Contents lists available at ScienceDirect

# ELSEVIER



## Hyperfocusing as a dimension of adult attention deficit hyperactivity disorder<sup> $\dot{\pi}$ , $\dot{\pi}\dot{\pi}$ </sup>

Erguvan Tugba Ozel-Kizil<sup>a,\*</sup>, Ahmet Kokurcan<sup>b</sup>, Umut Mert Aksoy<sup>c</sup>, Bilgen Bicer Kanat<sup>d</sup>, Direnc Sakarya<sup>e</sup>, Gulbahar Bastug<sup>f</sup>, Burcin Colak<sup>a</sup>, Umut Altunoz<sup>g</sup>, Sevinc Kirici<sup>a</sup>, Hatice Demirbas<sup>h</sup>, Bedriye Oncu<sup>a</sup>

<sup>a</sup> Ankara University School of Medicine, Department of Psychiatry, Ankara, Turkey

<sup>b</sup> Diskapi Yildirim Beyazit Research and Training Hospital, Psychiatry Clinic, Ankara, Turkey

<sup>c</sup> Bakırkoy Mazhar Osman Research and Training Hospital for Psychiatry, Psychiatry Clinic, Istanbul, Turkey

<sup>d</sup> Bergama Public Hospital, Psychiatry Clinic, Izmir, Turkey

<sup>e</sup> Uppsala University Hospital, Department of Psychiatry, Affective Disorders Unit, Uppsala, Sweden

<sup>f</sup> Ankara University Vocational School of Health, Ankara, Turkey

<sup>g</sup> Klinikum Wahrendorff Psychiatric Hospital, Department of Transcultural Psychiatry, Hannover, Germany

<sup>h</sup> Gazi University, Department of Psychology, Ankara, Turkey

#### ARTICLE INFO

Article history: Received 29 January 2016 Received in revised form 29 July 2016 Accepted 19 September 2016 Number of reviews completed is 1

Keywords: Adult ADHD Assessment Psychostimulant

#### ABSTRACT

Patients with Attention Deficit Hyperactivity Disorder (ADHD) suffer not only from inability to focus but also from inability to shift attention for events that trigger their interests. This phenomenon is called "hyperfocusing". Previous literature about hyperfocusing is scarce and relies mainly on case reports. The study aimed to investigate and compare the severity of hyperfocusing in adult ADHD with and without psycho-stimulant use. ADHD (DSM-IV-TR) patients either psycho-stimulant naive (n = 53) or on psycho-stimulants (n = 79) from two ADHD clinics were recruited. The control group (n = 65) consisted of healthy university students. A socio-demographic form, the Beck Depression Inventory, the Wender-Utah Rating Scale, the Adult ADHD Self- Report Scale and the Hyperfocusing Scale were applied to the participants. There was no difference between total Hyperfocusing Scale and Adult ADHD Self- Report Scale scores of two patient groups, but both have higher scores than controls (p < 0.001). Hyperfocusing is higher in adult ADHD and there was no difference between stimulant-naive patients or patients on stimulants. Hyperfocusing can be defined as a separate dimension of adult ADHD.

© 2016 Elsevier Ltd. All rights reserved.

#### 1. Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is characterized by problems of attention, overactivity and impulsivity which begin in early childhood and last for lifelong. ADHD is a heterogeneous syndrome with unknown etiology and preva-

<sup>6</sup> Corresponding author.

http://dx.doi.org/10.1016/j.ridd.2016.09.016 0891-4222/© 2016 Elsevier Ltd. All rights reserved.





<sup>\*</sup> This study was presented as a poster at the ECNP Congress held in Berlin, 2014 and the abstract has been published in the supplement of European Neuropsychopharmacology.

<sup>\*\*</sup> Reference: Ozel-Kizil, E. T., Kokurcan, A., Aksoy, U. M., Biçer-Kanat, B., Sakarya, D., Bastug, G., ... & Oncü, B. (2014). P. 7. b. 005 Hyperfocusing as a dimension of adult ADHD. European Neuropsychopharmacology, 24, S707-S708.

E-mail addresses: etozel@ankara.edu.tr, etugbaozel@yahoo.com (E.T. Ozel-Kizil).

lence of ADHD is reported as 3–5% in children and adolescents. In adults, the prevalence of ADHD is not known, however the estimated prevalence of ADHD in adults was reported as 3.4–4.4% (Fayyad et al., 2007; Kessler et al., 2006) and ADHD symptoms were reported to persist in almost half of the childhood cases (Kessler et al., 2010). Psychiatric comorbidities such as depression, anxiety disorders, alcohol and substance use disorders, bipolar disorder are common in adult ADHD (Fayyad et al., 2007; Simon, Czobor, Bálint, Mészáros, & Bitter, 2009; Verbeeck, 2003). Current diagnostic criteria for ADHD are appropriate for childhood, however there is no consensus about the diagnostic criteria for adult ADHD (Adler & Cohen, 2004). Several instruments for the screening of adult ADHD have been developed and diagnostic criteria have been suggested as associated research increased in the last decade (Adler & Cohen, 2004; Kessler et al., 2005). In the recent diagnostic criteria by American Psychiatric Association (Diagnostic and Statistical Manual of Mental Disorders, DSM-5, 2013), the number of the criteria needed for the diagnosis of adult ADHD has been decreased (American Psychiatric Association, 2013). However, there was no change in terms of clinical features.

Patients with ADHD usually have difficulty of focusing and this has been the main concern in the diagnostic criteria. Besides, previous research highlighted the deficiency of the Navon effect, which is an automatic tendency to process the global picture prior to local details when processing compound patterns, in both children and adult ADHD patients (Kalanthroff, Naparstek, & Henik, 2013; Song & Hakoda, 2012; Song & Hakoda, 2015). In other words, patients with ADHD experience excessive local interference effect and/or lack of global processing such that they cannot stay focused on the big picture and they drown in the details.

"Hyperfocusing" is defined as a clinical phenomenon of "locking on" to a task in patients with ADHD who have a difficulty of shifting their attention from one subject to another, especially if the subject is about their interests (Conner, 1994). Hyperfocusing was mentioned as a state resembling a "hypnotic spell", according to the subjective experiences of the cases with ADHD (Brown, 2005). It may occur during activities with different modalities like visions, tasks or voices. Individuals usually report hyperfocusing during interactive, operative activities in which they are interested. Moreover, hyperfocused individuals neglect things other than the condition they are already focused on. Patients with ADHD are reported to be stuck in the activities that they are interested and they keep on doing these things for hours while they lose interest in their surroundings. The literature about hyperfocusing indicates that it appears especially while watching TV or using computer (Conner, 1994; Doyle, 2006). The patients with ADHD usually report that they cannot understand how the time passes. During hyperfocusing, the individuals state that they are aware of the things that they ignore, however they cannot give up what they are doing (Brown, 2005; Conner, 1994). Although it is not present in current diagnostic systems, impaired time management is also accepted as an accessory symptom in adult ADHD and has been assessed by some clinical instruments (Adler & Cohen, 2004).

Hyperfocusing is thought to occur on the basis of attention disorder; patients with ADHD have difficulties of focusing and sustaining, as well as shifting their attention. Therefore, some authors have suggested using "attention disorder" instead of "attention deficit" for defining the attention problem in ADHD (Doyle, 2006). When taken together, both hyperfocusing, which seems to be a state of increased attention due to heightened motivation, and excessive local interference point out an "attention disorder" instead of an "attention deficit". However, hyperfocusing that is frequently reported by patients in clinical settings has not been scientifically studied. The current literature about hyperfocusing depends mainly on case reports (Brown, 2005; Fitzsimons, Brookman, Arnholz, & Baker, 2016).

Hyperfocusing is also frequent in healthy population, but this problem seems to be more prevalent and chronic such that it causes significant dysfunction in patients with ADHD (Conner, 1994). Barkley (1998) observed that adults with ADHD were in search for activities promoting a state of hyperfocusing that evokes excitement and this situation led to functional impairment. Besides, some authors suggested that hyperfocusing, like hyperactivity and impulsivity, might enhance creativity although it impairs academic success in patients with ADHD (Flint, 2001; Hallowell & Ratey, 2011; Holmes, 2006).

Additionally, hyperfocusing has also been reported as an adverse effect of psycho-stimulants in these patients. Especially high doses of methylphenidate may lead to emotional lability and hyperfocusing (Silver, 2004). However, hyperfocusing due to psycho-stimulant usage relies either on subjective reports of the patients or was not clearly investigated (Solanto & Wender, 1989).

Although, hyperfocusing has been clinically reported as a frequent phenomenon in ADHD, it is not clearly defined and not examined as a separate dimension or a symptom in scientific research. Previously, Ozel-Kizil et al. (2013) developed a questionnaire (Hyperfocusing Scale-HS-Appendix A) for the assessment of the severity of hyperfocusing symptoms in a non-clinical sample consisting of university students. They reported that hyperfocusing which was evaluated by the HS had high correlations with other ADHD symptoms like inattention, impulsivity and hyperactivity. However, that study which was carried out in a non-clinical sample was a preliminary one such that the results did not support hyperfocusing as a symptom of adult ADHD.

Therefore, the present study was designed in order to evaluate whether hyperfocusing symptoms were present in patients with adult ADHD and there was a difference in the severity of hyperfocusing in these patients when compared to healthy controls. Because healthy people may also have hyperfocusing in some extent. The secondary aim of the study was to compare hyperfocusing symptoms in ADHD patients with or without psycho-stimulant use. Thus, it would be possible to evaluate whether hyperfocusing occurs due to psycho-stimulant use or an intrinsic part of the syndrome. In addition to that, the present study could also add on to the validity of the HS in adult patients with ADHD. So, both convergent validity and

Download English Version:

### https://daneshyari.com/en/article/6848380

Download Persian Version:

https://daneshyari.com/article/6848380

Daneshyari.com