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The Comorbidity of Attention Deficit/Hyperactivity Disorder and Rejection Sensitive Dysphoria as an Impediment in Foreign Language Learning

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ABSTRACT

This article aims to show the relationship between the co-occurrence of Attention Deficit/Hyperactivity Disorder (ADHD) and Rejection Sensitive Dysphoria (RSD) and their impact on foreign language learning. With the increasing social awareness of neurodiversity, i.e., differences in the characteristics of the human brain and, consequently, different ways of reasoning, perceiving the world, and the resulting behaviours, we are observing an increased interest in the diagnosis and psychotherapy of neurodevelopmental disorders (including ADHD, autism spectrum disorder, Asperger's syndrome, dyslexia, and dyspraxia). It is assumed that differences in information processing, learning methods, emotional reactions, and other neurobiological aspects are an integral part of the human neuropsychological spectrum and constitute the wealth of our population. Statistical data indicate that the concept of neurodiversity may affect as much as 15-20% of the general population. The study aims to show how the co-occurrence of two neurodevelopmental disorders—ADHD and RSD—affects learning foreign languages. The results presented included only those difficulties resulting from the co-occurrence of these two disorders and ignored variables resulting from only one. The research group included students learning foreign languages as part of their studies in applied linguistics who were diagnosed with ADHD and RSD. The observed difficulties were collected and compared, and conclusions were formulated.

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1. Introduction

Over recent years, we have observed increased public awareness of neurodevelopmental disorders. More and more people go to specialists to obtain a diagnosis and implement appropriate treatment combined with psychotherapy. For this reason, Specific Educational Needs (SpLDs) in the context of language teaching and learning is gaining popularity, which is reflected in publications focusing on neurodivergent people, including, among others, those on the autism spectrum, dyslexia, and Attention Deficit Hyperactivity Disorder (Kormos, 2017; Kormos & Smith, 2012). The subject of interest of this article is the presence of two neurodevelopmental disorders in the same individual, which is referred to as comorbidity; here, comorbidity of Attention Deficit Hyperactivity Disorder (ADHD) and Rejection Sensitive Dysphoria (RSD) and its impact on foreign language learning.

2. Characteristics of Attention Deficit Hyperactivity Disorder.

Attention Deficit Hyperactivity Disorder (ADHD) is a chronic debilitating condition defined as a neurodevelopmental disorder that affects children, teenagers, and adults (Peiman et al., 2015, p. 176). Individuals with ADHD may experience difficulties maintaining attention (attention deficit) and/or controlling activity (impulsivity and hyperactivity disorder). Therefore, they give the impression of not listening to instructions issued by teachers. They cannot sit still for longer, tend to start performing activities without prior thought, and are often described as daydreamers. However, in reality, they can understand the instructions but face difficulties following them owing to their lack of details or overwhelming boredom, especially when performing highly demanding tasks. Individuals with such characteristics may be perceived as undisciplined or less talented, but in fact, they show symptoms of ADHD (O'Regan, 2005).

According to statistics published by Peacock (2001), it is estimated that between 3% and 7% of the worldwide population experiences the symptoms of ADHD, with an average of 5% according to more recent studies (Kałdonek-Crnjaković, 2018, p. 216). The recent update of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) (American Psychiatric Association [APA], 2013), which is the taxonomic and diagnostic tool used by clinicians and researchers to diagnose and classify mental disorders, reveals a significant change within the

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classification of ADHD among other disorders. Since DSM-V ADHD falls under the category of learning difficulties and not the behavioural ones as in the previous version (Kałdonek-Crnjaković, 2018, p. 216), such a change in categories' assignment may result in an earlier diagnosis of neurodevelopmental disorders among other ADHD.

Barkley (2020) states that in order to diagnose ADHD, specialists must observe the following: 1) the first symptoms appear at an early stage of the child's development; 2) the child's behaviour differs from the behaviour of other children not affected by this disorder; 3) ADHD is a dominant disorder that appears in various situations, but not necessarily in all of them; 4) the presence of symptoms affects the functioning of the child/adult and coping with typical expectations related to peers in various spheres of life; 5) the symptoms do not improve over time and grow up; 6) there is no explanation for the presence of symptoms through the occurrence of other social or environmental factors.

3. Diagnostic Criteria Divided According to Attention Deficit Hyperactivity Disorder Presentation.

Two symptoms are characteristic of ADHD: *severe attention disorders*, i.e., inability to concentrate (=inattention), and/or *excessive impulsivity and hyperactivity* that interfere with functioning or development. They may coincide, or one of these groups may be dominant. DSM V clarifies that the occurrence of six (or more) of the following symptoms within one or two groups persisting for at least 6 months to a degree inconsistent with developmental level and that directly negatively impacts social and academic/occupational activities shall signal the prevalence of ADHD.

Symptoms connected with inattention (APA, 2013, p. 59):

a. "Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).

b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).

c. Often does not seem to listen when spoken to directly (e.g., the mind seems elsewhere, even without any obvious distraction).

d. Often does not follow instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily side-tracked).

e. Often needs help organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; better time management; failure to meet deadlines).

f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).

g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).

h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts). Is often forgetful in daily activities (e.g., doing chores, running errands for older adolescents and adults, returning calls, paying bills, keeping appointments)".

Symptoms connected with impulsivity and hyperactivity (APA, 2013, p. 59):

a. "Often fidgets with or taps hands or feet or squirms in the seat.

b. Often leaves the seat when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).

c. Often runs about or climbs in situations where it is inappropriate. (Note: It may be limited to feeling restless in adolescents or adults.)

d. Often unable to play or engage in leisure activities quietly.

e. Is often "on the go", acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for an extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).

f. Often talks excessively.

g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for a turn in conversation).

h. Often has difficulty waiting his or her turn (e.g., while waiting in line).

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i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing)".

As a result of the above symptoms, a specialist may diagnose ADHD with a combined presentation (in the case of the occurrence of six (or more) symptoms in each of the two groups), a predominantly inattentive presentation (in the case of the occurrence of six (or more) symptoms of inattention group), or a predominantly hyperactive/impulsive presentation (in the case of the occurrence of six (or more) symptoms of impulsivity and hyperactivity group).

4. Characteristics of Rejection Sensitive Dysphoria.

Rejection Sensitive Dysphoria is an example of an emotional dysregulation manifestation. It is a reasonably common, although not yet sufficiently researched, symptom of ADHD, especially among adults. While not everyone who experiences RSD has ADHD, and not everyone with ADHD experiences RSD, it is a common phenomenon in the ADHD community. People affected by Rejection Sensitive Dysphoria experience unbearable pain due to rejection or criticism. The feeling of rejection may result from an actual or imagined situation. A person suffering from RSD may misperceive and misinterpret certain situations, which leads to intense physical and emotional pain. The intensity of pain experienced by people with RSD is sometimes compared to physical wounds.

Symptoms of RSD are characterized by intense mood shifts triggered by distinct situations, typically one of the following (Dodson, 2023):

– *rejection* – be it the actual or perceived withdrawal of love, approval, or respect;

– *teasing* – by a group of acquaintances or strangers;

– *criticism* – expressed by acquaintances or superiors, no matter how constructive;

– *persistent self-criticism* or *negative self-talk* prompted by an actual or perceived failure.

The occurrence of the above feelings directly affects the individual's mood. If emotions are internalized, it may mean that the person suffers from Major Mood Disorder Syndrome, which, in extreme situations, may result in suicidal thoughts. In turn, if these feelings are externalized, they find expression in anger directed against the person or situation that led to the feeling of

pain. A characteristic feature of RSD is a relatively quick return to everyday mood, but there may be several episodes of mood dysregulation during the day.

According to Dodson (2023), the experience of RSD may manifest itself, among others, in sudden emotional outbursts as a result of a real or perceived stimulus, there may be withdrawal reactions, negative expressions about oneself (in extreme situations, a person with RSD becomes their own worst enemy), thoughts of self-harm, conscious avoidance of social settings where criticism could occur (this symptom is similar to Social Anxiety Disorder), low self-esteem, social distancing, problems with entering social relationships. Undoubtedly, no one likes to be criticized or rejected. Therefore, people with and without RSD try to avoid this situation. What distinguishes RSD is its unbearable intensity, which sets it apart from normal emotional responses familiar to neurotypical people.

5. Comorbidity of Rejection Sensitive Dysphoria and Attention Deficit Hyperactivity Disorder.

RSD is not listed in the American Diagnostic and Statistical Manual of Mental Disorders (APA, 2013, p. 60) as a diagnosis or symptom. However, emotional dysregulation is one of the six fundamental features used to diagnose ADHD according to ICD-11, which is another, next to DSM-V, globally used diagnostic tool for epidemiology, health management, and clinical purposes:

"Individuals with Attention Deficit Hyperactivity Disorder often experience problems with psychosocial functioning and interpersonal relationships, including regulation of emotions and negative emotionality. If Attention Deficit Hyperactivity Disorder persists into adolescence and adulthood, it may be difficult to distinguish it from Personality Disorder with prominent personality features such as disinhibition, which includes irresponsibility, impulsivity, distractibility, recklessness, and Negative Emotionality, which refers to a habitual tendency to manifest a broad range of distressing emotions including anxiety, anger, self-loathing, irritability, and increased sensitivity to negative stimuli" (International Classification of Diseases 11th Revision).

It is commonly known that the DSM-V's diagnostic criteria for ADHD have never been verified in a population of individuals older than 16 and only fit well with children aged 6 to 12

(PPAT, 2007). They solely take into account observable and quantifiable behavioural or observational criteria. Because these characteristics are difficult to quantify, the standard diagnostic criteria purposefully omit symptoms linked to emotions, thinking patterns, relationships, sleeping, etc. The DSM-V criteria are nearly useless for clinicians working with older teens and adults because they overlook many essential factors crucial to understanding how people with an ADHD nervous system experience their lives. Many professionals were unaware of the emotional aspect of ADHD, which had always existed but was purposefully ignored. They felt that the idea needed an actual or historical foundation. Additionally, only a tiny amount of research has been published. Most of those studies originated in the European Union and used the term emotional dysregulation (ED) rather than RSD (Kooij Sandra, 2010).

These barriers are being swiftly removed in order to recognize RSD as a significant and defining feature of adults with ADHD and to use drugs to provide some relief from the discomfort and disturbances caused by this aspect of ADHD. In a very short period, the amount of research available has rapidly increased (Graham et al., 2011). RSD is now officially recognized in the European classification, where the definition of adult ADHD was changed to include emotional self-regulation as a crucial component of the diagnostic criteria. Unfortunately, emotional dysregulation, or RSD, may never meet the diagnostic criteria for ADHD for at least three reasons. Firstly, RSD does not always appear; it occurs in precipitated episodes. Secondly, people with RSD typically suppress their overreactions out of embarrassment to avoid being viewed as mentally or emotionally unstable. Thirdly, even though RSD is present, it cannot be measured, which makes it difficult to conduct studies on it.

As a result, emotional dysregulation was purposefully left out of the diagnostic criteria for ADHD and was essentially ignored for a long time. Researchers have created several new perspectives on ADHD over the past ten years. The European Union released its 10-year update of the Consensus Guidelines on Adult ADHD by the end of 2019, which redefined adolescent and adult ADHD and listed difficulty with emotional regulation as one of only six fundamental characteristics of the ADHD syndrome (Kooij et al., 2019):

1. Inattention and hyperfocus.
2. Impulsivity.

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3. Hyperactivity.
4. Emotional dysregulation.
5. Excessive mind wandering.
6. Behavioural self-regulation (which they equated with executive function deficits).

It has been established that the aetiology of RSD in ADHD is intrinsic to the condition rather than the result of a concomitant disorder (Skirrow & Asherson, 2013). However, little is understood about the elements influencing the emergence of RSD in ADHD. The genetic theory has received the most research because ADHD and RSD are highly heritable.

Despite the paucity of studies on RSD and its relationship to ADHD, evidence indicates that emotional dysregulation is more common in people with ADHD because they experience emotions more strongly than those without ADHD. Strong emotion control issues may be a factor in RSD. People with ADHD are more likely than their non-ADHD peers to be rejected by adults throughout their youth, especially by teachers. More rejection experiences as a youngster may result in stronger feelings of perceived rejection as an adult. The stress of surviving in a world not built for their brains is also experienced more frequently by children with ADHD than those without it. These elements cause emotional problems in adults, such as RSD (Boodoo et al., 2022).

6. Impact of Attention Deficit Hyperactivity Disorder and Rejection Sensitive Dysphoria on Foreign Language Learning.

Learning a foreign language is a challenging cognitive and metacognitive task influenced by various variables. Language proficiency needs strategic competence (Hulstijn, 2011) and mastery of syntax, vocabulary, phonology, and spelling (Bachman & Palmer, 1996). According to a recent theory on the aptitude to learn additional languages (Wen et al., 2017), success will depend on L1–L2 language analysis skills and the cross-linguistic phonology/orthography analysis that was proposed by Sparks et al. (2011), in addition to the traditional Carroll's model (1962) that included phonemic coding ability, grammatical sensitivity, inductive learning ability, and rote learning ability. Most significantly, the modern perspective on one's capacity to learn a wide range of additional language abilities emphasizes the value of working memory, particularly its phonological component.

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The present study aims to fill in the gap in research by investigating the link between the comorbidity of ADHD and RSD in foreign language learning. Attention deficit hyperactivity disorder manifests in a different way of reasoning, perceiving the world, and the resulting behaviours. It includes the belief that differences in information processing, learning patterns, emotional responses, and other neurobiological aspects are an integral part of the human neuropsychological spectrum and constitute the richness of our population. A person with ADHD has a set of chronic difficulties in concentrating attention, undertaking tasks, maintaining effort, using working memory, and modulating emotions, which chronically impair their ability to cope with the necessary challenges of everyday life and make it difficult to learn foreign languages. For this reason, teachers need to be able to identify differences in the cognitive profiles of their students, i.e., differences in ways of thinking, talents, and especially unusual learning difficulties.

On the other hand, there is a co-occurrence of rejection sensitive dysphoria (RSD) when a person feels extreme, severe emotional pain due to perceived rejection, criticism, or failure. This is more than just hating the rejection experience; the person finds these sentiments intolerable or agonizing, not just unpleasant. RSD sufferers might struggle to control their emotions or find healthy ways to express their agony.

The research question was to reveal the connection between ADHD and RSD, and foreign language learning. Therefore, case studies have been conducted on individuals with diagnosed ADHD and emotional dysregulation. All of the participants are students of languages in applied linguistics and have been asked to talk about their experiences with foreign language learning during interviews conducted at the end of the one-year-long Communicative Competence Development of Language course. The responses have been collected and compared. Moreover, responses were selected according to the impact of ADHD and RSD comorbidity on learning foreign languages, and difficulties resulting solely from one of these disorders were omitted. The results reveal difficulties in the following areas:

1. ***Communication apprehension*** is a general word that describes someone's "fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 2001). Communication anxiety is fundamentally a psychological reaction

to assessment. However, this psychological reaction swiftly changes to a physical one when the body reacts to the danger that the mind sees. One responds to them directly because the body cannot discern psychological and physical dangers. This response causes the body's circulatory and adrenal systems to go into overdrive, putting a person in the best possible physical condition. The bodily reactions to communication anxiety are frequently not well suited to the nature of the threat one confronts, as the extra energy the body produces can make it more challenging to be an excellent public communicator. One can better manage the body's misdirected attempts to assist in coping with the fear of social criticism if one is aware of the body's reactions to stress, as communication anxiety is deeply ingrained in thoughts.

A variety of physical feelings accompany the fear of communicating. One might feel their hands getting cold or their heart racing. One might start to perspire. One might get "stomach butterflies" or perhaps a queasy feeling. They may begin to pace uncomfortably, or their hands and legs may tremble. They could have trembling voices and a "dry mouth" feeling, making it challenging to form even basic phrases. Breathing speeds up, and they may experience light-headedness or vertigo in severe cases. Communication anxiety is extremely unsettling because it makes them feel like they have no control over their bodies. In addition, they could become so tense that they worry they will not remember their name, much less the significant ideas of the speech they will give.

2. ***Testing anxiety***. Students with testing anxiety are incredibly distressed and anxious about taking tests. Although many people feel tension and worry before and during exams, testing anxiety can damage test performance and hinder learning. Students can become so stressed that they cannot perform to their full potential when pressure and good performance matter.

The worries have been exemplified in the following ways:

– being concerned that one will not live up to the expectations of significant people in their life (be it teachers, parents, or partners) and that, if one fails, one will lose the support of those who matter;

– believing that grades are a measure of one’s worth as an individual;

– focusing excessively on a specific test;

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– giving in to fear or guilt over not preparing well enough for tests;

– one feels powerless and thinks they do not influence work or grades.

Testing anxiety symptoms can range significantly in intensity, from low to severe. Some students only have minor testing anxiety symptoms, yet they can do admirably on exams. Others are so overcome by worry that they do poorly on examinations or have panic episodes before or during exams. Symptoms of their testing anxiety can be physical (sweating, shaking, rapid heartbeat, dry mouth, fainting, and nausea), behavioural and cognitive (include avoiding situations that involve testing, which results in skipping class or even dropping out of school; other symptoms are memory problems, difficulty concentrating and negative self-talk), and emotional (depression, low self-esteem, anger, and a feeling of hopelessness).

3. ***Fear of negative evaluation*** (FNE) reflects concern about others' evaluations, specifically others' negative evaluations. Specific personality traits like nervousness, submissiveness, and social avoidance are associated with FNE. Fear of negative evaluation is distinct from testing anxiety, which refers to an individual's fear of being evaluated in any situation, including situations that are not social. Since FNE refers to a social context, it will be more common in active learning classrooms than traditional lectures.

FNE is present in language-learning classes where there are frequent social interactions. Students exemplify fear of negative evaluation in student-teacher interactions, student-student interactions during group work, and speaking out in front of the whole class when a student does not volunteer. Their anxiety during active learning in a classroom should be reduced by lowering the likelihood that they will feel adverse about themselves in front of their classmates and the teacher. It can be achieved by fostering relationships among students and between students and the teacher and creating a classroom environment where making mistakes is acceptable.

The fact that college students experience anxiety is not surprising. College students usually express feeling overwhelmed since they are given new duties, frequently have a demanding academic workload, and combine studies with their first jobs. Nevertheless, understanding the connection between active learning and anxiety is crucial for maximizing the benefits of active

learning for students, given the rising prevalence of anxiety among college students and teachers' increased use of active learning techniques.

7. Concluding Remarks.

Learning a foreign language is a complex cognitive process; therefore, the support of teachers is an inevitable element of the successful acquisition of linguistic competencies. Teachers should be able to recognize students with ADHD (and RSD) based on their observations or the basis of the diagnosis handed in by the students themselves. Although some difficulties may be culture-specific, requiring teachers to use their senses and judgment, there are some obvious symptoms, including anxious behaviour and signs (e.g., general avoidance, stuttering or stammering, silence), that teachers can recognize in their classrooms. By creating a supportive emotional climate in the classroom, teachers can reduce the dire consequences of the comorbidity of ADHD and RSD. Learners' levels of emotional dysregulation will decrease as they realize that they will not be made fun of for making mistakes, that the teacher may have had similar anxieties, and that the teacher will appreciate their trying something new in the foreign language. Dewaele (2011) argued that "language teachers could use their own emotions and feelings, their multilingual subjectivity, by presenting the target language not just as a tool for communication but as an opportunity for learners to expand their symbolic selves, get emotionally and cognitively involved in the foreign language process, and develop tertiary socialisation" (p. 37). Positive emotion is essential for foreign language learning because it facilitates the building of resources and broadens a person's perspective, allowing the individual to absorb the language to the best of their abilities. The main aim of this paper is to assist teachers in thinking about how to lessen, in particular, ADHD and RSD students' anxiety and fear of failing to help create more equitable college environments—not only in terms of participation but also in terms of student benefit from those interactions.

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