# Beliefs concerning the components of romantic love and its types among adults with attention deficit hyperactivity disorder

Natalia Kajka <sup>1</sup> <sup>©</sup> https://orcid.org/0000-0002-1781-6773
Agnieszka Kulik <sup>2</sup> <sup>©</sup> https://orcid.org/0000-0002-1643-4159
Magdalena Traczyk <sup>1</sup> https://orcid.org/0009-0004-3822-4111
Kamila Budzyńska <sup>3</sup> © https://orcid.org/0009-0009-2657-2983
Weronika Osełka <sup>3</sup> https://orcid.org/0009-0007-0971-1799

<sup>1</sup>Katedra Psychiatrii i I Klinika Psychiatrii, Psychoterapii i Wczesnej Interwencji, Uniwersytet Medyczny w Lublinie <sup>2</sup>Katedra Psychoterapii i Psychologii Zdrowia, Katolicki Uniwersytet Lubelski Jana Pawła II <sup>3</sup>Studentka Katolicki ogo Uniwersytetu Lubelski go Jana Pawła II

<sup>3</sup> Studentka Katolickiego Uniwersytetu Lubelskiego Jana Pawła II

Adres do korespondencji: Natalia Kajka, Katedra Psychiatrii i I Klinika Psychiatrii, Psychoterapii i Wczesnej Interwencji, ul. Głuska 1, 20-439 Lublin, natalia.kajka@umlub.pl

# Abstract

The aim of the study is to analyse beliefs concerning the components of romantic love, its types and its relation with ADHD symptoms in the group of young adults with ADHD. The research involved 86 individuals aged 20 to 28 years (M = 23.14; SD = 2.06). Young adults with ADHD, compared to the control group, are significantly less satisfied with their romantic relationships in terms of commitment, and more satisfied in terms of intimacy; the level of passion does not differ between the groups. Hyperactivity/impulsivity can be indicated as a predictor of commitment to a relationship. Adults with ADHD express the romantic type of love.

#### Key words: ADHD, intimacy, love, passion, relationship

#### Stowa kluczowe: ADHD, intymność, mitość, namiętność, związek

### Introduction

Attention deficit hyperactivity disorder (ADHD<sup>1</sup>) is a chronic neurodevelopmental disorder with a confirmed status in both classifications of disorders (ICD 11 and DSM 5) [1, 2]. The worldwide prevalence of ADHD among adults ranges from 2% to 5% [3, 4]. The symptoms of ADHD occur throughout life and make everyday functioning difficult for the diagnosed persons [5, 6]. The literature often indicates inability to establish lasting and satisfying social [5–9]. ADHD is associated with relationship dissatisfaction, conflict, victimization, intimate partner violence perpetration, a burden for partners [4]. Young adults with ADHD encounter difficulties in love and marital relationships more often than people in the control group [3, 6, 10]. Examined marital satisfaction is lower among couples in which one of the spouses has been diagnosed with ADHD [5, 11]. According to Biederman et al. [11], the divorce rate is higher (28% vs 15%) among couples in which one of the spouses has ADHD symptoms [3, 6, 12]. The data suggest difficulties in experiencing and expressing love among adults with this diagnosis. A review of studies by Wymbs et al. [4] shows that the observed differences in the functioning of men and women with ADHD in romantic relationships are not necessarily associated only with ADHD. It is interesting how people who experience

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clinical symptoms can assess what are their feelings and what type of love they prefer. Understanding these elements may prove helpful for adults with ADHD and their partners, and it may be beneficial in their therapy too. Especially since romantic relationships have a special supportive function in reducing stress in difficult situations [13–15].

# Types of love and its ingredients

# **Types of love**

The way people function in romantic relationships is related to the intensity of the components of [16, 17]. Sternberg [16, 18] distinguishes such factors as intimacy, passion, and commitment. Changes in the intensity of individual components result from the essence of love and of the people who create it. Based on their intensity, it is possible to define a certain type of love characteristics of an individual [19]. According to Sternberg [18], the intensity system of the three components generates 8 possible types of love: (1) non-love is when all three components are missing; (2) complete love is when there is harmony between the components; (3) liking love is when there is intimacy with low passion and commitment; (4) infatuated love is when passion is dominant with lack of commitment and intimacy; (5) empty love is only characterized by commitment; (6) romantic love is a combination of intimacy and passion; (7) mature social love is characterized by high intimacy and commitment, but with extinguished passion; (8) the last one, fatal love, is built on strong passion and commitment, however, it does not include intimacy. The three main components that constitute the types of love will be characterized in detail below.

#### Intimacy

Intimacy is most often associated with the erotic dimension of romantic love [20]. However, as suggested by Sternberg [18], it refers to a feeling of closeness and bond with another person. This dimension is characterised by good communication between partners, mutual understanding, and respect, caring for the loved one, and a sense of availability and security. It is a component of love that requires time and work from partners [5, 21]. It increases along with the level of knowing the other person in a relationship. As a result, people in the relationship learn how to satisfy each other's needs and create models of effective communication [5, 22].

### Passion

Passion, as the second component of love, is a set of many diverse and very strong emotions; from jealousy or longing to delight, desire, and joy [14]. Passion is related to physical intimacy and closeness of partners [23]. It includes sex drive, physical attraction, flirting and eroticism in general. These are various forms of experiencing passion in a relationship between two people.

# Commitment

What affects the maintenance of the relationship is related to the third component of love, that is commitment. It consists not only of thoughts or emotions, but mostly of all activities ensuring the continuation of the relationship [18, 21]. Thus, the partners are able to control it and with a joint effort, people who are in love with each other can develop effective methods of maintaining the relationship e.g., through psychoeducation on ADHD undertaken by both partners, contact with therapists working with adult couples with ADHD, integrating cognitive-behavioral therapy, the use of mediation in relational strife, psychiatric consultation, and pharmacotherapy [4]. Unfortunately, the absence of such methods may soon lead to its breakdown [16, 22].

# The purpose of the research

It is worth noting that most of the published studies explore accurately the effects resulting from ADHD symptoms [4, 10, 24]. However, there are not enough reports that present beliefs about romantic relationships and the type of love characteristic for this group of people. Therefore, the aim of this research shall be to explore this thread. The following hypotheses are put forward:

- young adults with ADHD may differ from their peers in the control group in terms of the intensity of the components of love. Considering their problems in romantic relationships and reports of partners of people with ADHD, it may be assumed that the mean of the obtained results in the subscale measuring intimacy, passion, and commitment is significantly lower in the group of adults with ADHD than in the one consisting of young adults without this diagnosis [25, 26];
- 2) ADHD may reduce the level of beliefs connected with commitment and intimacy, but it rises passion. Research by Ovelbey et al. [25] shows that hyperactivity/impulsivity symptoms are related to the avoidance coping strategy in a romantic relationship. This may indicate that the diagnosed people are less involved in romantic relationships, while the study by Canu and Carlson [7] indicates that people with the subtype of inattention are more passive in the relationship, which could imply that there is a link between inattention and lower severity of beliefs about intimacy. The same study [7] also identifies a mixed subtype that was associated with increased sex drive and early dating experiences; therefore it is assumed that hyperactivity/impulsivity is positively associated with passion;
- 3) it is assumed that adults with ADHD prefer the type of infatuated love, which is driven by high passion and lack of commitment and intimacy. Usually their relationships are intense, erotic, and they last for a short time, which fits into the clinical picture of people with ADHD [4, 10, 24, 25].

# **Material and methods**

#### **Description of the study group**

The study involved 86 persons aged 20 to 28 years (M = 23.14; SD = 2.06). Among them, 50 were women and 36 were men (Table 1). The subjects were assigned either to the control or the clinical group, and the detailed method of selection is described in the procedure. The analysis with the Mann-Whitney U test showed no statistically significant differences in the level of education of the participants and number of romantic relationships. The subjects were homogeneous too in terms of age, sex, case of medications taken, having comorbidities and significant events (Table 1).

Observed differences concern the current status of being in a relationship. This is confirmed by a chi-squared test  $(X^2(1) = 6.103; p = 0.01)$ , which shows that the relationship status is strongly related to the group of respondents. Table 1 shows that people belonging to the clinical group at the time of the study more often declared their relationship status as single (76.70%) compared to people in the control group (51.20%).

#### **Research procedure**

The study was conducted via email during the pandemic of COVID-19 time (2020). To reach potential respondents from the clinical group, the random purposive sampling method via social media was used, following the example of other researchers who had recruited people with ADHD via local media [27]. A poster inviting young adults with symptoms of ADHD to participate in the study was published on the official fanpage of the Empiryczny Zespół Badawczy ADHD. In the next step, the same procedure was applied in order to recruit young adults with no ADHD symptoms. People qualified for the research took part in it voluntarily, and during the e-mail correspondence they gave their consent to both the anonymous research and the subsequent publication of the collected results. The project was approved by the Research Ethics Committee of the Institute of Psychology of the John Paul II Catholic University of Lublin (KEBN 26/2020).

In order to assign study participants to the groups (ADHD and control group), a triple criterion was applied: (1) declaration of participation in the research according to the instructions (people with/without ADHD symptoms were sought; N = 51 / N = 60; (2) declaration of having a psychiatric diagnosis confirming ADHD in childhood or adulthood (for the clinical group) and no such diagnosis for the control group (N = 43 / N = 60 people); (3) (not) meeting the criteria and severity of ADHD symptoms obtained in the ADHD Diagnostic Interview for adults (DIVA 2.0) filled by the respondents. The examined persons determine which symptoms are present in their lives during the research time and what symptoms they experienced in childhood [28]. They should meet at least 4<sup>2</sup> criteria (out of 9) connected with symptoms of attention disorder and hyperactivity/impulsivity. These symptoms should be occurring in the past and presently (at least 4 in the past and

4 presently). People who met the criteria for ADHD, and the intensity of their symptoms indicated attention deficit disorder with hyperactivity/impulsivity, were included in the clinical group (N = 43). On the other hand, the lack of fulfilled ADHD criteria in people declaring no symptoms or diagnosis was decisive for including volunteers in the control group (N = 51). Finally, 51 young adults from the control group were matched to the clinical group in terms of sex and age, which led to reducing the size of the control group to 43 people [31]. Both the presence of comorbidities (asthma, allergies) and medications taken by the respondents were neutral for the study.

The respondents completed a health survey and two questionnaires: Diagnostic Interview for ADHD in Adults (DIVA 2.0) [32] and Sternberg's Triangular Love Scale [18] in the Polish adaptation by Wojciszke [22]. The questions included in the health survey concerned the characteristics of the respondents, and the obtained answers are presented in Table 1.

The DIVA 2.0 questionnaire is a structured diagnostic interview for adults based on ADHD criteria [33, 34]. It is a tool commonly used in both research and clinical practice [28, 33, 35]. It allows for the diagnosis of ADHD in adults who have not been formally diagnosed before [36]. The analysis of the psychometric parameters of this interview shows that it is reliable and accurate, equal in its properties to the two most popular counterparts – the Conners' Adult ADHD Diagnostic Interview for DSM-IV (CAADID) and the Wender Utah Rating Scale (WURS) [28]. The scale also measures the severity of the disorder symptoms. The values range from 0 to 55 for attention deficit and from 0 to 44 for hyperactivity/impulsivity.

The last tool used in this research was the Polish adaptation of the Triangular Love Scale [18, 22]. It was used to determine the belief intensity of the respondents' romantic love between them and their partners in three dimensions: intimacy (e.g., "I feel that I can really trust .....", "I receive considerable emotional support from ....."), passion (e.g., "I find ..... to be very personally attractive". "I especially like physical contact with ....."), commitment (e.g., "Even when ..... is hard to deal with, I remain committed to our relationship", "I will always feel a strong responsibility for .....") and love (based on the instructions for the questionnaire). The questionnaire consists of 36 items which are evaluated on a scale from 1 to 7. The more the respondent agrees with a given opinion, the more strongly he/she expresses feelings for his/her partner. The psychometric properties of the tool are high both in terms of accuracy and reliability [18, 21]. Additionally, the type of love that is characteristic for the respondents can be calculated on the basis of the obtained results in individual scales. Sternberg [18] presents a triangle by means of which he shows the intensity on the scale of intimacy, passion, and commitment.

#### Results

In the first step, there were presented descriptive statistics for the severity of ADHD symptoms and the intensity of

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Variables		ADH	D Group	Contro	l Group	Group	
Variables		N	%	N	%	comparison	
	М	23.02	_	23.26	-		
	SD	2.06	_	2.07	_	. 0.521	
Age	Min	20.00	_	20.00	-	t = 0.521	
-	Max	28.00	-	28.00	_		
<u>C.</u>	female	25.00	58.10	25.00	58.10	1/2 0.000	
Sex	male	18.00	41.90	18.00	41.90	$X^2 = 0.000$	
	PE	1.00	2.30	0.00	0.00		
Education	SE	6.00	14.00	4.00	9.30	Z = 0.828	
Education	US	30.00	69.80	32.00	74.40	Z = 0.828	
	HE	6.00	13.90	7.00	16.30		
Relationship status	Si	33.00	76.70	22.00	51.20	$-X^2 = 6.103^*$	
	Re	10.00	23.30	21.00	48.80	$A^2 = 0.103^{+-1}$	
	0.00	9.00	20.90	9.00	20.90		
-	1.00	16.00	37.20	6.00	14.00	7	
	2.00	8.00	18.60	12.00	27.90		
Number of romantic relationships	3.00	3.00	7.00	10.00	23.30	Z = 1.263	
	4.00	4.00	9.30	5.00	11.60		
-	5.00	1.00	2.30	0.00	0.00		
-	6.00	2.00	4.70	1.00	2.30		
	Ме	1.00	_	2.00	-		
Number of romantic relationships	М	1.72	-	2.00	_	t = 0.864	
	SD	1.60	_	1.44	_		
Madiantiana	Yes	3.00	7.00	1.00	2.30	$V_{2} = 1.040$	
Medications -	No	40.00	93.00	42.00	97.70	$X^2 = 1.049$	
Comorhidition	Yes	4.00	9.30	2.00	4.70	$V_{2} = 0.717$	
Comorbidities	No	39.00	90.70	41.00	95.30	$X^2 = 0.717$	
Similan t E	Yes	3.00	7.00	4.00	9.30	V2-0156	
Significant Events	No	40.00	93.00	39.00	90.70	$X^2 = 0.156$	

Note: PE - primary education; SE - secondary education; US - university students; HE - higher education; Si - single; Re - in a relationship;  $*p \le 0.05$ ;  $**p \le 0.001$ 

#### Table 1. Descriptive statistics of socio-demographic variables by groups

Source: own study.

the dimensions of love in the clinical and in the control group. Subsequently, the Student's *t*-test was used to verify whether there were statistically significant differences between these groups. The next step was to predict which ADHD symptoms could be predictors of the components of love in a group of young adults with ADHD. For this purpose, multiple regression analysis with the enter method was used.

The results of the Student's *t*-test showed (Table 2) that there are statistically significant differences in the mean severity of attention deficit disorder, hyperactivity/ impulsivity, and the sum of ADHD symptoms between the clinical and the control group. The mean sum of the severity of attention deficit was higher in the group of people diagnosed with ADHD than in the control group.

As for the average severity of hyperactivity/impulsivity symptoms, it was also statistically significantly higher in the group diagnosed with ADHD than in the control group. The mean sum of the severity of ADHD symptoms in total was also significantly higher in the group with the diagnosis than in the control group.

The next step is to analyse the differences in the intensity of beliefs about intimacy, passion, and commitment in a romantic relationship between groups. As there were people in the group who had never been in a relationship before, it was decided to control this variable, and the Mann-Whitney U test was performed (Appendix 1). Only in the group of people with ADHD, there were significant differences in beliefs about intimacy. People who had ever been in a relationship assessed this dimension significantly

	ADHD Group			itrol oup	Т	р
	М	SD	М	SD		_
Attention deficit	26.37	10.43	0.0	0.0	16.57	0.001
Hyperactivity/Impulsivity	16.02	8.71	3.34	3.78	8.74	0.001
Severity of ADHD symptoms	42.39	17.55	1.27	1.72	15.28	0.001

 Table 2. Analysis of differences in the severity of ADHD symptoms in the clinical and control group

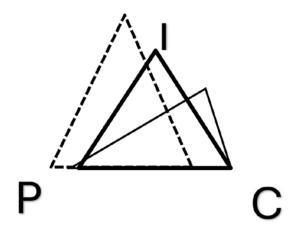
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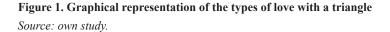
Source: own study.

	ADHD Group			itrol oup	Т	р
	Μ	SD	М	SD		
Intimacy	69.44	7.58	60.58	16.45	2.749	0.008
Passion	60.02	13.52	63.14	10.76	1.052	0.297
Commitment	55.02	12.47	63.05	12.90	2.399	0.019

Table 3. Analysis of differences in the severity of components of love among people who have ever been in a romantic relationship

Source: own study.





higher than people who had never been in a relationship. For the clarity of the obtained results, the assessment of the intensity of beliefs about romantic love and the dominant type of love (for both groups) was performed on a group of people who had ever been in at least one relationship (N = 68), the remaining analyses were performed respectively for all participants (N = 86). The conducted analyses show (Table 3) that there are statistically significant differences in the mean level of commitment and intimacy between the groups. However, no statistically significant differences were found in the mean intensity of passion between these groups. The mean level of commitment to romantic love in

the clinical group is lower than in the control group. However, an interesting issue is the rating of intimacy by people with ADHD. They rate their love as much more intimate than people who do not have this disorder.

Figure 1 shows the average results for the components of love. Respondents with ADHD present the type of romantic love, in which the highest values are assigned to intimacy and passion with less commitment (dotted triangle). On the other hand, people from the control group present the type of fatal love, in which passion and commitment play a significant role in regards to intimacy (Figure 1). Sternberg [18] emphasizes that these are so-called pure

Variables	В	ß	t	р	Model estimation
Constant	61.820		15.346	0.001	R = 0.329;R2 = 0.108;F = 4.973df = 42
Hyperactivity and impulsivity	-0.494	-0.329	2.230	0.03	df = 42 p = 0.03 VIF = 1.000 TOL = 1.000

**Table 4. The linear Regression Analysis with the Enter Method** 

 Source: own study.

types on which we apply the obtained results in search of a similar pattern.

The final step is to identify which ADHD symptoms can explain the changes in the level of intimacy, passion, and commitment in the romantic relationships of young adults from the clinical group. For this purpose, linear regression analysis was performed with descriptive statistics (correlation analysis). The preliminary descriptive results that were obtained, indicated that only hyperactivity/impulsivity is related to involvement, and therefore, a regression analysis was performed on this result. The proposed regression model for the commitment variable turned out to be the one that was significant and well-fitted to the data. It explains 11% of the variability of the dependent variable and there is no risk of collinearity of the explanatory variables (VIF < 4; tolerance coefficient > 0.25). Based on the regression coefficient, it can be concluded that the severity of hyperactivity and impulsivity is moderately negatively associated with commitment to the romantic relationship ( $\beta = -0.494$ ; p = 0.01). This means that the higher the intensity of hyperactivity and impulsivity of young adults with ADHD is, the lower their commitment to romantic relationships. In this model, attention deficit is not significantly related to commitment to a romantic relationship.

#### Discussion

The aim of the study was to analyze beliefs about components of romantic love and its type, and also ADHD symptoms in a group of young adults. The obtained research results partially confirmed the hypotheses. These show that young adults with ADHD: (a) believe that they have their intimacy component on a higher level of mean intensity than those from the control group; (b) in the case of passion, there are no statistically significant differences between them and the control group; (c) but they think that their commitment to a romantic relationship is significantly lower than their healthy peers. According to Sternberg's [18] love types, adults with ADHD express romantic love. This type is characterized by intense emotions towards the partner, but without the real desire to get involved in his or her life, values, or problems. It is likely that this type of love is present in adults with ADHD due to their

problem with engaging in romantic relationships (which this study also confirms). Also, whenever young people enter a new relationship, they can stop at this initial stage of falling in love and idealization, without moving to the next stages of love. Kooij [37] reports that nearly half of the surveyed adults (49%) with ADHD are in a relationship that only lasts up to 1 year, and 32% of respondents already had more than 10 partners. Soldati et al. [38] note that the sexual desire of people with ADHD is more intense than those in the control group, so this type of love experience may be a strategy for regulating the needs of strong sensations. Canu & Carlson [7] link it with the combined presentation of ADHD too. As a result, the established romantic relationships based on passion and sexual desire only, are superficial and impermanent. In this study, the confirmation to this thesis can also be found. The studied involvement in the romantic relationship was predicted by impulsiveness/hyperactivity. Impulsivity is described in a variety of ways, but recently more and more reports have been focusing on its four components: (1) low urgency; (2) lack of planning; (3) lack of perseverance; and (4) sensation seeking [39, 40]. These traits are related to perseverance, which is crucial for (no) commitment to a romantic relationship. The low level of this ingredient may explain the results obtained in this study.

Interestingly, despite the lower ratings of commitment to the developing romantic relationship, there were high ratings of intimacy among young adults with ADHD. These results were consistent for both sexes, which would preclude a high rating of this component by women. According to some researchers, ADHD symptoms should interfere with the formation of an intimate, deep relationship [5, 10, 24]. It is recognized that this belief about intimacy in a romantic relationship among those with ADHD syndrome can be seen from several perspectives

Marsh et al. [24] observe that there is a fear of intimacy among adults with ADHD. It can be understood as an attempt to protect themselves from being hurt and rejected, as it has happened repeatedly over their lives [5, 41]. The young, just entering the stage of early adulthood, idealise this dimension of romantic love by showing *apparent openness* in this sphere or poor insight into real difficulties in relationships [24]. Among people with ADHD, who have experienced rejection sensitivity, there are two extreme styles of functioning in romantic relationships [42]. Some put a lot of energy into creating a close relationship, and it is known as a *high relational investment*, while others prefer the other extreme of such investment by engaging in numerous and superficial relationships [42]. The profile of the rated romantic love of young adults with ADHD in this study may indicate that the subjects belong to the group of high investment. It should be noted, however, that a significant limitation of this study is the lack of comparison of the results obtained in the self-report of adults with ADHD with the assessment of their partners. Researchers stress the quite frequent phenomenon of positive illusory bias among people with ADHD, the aim of which is to protect oneself by overestimating one's competencies [42, 43]. At this point, it is also worth paying attention to one more issue - the way in which data are collected and the results presented in different studies. For example, Kooij [37] cites studies in which the respondents answered the following questions:

- 1. How many items do both partners perceive as burdensome?
- 2. How unloved/unimportant do the partners feel because of this?
- 3. What is the negative impact of this behavior on the relationship according to both partners?

These questions focus on the difficulties. If, when examining the sphere of romantic relationships, we ask the questions focused only on problems, we will receive corresponding, negative answers. The love scale used in this study has both positive and negative questions in the field of intimacy. Perhaps this is another factor that influenced this result.

The last aspect is the time the research was collected. The study was carried out in February, so shortly before the outbreak of the COVID-19 pandemic in Poland which officially began in March. And it continued during the first wave of COVID-19. Perhaps limited physical contact and uncertainty of the situation influenced such an assessment of young adults. In conclusion, adults with ADHD in this study are characterized by the type of romantic love that is typical of the initial stages of falling in love. Their peers from the control group show a type of fatal love (the decision to stay together is primarily due to sexual desire and passion). The beliefs of adults with ADHD about the components of love differ from of the ones of people who are not diagnosed – they rate their intimacy in a relationship higher and their commitment lower. However, passion is on a comparable level.

A significant limitation of this study was a small number of respondents, lack of the impact of the COVID-19 pandemic on the assessment of the beliefs of young adults, and the lack of a group of partners of the examined people, which prevented the researchers from obtaining two perspectives of a romantic relationship with people with ADHD.

Despite these significant limitations, the obtained results should encourage further analysis, because several conflicts occurring between partners may result from the positively illusory attitude of adults with ADHD and the low awareness of the real perception of their actions in a romantic relationship, as well as their misunderstanding about the lack of appreciation for what according to them they do properly. So far, the influence of ADHD symptoms on problems in romantic relationships has been pointed out, but this research shows also that hyperactivity/impulsiveness explains only 11% of such difficulties. The remaining unexplained variance may correspond to misconceptions about oneself and activities related to the romantic relationship.

Therapy for adults with ADHD could focus on:

- 1. Learning the patterns of mutual communication with your partner;
- 2. Developing social cognition skills, including the image and needs of yourself and your partner;
- 3. Analysis of the dynamics of a particular couple's romantic relationship.

#### Endnotes

- From January 2022, when the new ICD-11 coding system for mental diseases and disorders comes into force, the term ADHD, i.e. attention deficit and hyperactivity disorder, should no longer be used in nomenclature. However, due to the fact that the research was carried out in 2020, the article uses the commonly known concept of ADHD, which includes attention deficit, mobility and impulsivity and which is still present in the DSM 5 classification.
- In the DIVA 2.0 manual, available to specialists, the authors of the tool added the following annotation: "Clinical studies show that in adulthood it is possible to diagnose ADHD with 4 symptoms of attention deficit disorder and/or hyperactivity and impulsiveness" [29, 30].

#### References

- 1. American Psychiatric Association, DSM-5 Task Force, American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, Vol. 5, No. 5, American Psychiatric Association, Washington, DC 2013.
- 2. World Health Organization, *Attention Deficit Hyperactivity Disorder*, 5 December 2021, https://icd.who.int/browse11/l-m/en#/ http%3a%2f%2fid.who.int%2ficd%2fentity%2f821852937 (accessed: 7.11.2024).
- Holst Y., Thorrel L.B., Functional Impairments Among Adults with ADHD: A Comparison with Adults with Other Psychiatric Disorders and Links to Executive Deficits, "Applied Neuropsychology: Adult" 2020; 27 (3): 243–255, https://doi.org/10.1080/ 23279095.2018.1532429.
- 4. Wymbs B.T., Canu W.H., Sacchetti G.M. et al., *Adult ADHD and Romantic Relationships: What We Know and What We Can Do to Help*, "Journal of Marital and Family Therapy" 2021; 47 (3): 664–681, https://doi.org/10.1111/jmft.12475.
- Ben-Naim S., Marom I., Krashin M. et al., *Life with a Partner with ADHD: The Moderating Role of Intimacy*, "Journal of Child and Family Studies" 2017; 26: 1365–1373.
- Wyms B., Molina B., Pelham W. et al., *Risk of Intimate Partner Violence Among Young Adult Males with Childhood ADHD*, "Journal of Attention Disorders" 2012; 16 (5): 373–383, https://doi.org/10.1177/1087054710389987.
- Canu W.H., Carlson G.L., Differences in Heterosocial Behavior and Outcomes of ADHD-Symptomatic Subtypes in a College Sample, "Journal of Attention Disorders" 2003; 6 (3): 123–133, https://doi.org/10.1177/108705470300600304.
- Faraone S.V., Asherson P., Banaschewski T. et al., *Attention-Deficit/Hyperactivity Disorder*, "Nature Reviews Disease Primers" 2015' 1: 15020, https://search-1ebscohost-1com-1okjtg60y03af.hps.bj.uj.edu.pl/login.aspx?direct=true&db=cmedm&AN=271 89265&site=ehost-live (accessed: 14.05.2023).
- Sacchetti G.M., Lefler E.K., ADHD Symptomology and Social Functioning in College Students, "Journal of Attention Disorders" 2014; 21 (12): 1009–1019, https://doi.org/10.1177/1087054714557355.
- Bruner M.R., Kuryluk A.D., Whitton S.W., Attention-Deficit/Hyperactivity Disorder Symptom Levels and Romantic Relationship Quality in College Students, "Journal of American College Health" 2015; 63 (2): 98–108, https://doi.org/10.1080/074484 81.2014.975717.
- 11. Biederman J., Faraone S.V., Spencer T.J. et al., *Functional Impairments in Adults with Self-Reports Of Diagnosed ADHD:* A Controlled Study of 1001 Adults in the Community, "The Journal of Clinical Psychiatry" 2006; 67 (4): 524–540, https://doi. org/10.4088/jcp.v67n0403.
- Soares L.S., de Souza Costa D., Malloy-Diniz L.F. et al., *Investigation on the Attention Deficit Hyperactivity Disorder Effect on Infatuation and Impulsivity in Adolescents*, "Frontiers in Behavioral Neuroscience" 2019; 13 (137): 1–7, https://doi.org/10.3389/ fnbeh.2019.00137.
- Gottlieb B.H., Wagner F., Stress and Support Processes in Close Relationships, [in:] J. Eckenrode (ed.) The Social Context of Coping, Springer, New York 1991: 165–188, https://doi.org/10.1007/978-1-4899-3740-7\_8.
- Fisher H.E., Xu. X., Aron A. et al., Intense, Passionate, Romantic Love: A Natural Addiction? How the Fields That Investigate Romance and Substance Abuse Can Inform Each Other, "Frontiers in Psychology", 2016; 7: 687, https://doi.org/10.3389/ fpsyg.2016.00687.
- Tripp G., Wickens J.R., *Neuropsychology of ADHD*, "Neuropharmacology" 2009; 57 (7–8): 579–589, https://doi.org/10.1016/j. neuropharm.2009.07.026.
- Sternberg R.J., A Triangular Theory of Love, "Psychological Review" 1986; 93 (2): 119–135, https://psycnet.apa.org/ doi/10.1037/0033-295X.93.2.119.
- 17. Karandashev V., Clapp S., *Multidimensional Architecture of Love: From Romantic Narratives to Psychometrics*, "Journal of Psycholinguistic Research" 2015; 44 (6): 675–699, https://doi.org/10.1007/s10936-014-9311-9.
- Sternberg R.J., Construct Validation of a Triangular Love Scale, "European Journal of Social Psychology" 1997; 27 (3): 313–335, https://doi.org/10.1002/(SICI)1099-0992(199705)27:3<313::AID-EJSP824>3.0.CO;2-4.
- 19. Lee J.A., A Typology of Styles of Loving, "Personality and Social Psychology Bulletin" 1977; 3 (2): 173–182, https://doi.org/10.1177/014616727700300204.
- 20. Dolińska A., *Maintaining Close and Intimate Relationships by Migrant Peasant Families at the Beginning of the 20th Century*, "Italian Sociological Review" 2020; 10 (2S): 409–423, http://dx.doi.org/10.13136/isr.v10i2S.354.
- Sabiniewicz A., Borkowska B., Serafińska K. et al., Is Love Related to Selfies? Romantic Selfie Posting Behavior and Love Levels Among Women and Men, "Personality and Individual Differences" 2017; 111: 297–300, https://doi.org/10.1016/j.paid.2017.02.038.
- 22. Wojciszke B., *Psychologia miłości. Intymność, namiętność, zaangażowanie*, Gdańskie Wydawnictwo Psychologiczne, Gdańsk 2018.
- Cacioppo S., Cacioppo J.T., Demystifying the Neuroscience of Love, "Emotion Review" 2015; 8 (2): 108–109, https://doi. org/10.1177/1754073915594432.
- Marsh L.E., Norvilitis J.M., Ingersoll T.S. et al., ADHD Symptomatology, Fear of Intimacy, and Sexual Anxiety and Behavior Among College Students in China and the United States, "Journal of Attention Disorders" 2012; 19 (3): 211–221, https://doi. org/10.1177/1087054712453483.
- 25. Overbey G.A., Snell W.E. Jr, Callis K.E., Subclinical ADHD, Stress, and Coping in Romantic Relationships of University Students, "Journal of Attention Disorders" 2011; 15 (1): 67–78, https://doi.org/10.1177/1087054709347257.
- 26. Rokeach A., Wiener J., *The Romantic Relationships of Adolescents with ADHD*, "Journal of Attention Disorders" 2014; 22 (1): 35–45, https://doi.org/10.1177/1087054714538660.
- Stevens J., Quittner A.L., Zuckerman J.B. et al., *Behavioral Inhibition, Self-Regulation of Motivation, and Working Memory in Children with Attention Deficit Hyperactivity Disorder*, "Developmental Neuropsychology" 2002; 21 (2): 117–140, https://doi.org/10.1207/S15326942DN2102\_1.
- Ramos-Quiroga J.A., Nasillo V., Richarte V. et al., Criteria and Concurrent Validity of DIVA 2.0: A Semi-Structured Diagnostic Interview for Adult ADHD, "Journal of Attention Disorders" 2016; 23 (10): 1126–1135, https://doi.org/10.1177/1087054716646451.

- Kooij J.J.S., Buitelaar J.K., van den Oord E.J. et al., Internal and External Validity of Attention-Deficit Hyperactivity Disorder in a Population-Based Sample of Adults, "Psychological Medicine" 2005; 35 (6): 817–827, https://doi.org/10.1017/ s003329170400337x.
- 30. Barkley E.A., Age Dependent Decline in ADHD: True Recovery or Statistical Illusion?, "The ADHD Report" 1997; 5: 1-5.
- Zieliński A., Dobór próby w badaniach epidemiologicznych, "Przegląd Epidemiologiczny" 2002; 56 (3): 489–498.
   Kooij J.J.S., Francken M.H., DIVA 2.0. Diagnostisch Interview voor ADHD (DIVA) bij volwassenen, DIVA Foundation, Den
- Haag 2010.
- Kooij J.J.S., Adult ADHD: Diagnostic Assessment and Treatment, 3rd ed., Springer, London 2013, https://doi.org/10.1007/978-1-4471-4138-9.
- 34. Jaeschke R.R., Brudkiewicz P., Bron A. et al., *Polish Translation of the Diagnostic Interview for ADHD in Adults (DIVA 2.0)*, DIVA Foundation, Haga 2016, https://doi.org/10.13140/RG.2.1.3862.6165.
- Wojnarska A.D., Nieprzystosowanie społeczne osób dorosłych z ADHD aspekty diagnostyczne, "Lubelski Rocznik Pedagogiczny" 2019; 38 (2): 11–32, https://doi.org/10.17951/lrp.2019.38.2.89-109.
- 36. Semeijn E.J., Michielsen M., Comijs H.C. et al., Criterion Validity of an Attention Deficit Hyperactivity Disorder (ADHD) Screening List for Screening ADHD in Older Adults Aged 60–94 Years, "The American Journal of Geriatric Psychiatry" 2013; 21 (7): 631–635, https://doi.org/10.1016/j.jagp.2012.08.003.
- Kooij S.J.J., Attention-Deficit Hyperactivity Disorder (ADHD), Intimate Relationships and Sexuality, [in:] E. Jannini, A. Siracusano (eds.), Sexual Dysfunctions in Mentally Ill Patients: Trends in Andrology and Sexual Medicine, Springer, Cham 2018: 75–82, https://doi.org/10.1007/978-3-319-68306-5\_7
- 38. Soldati L., Bianchi-Demicheli F., Schockaert P. et al., *Sexual Function, Sexual Dysfunctions, and ADHD: A Systematic Literature Review*, "The Journal of Sexual Medicine" 2020; 17 (9): 1653–1664, https://doi.org/10.1016/j.jsxm.2020.03.019.
- McCarty K.N., Morris D.H., Hatz L.E. et al., Differential Associations of UPPS-P Impulsivity Traits with Alcohol Problems, "Journal of Studies on Alcohol and Drugs" 2017; 78 (4): 617–622, https://doi.org/10.15288/jsad.2017.78.617.
- 40. Kajka N., Kulik A., Wachnicka M., *Temperamental Risk Factors in Young Adults with ADHD Symptoms*, "Current Problems of Psychiatry" 2020; 21 (3): 140–153, https://doi.org/10.2478/cpp-2020-0013.
- Marton I., Wiener J., Rogers M. et al., Friendship Characteristics of Children with ADHD, "Journal of Attention Disorders" 2012; 19 (10): 872–881, https://doi.org/10.1177/1087054712458971.
- 42. Canu W.H., Carlson C.L., *Rejection Sensitivity and Social Outcomes of Young Adult Men with ADHD*, "Journal of Attention Disorders" 2007; 10 (3): 261–275, https://doi.org/10.1177/1087054706288106.
- 43. Volz-Sidiropoulou E., Boecker M., Gauggel S., *The Positive Illusory Bias in Children and Adolescents with ADHD: Further Evidence*, "Journal of Attention Disorders" 2013; 20 (2): 178–186, https://doi.org/10.1177/1087054713489849.

			ADHD	Group		Control Group			
		М	Me	SD	Z	М	Me	SD	Z
Intime or	0	59.88	62	13.70	2.214*	64.66	62	8.68	0.356
Intimacy 1	1>	69.44	69	7.58		61.26	65	15.59	
Dession	0	59.11	63	9.58	0.250	64.33	67	9.06	0.210
Passion 1> 60.02 57	57	13.52	.52 0.359	63.13	65	10.76	0.210		
Commitment	0 49.66 55 15.21 0.502	66.33	70	11.86	1.002				
Commitment	1>	55.02	54	12.47	0.583	62.44	64	12.99	1.002

Annex 1. Differences between the intimacy, passion, and commitment perceived by adults in the clinical and the control group, broken down by a number of romantic relationships

*Note:* 0 - no *romantic relationship;* 1 > at *least one romantic relationship;* \*p = 0.05

		ADHD Group				Control Group			
		М	Me	SD	Z	Μ	Me	SD	Z
т	F	70.26	70	7.62	1.180	65.15	73	14.60	1.791
Intimacy	М	67.72	66	7.56	55.71	54	15.78		
Passion	F	59.30	60	14.45	0.313	64.45	64	9.75	0.660
	М	53.72	57	11.84	61.28	66	12.19		
Commitment	F	55.65	54	14.33	0.849	62.35	65	14.73	0.263
	М	53.72	52	7.64	62.57	60	10.55		

Annex 2. Differences between the commitment, intimacy, and passion perceived by adults who have ever been at least in one romantic relationship in the clinical and the control group, broken down by sex

*Note:* F - Female; M - Male; \*p = 0.05; \*\*p = 0.001