeed, a person with Asperger's syndrome has several difficulties explained in the DSM-IV (Bell, 1994). The main ones are:

1) A qualitative alteration of social relations;

2) A restricted, repetitive, and stereotypical behaviors, interests, and activities;

3) Disturbances that result in clinically significant impairment of social, occupational, or other important areas of functioning. 4) No general clinically significant language delay (e.g., the subject uses isolated words around the age of two and sentences with communication value around the age of three).

5) During childhood, there was no clinically significant delay in cognitive development or development based on age, autonomy abilities, adaptive behavior (except in social interaction), and curiosity about the environment.

6) The disorder does not meet the criteria for another specific pervasive developmental disorder or schizophrenia.

To evaluate these specific aspects, we administer questionnaires in two stages. First, the person completed the following questionnaires alone, with the help of the psychologist:

1) QA: the quotient of the autistic spectrum

2) EQ: the empathy quotient

3) FQ: the quotient of friendship and relationship

4) SQ: the methodical quotient

5) RAADS-14: Ritvo's Autism and Asperger's Diagnostic Scale in an abbreviated version

6) Eyes test: the task of interpreting the gaze.

If the test results suggest that the person may be a carrier of Asperger's Syndrome, a clinical interview with the AAA (Adult Asperger Assessment by Baron-Cohen et al. (Baron-Cohen et al., 2005)) is carried out. This tool uses the results obtained from the QA and EQ questionnaires and evaluates different domains similar to the DSM-IV (Segal, 2010) but with greater specificity. Various areas are investigated: Social, Obsessions, Communication, Imagination, and the last part corresponds to the exclusion criteria of the diagnosis.

ADHD, on the other hand, is a neurodevelopmental disorder characterized by a persistent mode of inattention or hyperactivity-impulsivity that interferes with daily functioning or development (DSM-V). Symptoms are structured around two poles: 1) inattention and 2) hyperactivity-impulsivity. In addition, the following criteria must be met for a positive diagnosis:

1) Several symptoms of inattention and hyperactivity-impulsivity were present before the age of 12;

2) The symptoms must significantly interfere with or reduce the quality of social, academic, or professional functioning;

3) Symptoms do not only appear during schizophrenia or other psychotic disorder;

4) Symptoms are not better explained by the presence of another mental disorder (for example, mood disorder, anxiety disorder, dissociative disorder, or personality disorder).

Based on these symptoms, three forms of ADHD can be diagnosed:

1) Combined: if there are enough symptoms related to inattention and hyperactivity-impulsivity present during the last six months;

2) Predominant inattention: if there are enough symptoms of inattention but no symptoms of hyperactivity-impulsivity present during the last six months; 3) Predominant hyperactivity-impulsivity: if there are enough hyperactivity-impulsivity symptoms but no inattention symptoms during the previous six months.

The symptoms of ADHD and associated problems are assessed through a protocol developed by the Canadian ADHD Resource Alliance and consisted of the following questionnaires: (CADDRA, 2017)

1) ASRS-v1.1: measures the overall symptoms of ADHD (and their intensity) during adolescence and adulthood;

2) SNAP-IV 26: measures ADHD symptoms (and their intensity) during childhood before the age of 12;

3) WFIRS-S: measures the functional consequences related to the symptoms of ADHD;

4) WSR-II: measures psychological disorders present throughout life.

The individual must complete ASRS-v1.1, WFIRS-S, and WSR-II. Parents or relatives who have known the person since childhood can complete SNAP-IV 26.

Combined with this protocol, we conduct a semi-structured interview, the DIVA-5 (Kooij et al., 2019), which measures the symptomatology of ADHD during childhood, adolescence, and adulthood and the functional consequences of the disorder. The patient is asked to give concrete examples to support the hypothesis of the presence of ADHD.

It is also possible to request the patient's school notebooks to study possible remarks related to behavioral difficulties at school, such as repeated chatter (which can disturb classmates), distractibility (or being "head in the air" or "dreamer" during classes), possible behavioral disorders (opposition, repeated conflicts, ...), difficulties of perseverance in the work, ...

We start the evaluation with a brief anamnestic interview on the difficulties that led to request an assessment of ADHD symptoms, as well as on the evolution of the school trajectory (disciplines in which the patient was strong or weak and for what reasons, presence of dropouts or doubling(s) in the school career, difficulties in finishing training or obtaining a diploma, ...) and the professional one (assessment of the stability or instability of the professional status, frequent change of profession, repeated dismissals, integration problems, etc.). These psycho-social aspects can be informative as they allow assessing the consequences of a possible ADHD.

Regarding the evaluation of OCD, we use the Yale-Brown Scale (Scahill et al., 2014), which consists of a scale of ten items rated from 0 to 4: five for obsessions and five for compulsions. However, other scales can be used (Cadman et al., 2015).

As described in the French version of the Yale-Brown obsession-compulsion scale: "*These ten items allow calculating an overall score from 0 to 40. Moreover, they measure obsessions (ideas) and compulsions (ritual acts) in five dimensions: the time occupied by pathological behaviors or thoughts, interference with daily life, distress, resistance to pathological phenomena, and the degree of con-*

trol exercised over them.

It also includes nine independent scales measuring respectively symptom awareness, avoidance, indecision, pathological accountability, slowness, pathological doubt (these five scales are rated from 0 to 4), the overall severity of disorders, and overall improvement (both rated from 0 to 6). Finally, the reliability of the scale, rated from 0 to 3. These nine additional items are considered for the moment as heuristic and are not considered in psychometric studies.

In addition, a "checklist" of symptoms has been added, as well as an open list of four target symptoms for both obsessions and compulsions and an open avoidance item. Despite this apparent complexity, the measuring instrument is reduced to the first ten items that alone have been the subject of psychological investigations"¹ (Mollard et al., 1989).

3. Life Stories and Clinical Aspects

The presence of the "three little piglets" dramatically complicates the lives of the people concerned. Overall, the TDP person is convinced that he is "normal" or, to put it better, he is convinced that he must adhere to normality. However, as contact with social reality becomes, by necessity, more extended or more inevitable or more daily, the difficulty of understanding the unspoken, the body language, and the innuendos become insurmountable.

If within the family, more or less (and we stress more or less) "it works," already at school, exchanges with the peers become problematic.

Taking a step back, during childhood, the young future patient of our practice was perfectly unaware of the troubles that his behavior, starting from kindergarten, caused his parents and the kindergarten staff.

A big dreamer, he played alone. Not very sociable, he became aggressive if solicited or jostled. He was either too calm or too turbulent. He was put aside quickly, often the victim of mockery because of a patent clumsiness or a lack of responsiveness. This situation is more visible in boys but no less present in girls.

Social mimicry, in which the feminine gender is more skillful, could not erase insurmountable left-handedness in social interaction. One could say that in girls, the effort to conform to others was undoubtedly more successful but at the cost of fatigue due to very early over-adaptation and more severe exhaustion.

At the school age, around 5 or 6 years old, the person with Asperger's syndrome begins a phase of life that can no longer avoid being centered on socialization: academic results are important and sometimes reassuring, one could even say "falsely" reassuring, but everything related to learning in human interactions is problematic or turns into a disaster.

Often, parents focus their efforts—these are considerable efforts—on good grades. The current organization of the school with the importance given to the academic support by the parents is a terrible trap and a phenomenal source of anxiety. There is no place or time where children are "left in peace": after school, ¹Translation by the authors.

which remains a place of hard struggle, there is homework, and this is not a pleasure for either the children or the mothers (or fathers) (Larsson et al., 2014; Mazefsky et al., 2013).

Parents' narcissism is rudely exposed because often, they realize that "something is wrong," and children must succeed at all costs to dispel this suspicion. Young people with Asperger's syndrome who often have ADHD are severely put to the test. Vulnerability to stress leads them to chronic suffering in the effort to achieve good results.

Even with good cognitive abilities bordering on giftedness, the child with Asperger's syndrome must face learning tasks that are foreign to him. In addition to cognitive learning, he is confronted with social learning that further complicates his daily life. Life then becomes a series of moments of stress to endure, with little room for relaxation and pleasure. The free time spent alone may be used to rest (often partially).

Cognitively, the TDP person wants and believes they need to "know everything" before passing a test. Memory tends to be unselective and not very hierarchical. The time required to prepare for an exam always seems to be short. Panic arrives accompanied by paralyzing procrastination in the attempt to indefinitely postpone the feared moment "to open the book and get started." The energy put into learning is so great that there is none left for social learning, passing the time with friends, strolling, or simply letting oneself live.

Indeed, the results of the exams can sometimes surprise with excellent grades, which gives great satisfaction to the parents, but the crux of the problem is that the student cannot "learn to learn" and saturates.

As school progresses and becomes more complex, it becomes an increasingly toxic source of stress. Moreover, the screen (telephone, television, video games) becomes—for young people of the last 20 years at least, but also the older ones—one of their restricted interests, if not the only restricted interest.

A limited interest can be seen as a hobby and be reasonably well accepted socially: photography, reading military strategy text, miniature trains, dogs, horses, skiing, etc., etc. And, in itself, there is no problem with indulging in it. The problem is that it takes up all the space, to the point where conversations and exchanges with friends, when it is possible to have them, are entirely invaded by this limited interest.

Several issues appear at the relational level for the TDP person. Indeed, he tends either to "drown" the interlocutor, leaving him no space to talk and filling with words the whole exchange, or, on the contrary, to remain speechless, incapable of having a minima conversation. Having experienced some situations of general embarrassment after 40 minutes of monologue, she will adopt the habit of not daring to say anything. In addition, the TDP person is very precise, almost fastidious, and must explain well—or even very well—(sometimes obsessively) the answers to the questions he is asked. He must expose all the details, and the interlocutor—who had the naivety to ask the rather generic question "how are you?"—finds himself looking for a way to stop this flow of explanations not required in a neurotypical context. The result is an existential question that the Asperger's person sincerely asks his therapist: why do we ask a question if we do not want to know the answer? It is difficult to convey the concept of chatter, speaking for the sake of saying nothing, which is so natural in neurotypicals but is considered conceptual madness in neuroatypicals. The "little talk" is incomprehensible for a TDP patient: it is, on the one hand, experienced as dull and, on the other hand, as stressful because the person does not know how to conduct it.

For a person with Asperger's, chatter is painful because it lacks depth and is not interesting. In addition, with her crystalline frankness, she seems to strive to offend the people around her by "setting things straight" and saying bluntly and without filters what goes through her head, not knowing how to lie. All this, without realizing that neurotypicals show much more restraint anyway and keep what they think for themselves, they, far from being kind, think no less and quickly deviate from the unwelcome presence of the indelicate or criticize him behind his back. Since these types of reactions on the part of neurotypicals occur in the shadows and operate sneakily, they result in a painful outcome for the TDP person, who finds himself isolated without understanding what they have done to deserve this. Even for savvy therapists, accompanying a TDP person requires considerable patience. Some stubbornness, which nothing seems able to soften, faces the therapist with the inevitability of exhaustion, his own, but especially that of the patient. For example, when the patient complicates his life in administrative procedures, he could either delegate, settle more expeditiously, or even abandon it altogether. When she prepares meals with exaggerated attention to details, manages domestic chores as if preparing for a trip to the moon, or when she must perform flawlessly at work (giving the famous "good example" and annoying everyone).

Associated with this mental rigidity, a TDP person has certain peculiarities in terms of cognition. He almost systematically presents attention difficulties, especially in terms of cognitive flexibility. It is, in fact, painful and challenging to move from one subject to another or from one task to another in a relatively short time. The TDP person is absorbed—or bogged down in some cases when there is stress and anxiety—by his current task and struggles to suspend it due to cognitive flexibility difficulties.

Attention disorder is characterized at one extreme by the "head in the clouds," which is the tip of the iceberg of the difficulty of remaining attentive to a task (hence the eternal refrains of "I am bored," "it's too easy," "not interesting"). On the other hand, it causes hyper-focusing. Hyper-focusing could mean that when you have finally "found the way to use your brain," you can no longer detach yourself from the task, hence the limited interests of Asperger's patients and the hyper-focusing proper of ADHD and OCD. It's not that something interests the person with TDP, but they just got "stuck" into it. To describe this state of mind, we could use the metaphor of a "bike in the head." The mind desperately pedals without really getting anywhere but without being able to stop for fear of falling. To broaden the metaphor, the three little piglets, always together, are confronted

with the danger of the wolf, who wants to catch them with the (infinite) loop of the obsessive idea.

This rigid attitude also results in a form of perfectionism that borders on the pathological. In this *modus operandi*, the TDP person is convinced that his way of doing things is not only good and fair but also, and above all, it is the only possible way to go. She also claims that everyone does the same as her. However, her way of doing things becomes quickly problematic, as it is energy- and time-consuming and anxiety-provoking: everything becomes very complicated, heavy, and tiring. If others do the same work—be it cooking, domestic chores, or administrative tasks—with nonchalance and a bit of "couldn't-care-less," this generates frustration, rage, depression... and anger.

The functioning of the TDP person involves a painful oscillation between "god narcissism" and "shitty narcissism" (Freléchoz, Carminati, & Carminati, 2021a; Freléchoz, Carminati, & Galli Carminati, 2021b; Carminati et al., 2020). Freléchoz gives an interesting vision of the setbacks of narcissism and says: "Here there is the comparison with the other: a measure of my strength and my skills versus the abilities of others. Difficult steps, we suspect, for self-esteem. Am I as strong as the other? That is the question that haunts this stage of development. As we can imagine, the answers to these questions will determine part of the personality of the subject and his mode of "being in the world." There can be two opposite answers to this question of narcissism, which I summarized in the following two formulas: There is what I call "shitty narcissism": I am worthless, I am the most unworthy, I am a failure, do with me what you want: as long as you use—or even abuse—me, I exist…", and at its opposite the narcissism of God: "I am the best, I am a genius, you are lucky to know me and to be able to serve me…" (*Ibid.*, p. 7)

The TDP patient knows that a series of unrealistic demands hinder his potential. He realizes that he does not understand the granularity of the actual demands from reality, the level and effort needed to perform a specific task in a particular situation: he must know everything, understand everything, and flawlessly execute everything, even if it is not actually what has been asked of him or completely useless. The result is a sense of panic in the face of the impossible and, as a result, the development of avoidance and procrastination behaviors when confronted with what has become in his mind a superhuman and overwhelming task. This effort can even lead the patient to develop dark or even suicidal ideas out of a feeling of not being capable of achieving the objectives or to "let down" the people to whom he has committed himself to achieve the stated goal.

The burden of these situations at the individual level is suffering and, as has been said, exhaustion. On the social level, the knot is the loss of skills and labor power and a high social cost in terms of job loss, unemployment, disability insurance, and precariousness.

4. Social Impact and Prevention

As we said above, the social cost of PDT is high, especially since diagnoses (As-

perger's syndrome, ADHD and OCD) are made in a majority of cases late when exhaustion has done considerable damage. We can no longer completely "recover" the person even with adequate psychotherapeutic and pharmacological treatment (especially with antidepressant treatment, where the choice is pretty broad, or therapy with Ritalin).

To use a concept previously expressed: One could assume that there is a positive reinforcement between Asperger's psychic functioning/ADHD/OCD (related in part to genetics and in any case representing a developmental disorder) and environmental phenomena that impact the psyche and have epigenetic effects.

The current style of studies—both secondary and university—with significant competitiveness and an elimination system with multiple padlocks or obstacle courses plays a harmful role already for neurotypicals and even more so for TDP people. Neurotypicals, as far as they know how to take the necessary distance, relativize academic requirements and their own priorities, and find loopholes and strategies for self-protection. But, on the other hand, for the TDP person, studies become the center of her existence and a pathogenic tunnel from which, considering the anosognosia of the person and the entourage, she will have great difficulty emerging unscathed.

As we have seen, the school career is strewn with pitfalls because there are indeed in the TDP person not only attention disorders and pathological—and pathogenic—perfectionism, but also because TDP people tend to try to succeed at school at any price. This success becomes a limited interest, leaving the rest by the side of the road: friendships, love, intimacy, and sexuality.

Even if the person succeeds in his studies, adapting to the logic of work and empowerment remains difficult. Especially when, as already mentioned, the TDP person does not realize that his functioning is not "normal," and he tries at all costs to appear so.

We find TDP people coming out of a highly renowned university with prestigious degrees but exhausted and often unable to find a job. If they find a job by chance, they are unable to keep it in the medium term. Then, at 40 - 45 years old, burnout after burnout, natural victims of mobbing, because unable to detect it and defend themselves, they take the path of disability insurance.

5. Conclusion

TDP patients are an extremely interesting population. We all live in a stressful and anxiogenic world, but somehow, we adapt to it, according to a "principle of reality." We do this sometimes with a lot of suffering, and many neurotypicals are left on the side of the road. As neurotypical persons, we take reality as immutable, and we strive to adapt to it.

Stress intoxication is not transient, and the disruption of synapses, to take a logical shortcut, becomes chronic and irreversible. If we want to see this situation from a purely economic angle, the social cost would be lower if autonomy

and productivity were preserved by not demanding a 100% efficiency or success rate. In the current Western economic system, we realize that this would have profound implications for the global organization and ethics of training and work.

Why is an "early" diagnosis so helpful? Because the awareness of this disorder can first allow one to accept it, then deal with it, and especially help to organize oneself and avoid the overload of stress by negotiating studies with a calmer pace and possibly a part-time job.

Indeed, all this may sound simplistic, but it is not, and TDP people can testify to it!

Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- ADHD Institute (2022). *The Burden of ADHD—Epidemiology*. <u>https://adhd-institute.com/burden-of-adhd/epidemiology</u>
- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th Edition). American Psychiatric Association. https://doi.org/10.1176/appi.books.9780890425596
- Baron-Cohen, S., Wheelwright, S., Robinson, J., & Woodbury-Smith, M. (2005). The Adult Asperger Assessment (AAA): A Diagnostic Method. *Journal of Autism and De*velopmental Disorders, 35, 807-819. <u>https://doi.org/10.1007/s10803-005-0026-5</u>
- Bell, C. C. (1994). DSM-IV: Diagnostic and Statistical Manual of Mental Disorders. JAMA: The Journal of the American Medical Association, 272, 828. <u>https://doi.org/10.1001/jama.1994.03520100096046</u>
- CADDRA (2017). Canadian ADHD Resource Alliance. https://www.caddra.ca
- Cadman, T., Spain, D., Johnston, P., Russell, A., Mataix-Cols, D., Craig, M., Deeley, Q., Robertson, D., Murphy, C., Gillan, N., Wilson, C. E., Mendez, M., Ecker, C., Daly, E., Findon, J., Glaser, K., MRC AIMS Consortium, Happé, F., & Murphy, D. (2015). Obsessive-Compulsive Disorder in Adults with High-Functioning Autism Spectrum Disorder: What Does Self-Report with the OCI-R Tell Us? OCD in Adults with ASD. *Autism Research*, *8*, 477-485. <u>https://doi.org/10.1002/aur.1461</u>
- Carminati, G. G., Freléchoz, T., & Carminati, F. (2020). *Aux tréfonds de l'Œdipe*. Cahiers de la SIPsyM N. 31.

http://www.sipsym.com/images/CahiersSIPsyM/N31-LesTrefonds.pdf

- Derksen, M., Feenstra, M., Willuhn, I., & Denys, D. (2020). The Serotonergic System in Obsessive-Compulsive Disorder. In *Handbook of Behavioral Neuroscience* (Vol. 31, pp. 865-891). Elsevier. https://doi.org/10.1016/B978-0-444-64125-0.00044-X
- Fawcett, E. J., Power, H., & Fawcett, J. M. (2020). Women Are at Greater Risk of OCD than Men: A Meta-Analytic Review of OCD Prevalence Worldwide. *The Journal of Clinical Psychiatry*, *81*, 19r13085. <u>https://doi.org/10.4088/JCP.19r13085</u>
- Fisher, M. H., Moskowitz, A. L., & Hodapp, R. M. (2013). Differences in Social Vulnerability among Individuals with Autism Spectrum Disorder, Williams Syndrome, and Down Syndrome. *Research in Autism Spectrum Disorders*, 7, 931-937.

https://doi.org/10.1016/j.rasd.2013.04.009

- Fombonne, E. (2009). Epidemiology of Pervasive Developmental Disorders. *Pediatric Research*, 65, 591-598. <u>https://doi.org/10.1203/PDR.0b013e31819e7203</u>
- Freléchoz, T., Carminati, F., & Carminati, G. G. (2021a). Oedipus's Depths. *Psychology*, 12, 1490-1505. <u>https://doi.org/10.4236/psych.2021.1210094</u>
- Freléchoz, T., Carminati, F., & Carminati, G. G. (2021b). *Addenda aux Tréfonds de l'Œdipe*. Cahiers de la SIPsyM N. 32. http://www.sipsym.com/images/CahiersSIPsyM/N32-AddendaAuxTrefonds.pdf
- Girgis, R. R., Slifstein, M., Xu, X., Frankle, W. G., Anagnostou, E., Wasserman, S., Pepa, L., Kolevzon, A., Abi-Dargham, A., Laruelle, M., & Hollander, E. (2011). The 5-HT 2A Receptor and Serotonin Transporter in Asperger's Disorder: A PET Study with [11C]MDL 100907 and [11C]DASB. *Psychiatry Research: Neuroimaging, 194*, 230-234. https://doi.org/10.1016/j.pscychresns.2011.04.007
- Hebron, J., Humphrey, N., & Oldfield, J. (2015). Vulnerability to Bullying of Children with Autism Spectrum Conditions in Mainstream Education: A Multi-Informant Qualitative Exploration. *Journal of Research in Special Educational Needs*, 15, 185-193. <u>https://doi.org/10.1111/1471-3802.12108</u>
- Kooij, J. J. S., Francken, M. H., & Bron, T. I. (2019). *Diagnostic Interview for ADHD in adults* (3rd ed., DIVA-5th ed.). DIVA Foundation.
- Larsson, H., Chang, Z., D'Onofrio, B. M., & Lichtenstein, P. (2014). The Heritability of Clinically Diagnosed Attention Deficit Hyperactivity Disorder across the Lifespan. *Psychological Medicine*, 44, 2223-2229. <u>https://doi.org/10.1017/S0033291713002493</u>
- Mazefsky, C. A., Herrington, J., Siegel, M., Scarpa, A., Maddox, B. B., Scahill, L., & White, S. W. (2013). The Role of Emotion Regulation in Autism Spectrum Disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, *52*, 679-688. <u>https://doi.org/10.1016/j.jaac.2013.05.006</u>
- McDougle, C. J., Kresch, L. E., Goodman, W. K., Naylor, S. T., Volkmar, F. R., Cohen, D. J., & Price, L. H. (1995). A Case-Controlled Study of Repetitive Thoughts and Behavior in Adults with Autistic Disorder and Obsessive-Compulsive Disorder. *American Journal of Psychiatry*, 152, 772-777. <u>https://doi.org/10.1176/ajp.152.5.772</u>
- Mollard, E., Cottraux, J., & Bouvard, M. (1989). Version française de l'échelle d'obsessioncompulsion de Yale-Brown. *L'Encéphale: Revue de Psychiatrie Clinique Biologique et Thérapeutique, 15,* 335-341.
- Oades, R. D. (2010). The Role of Serotonin in Attention-Deficit Hyperactivity Disorder (ADHD). In *Handbook of Behavioral Neuroscience* (Vol. 21, pp. 565-584). Elsevier. https://doi.org/10.1016/S1569-7339(10)70101-6
- Pebole, M. M., Greco, C. E., Gobin, R. L., Phillips, B. N., & Strauser, D. R. (2021). Impact of Childhood Maltreatment on Psychosomatic Outcomes among Men and Women with Disabilities. *Disability and Rehabilitation*, 1-9. https://doi.org/10.1080/09638288.2021.1998666
- Polanczyk, G., de Lima, M. S., Horta, B. L., Biederman, J., & Rohde, L. A. (2007). The Worldwide Prevalence of ADHD: A Systematic Review and Metaregression Analysis. *American Journal of Psychiatry*, 164, 942-948. <u>https://doi.org/10.1176/ajp.2007.164.6.942</u>
- Postorino, V., Kerns, C. M., Vivanti, G., Bradshaw, J., Siracusano, M., & Mazzone, L. (2017). Anxiety Disorders and Obsessive-Compulsive Disorder in Individuals with Autism Spectrum Disorder. *Current Psychiatry Reports, 19*, 92. <u>https://doi.org/10.1007/s11920-017-0846-y</u>

Russell, A. J., Mataix-Cols, D., Anson, M., & Murphy, D. G. M. (2005). Obsessions and

Compulsions in Asperger Syndrome and High-Functioning Autism. *British Journal of Psychiatry*, 186, 525-528. <u>https://doi.org/10.1192/bjp.186.6.525</u>

- Ruta, L., Mugno, D., D'Arrigo, V. G., Vitiello, B., & Mazzone, L. (2010). Obsessive-Compulsive Traits in Children and Adolescents with Asperger Syndrome. *European Child & Adolescent Psychiatry*, 19, 17-24. <u>https://doi.org/10.1007/s00787-009-0035-6</u>
- Sasson, Y., Zohar, J., Chopra, M., Lustig, M., Iancu, I., & Hendler, T. (1997). Epidemiology of Obsessive-Compulsive Disorder: A World View. *The Journal of Clinical Psychiatry*, 58, 7-10.
- Scahill, L., & Challa, S. A. (2016). Repetitive Behavior in Children with Autism Spectrum Disorder: Similarities and Differences with Obsessive-Compulsive Disorder. In L. Mazzone, & B. Vitiello (Eds.), *Psychiatric Symptoms and Comorbidities in Autism Spectrum Disorder* (pp. 39-50). Springer International Publishing. https://doi.org/10.1007/978-3-319-29695-1_3
- Scahill, L., Dimitropoulos, A., McDougle, C. J., Aman, M. G., Feurer, I. D., McCracken, J. T., Tierney, E., Pu, J., White, S., Lecavalier, L., Hallett, V., Bearss, K., King, B., Arnold, L. E., & Vitiello, B. (2014). Children's Yale-Brown Obsessive Compulsive Scale in Autism Spectrum Disorder: Component Structure and Correlates of Symptom Checklist. *Journal of the American Academy of Child & Adolescent Psychiatry, 53*, 97-107. https://doi.org/10.1016/j.jaac.2013.09.018
- Schechter, D. (2022, March 29). Post-Traumatic Pain Expressed Physically from Generation to Generation. <u>https://nccr-synapsy.ch/news/14244</u>
- Segal, D. L. (2010). Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). In I. B. Weiner, & W. E. Craighead (Eds.), *The Corsini Encyclopedia of Psychology* (p. corpsy0271). John Wiley & Sons, Inc. https://doi.org/10.1002/9780470479216.corpsy0271
- Sofronoff, K., Dark, E., & Stone, V. (2011). Social Vulnerability and Bullying in Children with Asperger Syndrome. *Autism*, 15, 355-372. https://doi.org/10.1177/1362361310365070
- Song, P., Zha, M., Yang, Q., Zhang, Y., Li, X., & Rudan, I. (2021). The Prevalence of Adult Attention-Deficit Hyperactivity Disorder: A Global Systematic Review and Meta-Analysis. *Journal of Global Health*, 11, Article ID: 04009. <u>https://doi.org/10.7189/jogh.11.04009</u>
- Turner-Brown, L. M., Lam, K. S. L., Holtzclaw, T. N., Dichter, G. S., & Bodfish, J. W. (2011). Phenomenology and Measurement of Circumscribed Interests in Autism Spectrum Disorders. *Autism, 15*, 437-456. <u>https://doi.org/10.1177/1362361310386507</u>
- Wan, A., Bernstein, C. N., Graff, L. A., Patten, S. B., Sareen, J., Fisk, J. D., Bolton, J. M., Hitchon, C., Marriott, J. J., Marrie, R. A., & for the CIHR Team in Defining the Burden and Managing the Effects of Immune-Mediated Inflammatory Disease (2022). Childhood Maltreatment and Psychiatric Comorbidity in Immune-Mediated Inflammatory Disorders. *Psychosomatic Medicine*, *84*, 10-19. https://doi.org/10.1097/PSY.000000000001025
- WHO (2022). *Mental Disorders*. <u>https://www.who.int/news-room/fact-sheets/detail/mental-disorders</u>
- Wikipedia (2018). *Étude ACE (Adverse Childhood Experiences)*. Étude ACE (Adverse Childhood Experiences).

https://fr.m.wikipedia.org/wiki/Étude ACE (Adverse Childhood Experiences

Wikipedia (2022). *Epidemiology of Autism*. <u>https://en.wikipedia.org/wiki/Epidemiology of autism</u>

World Health Organization (1993). The ICD 10 Classification of Mental and Behavioural

Disorders. World Health Organization.

- World Health Organization (2019). *The ICD 11 International Statistical Classification of Diseases and Related Health Problems.* The World Health Organization.
- Wu, M. S., Rudy, B. M., & Storch, E. A. (2014). Obsessions, Compulsions, and Repetitive Behavior: Autism and/or OCD. In T. E. Davis III, S. W. White, & T. H. Ollendick (Eds.), *Handbook of Autism and Anxiety* (pp. 107-120). Springer International Publishing. <u>https://doi.org/10.1007/978-3-319-06796-4_8</u>
- Zandt, F., Prior, M., & Kyrios, M. (2007). Repetitive Behaviour in Children with High Functioning Autism and Obsessive Compulsive Disorder. *Journal of Autism and Developmental Disorders, 37*, 251-259. <u>https://doi.org/10.1007/s10803-006-0158-2</u>