Thesis of Doctoral (PhD) Dissertation

Examination of childhood traumatic experiences, dissociative experiences, attachment and emotion regulation in maladaptive daydreaming

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UNIVERSITY OF DEBRECEN
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INTRODUCTION

Daydreaming and mind-wandering are universal mental activities, having various adaptive functions: they promote the anticipation of future, planning processes, the navigation in the social world, and can be associated with creativity as well. In 2002 a new research direction appeared in the daydreaming research field under the direction of Eli Somer. Maladaptive daydreaming is an excessive, addictive and compulsive mental activity, which results in significant waste of time, functional impairment and severe distress (Somer, 2002). Although after the publication of the seminal paper of Somer hundreds of websites, community groups and blogs were created to exchange information and provide peer support for those affected by the disorder, the phenomenon has remained poorly understood, and several questions – regarding the etiology, pathomechanisms and diagnostics – remained unanswered.

In the doctoral dissertation, three main aims were formulated: the adaptation of the Maladaptive Daydreaming Scale (MDS-16) to Hungarian, the assessment of its psychometric properties and the examination of the applicability of the scale; the qualitative examination of the subjective daydreaming experience of maladaptive daydreamers; examination of the potential role of childhood traumatic experiences, dissociation,

attachment characteristics and emotion regulation deficits in the etiology and pathogenesis of maladaptive daydreaming.

AIMS

1. aim: Adapting the MDS-16 to Hungarian, determining the cut-off score and examinaning the reliability and applicability of the scale

- One aim of the research is to adapt the screening measure of maladaptive daydreaming (Maladaptive Daydreaming Scale, Somer et al., 2017) to Hungarian (MDS-16-HU) and measure its psychometric properties,
- To determine the cut-off score of the MDS-16-HU,
- To test the reliability and applicability of the MDS-16-HU with the Tellegen Absorption Scale and the ACE-10.

2. aim: The phenomenological study of maladaptive daydreaming

- Examining the main characteristics of daydreaming in a sample of maladaptive daydreamers screened by the cut-off score of the MDS-16-HU.

3. aim: Examination of the potential ethiological segments and pathomechanisms of maladaptive daydreaming

- Exploring the frequency and severity of childhood traumatic experiences among maladaptive and non-maladaptive daydreamers in two developmental periods: 0-6 years and 7-12 years,
- Exploring the dissociative experiences among maladaptive and non-maladaptive daydreamers,
- Investigating the relationship between childhood traumatic experiences, dissociation and maladaptive daydreaming applying path analysis,
- Comparing the attachment characteristics of maladaptive and non-maladaptive daydreamers,
- Comparing the emotion regulation difficulties of maladaptive and non-maladaptive fantasizers.

METHODS

Sampling procedure

Approval for the research was obtained by the Regional Institutional Research Ethics Committee at the Clinical Center of the University of Debrecen and by the Medical Research Council (approval number: RKEB/IKEB 5030-2018).

The previously described research aims were carried out through two phases. In the first research phase quantitative and qualitative methods were also applied. In the second phase of our research quantitative methodology was applied.

The aim of the quantitative part of *the first research phase* was to adapt the MDS-16 to Hungarian, measure its psychometric propertied (reliability, convergent validity and applicability), as well as to determine the cut-off score of the scale which can reliably differentiate maladaptive daydreamers from non-maladaptive fantasizers.

Apart from using quantitative methods, we decided to apply qualitative methodology as well, in order to examine the daydreamers' daydreaming experiences and subjective world more profoundly. Online snowball sampling was carried out to recruit research participants, who could access the questionnaire pachage via an Internet link. Participation in the study was anonymous, voluntary, and involved one inclusion criterion, that the participant has reached the age of 18.

The aim of the *second research phase* was to identify some potential important segments of the ethiology and maintenance of maladaptive daydreaming: traumatic childhood experiences, dissociation, attachment and emotion regulation deficits. The recruitment of study participants was twofold: individuals were recruited from online communities using the snowball sampling method who could access the questionnaire package via an Internet link; also Hungarian students of the University of Debrecen were informed about the pssobility of participating in

the study via email through the Neptun Unified Education System.

Study participants

During *the first phase* of our research 494 individuals (414 women, 80 men) responded to the research call. Given the fact that there is no screening or diagnostic tool available in Hungarian for the assessment of maladaptive daydreaming, we applied three criteria to indentify individuals with excessive daydreaming: the self-identified MD-er status, the observed control over daydreaming (rating on an 11-point Likert scale) and the frequency of daydreaming. The participants who simultaneously fulfilled all the three criteria, that is they identified themselves as daydreaming excessively, had a degree of observed control over daydreaming from 0 to 5, and admitted daydreaming at least once a day or several times a day, were included in the study group of excessive daydreamers. 70 individuals fulfilled all the three criteria. Those respondents who did not consider the definition of excessive daydreaming to be true for themselves, felt this activity highly controllable (ranging from 6 to 10), and said they only daydreamed once a week or a few times a month served as the comparison group. Based on these critera, 90 individuals formed the comparison group.

The final study sample consisted of 160 participants (16.25% male; 83.75% female) based on the three priori-defined criteria. The youngest respondent was 18 and the oldest was 68 years old (M=33.77; SD= 11.09). As regards marital status, those living in relationships (64.38%) were over-represented. Regarding education, more than half of the sample (63.13%) had a university degree, 31.88% had General Certificate of Secondary Education, and those who had only completed their elementary scool education accounted for 0.63%. 4.38% reported to have other educational attainment. In terms of employment, nearly half of the respondents (46.25%) work, 23.75% of them work and study at the same time, 18.13% study, 5.63% are unemployed, and 6.25% reported to have other employment status.

In the qualitative part of the research we analysed the daydreaming habits of those participants who were screened as excessive daydreaming during the quantitative part of the first phase. 185 potential maladaptive daydreamers were indentified (out of 494 participants) (17.3% male, 82.7% female). Regarding marital status, 51.35% were in relationship or married, 46.49% had a single relationship status, 2.16% were divorced. More than half of the sample had tertiary education (57.84%), 38.92% had secondary and 3.24% primary education. In terms of employment, 40.54% were employed at the time of

the research, 26.49% were student, 24.86% were student and employed at the same time, 7.03% were unemployed, and 1.08% received child care benefit.

During the *second research phase* 717 participants were recruited, 106 of whom (14.78%) were screened as problematic daydreamers, based on the MDS-16-HU cut-off score. Regarding the gender distribution of the two study groups, no significant differences were found ($\chi 2(1)=0,1136$, $p=0,736$). As regards the age, maladaptive daydreamers were significantly younger ($M=26.33$, $SD=8.71$) than non-maladaptive fantasizers ($M=30.13$, $SD=11.46$) ($t(715)= 3,2576$, $p=0,0012$). Examining the marital status (Fisher' exact test, $p<0.001$), education (Fisher's exact test, $p<0.001$) and employment status ($\chi 2(4)=25.0356$, $p<0.001$) significant differences were found between the study groups.

Measures

In the first phase of our research, participants were asked for basic demographic data, and also provided some clinical information. In the questionnaire package a 16-item self-report questionnaire, *the Maladaptive Daydreaming Scale* was also included (MDS-16, Somer et al., 2017a). Hungarian translation and adaptation of the scale was carried out. The convergent validity of the Hungarian version of the MDS-16 (MDS-16-

HU) was examined with the *Tellegen Absorption Scale* (Tellegen Absorption Scale, TAS, Tellegen & Atkinson, 1974; adapted to Hungarian by Simor et al., 2011). When filling out the 34-item survey, respondents could choose from two options (true-false). To test the applicability of the MDS-16-HU, the *ACE-10 score calculator* was applied (Adverse Childhood Experience Questionnaire- Finding Your ACE Score; Anda, Butchart, Felitti, & Brown, 2010; translated to Hungarian by Anikó Ujhelyiné Nagy and Ildikó Kuritárné Szabó in 2015), which assesses five experiences of abuse (emotional, physical and sexual abuse, emotional and physical neglect), as well as five categories of household dysfunction (parental separation or divorce; witnessed violence against mother or foster mother; familial substance abuse; familial mental illness or suicide attempt; household incarceration).

We compiled a *23-item questionnaire* to reveal some specific features of daydreaming (such as frequency, duration, time of the day, location, body position, movements, listening to music, onset, observed control, content and title of the daydreams, emotions, advantages and disadvantages, triggers, maintaining factors).

In the second research phase, apart from the MDS-16-HU, the 40-item *Traumatic Antecedents Questionnaire* was also applied (Traumatic Antecedents Questionnaire, TAQ, Van der Kolk &

Smyth, 2010; adapted for Hungarian use by Merza Katalin in 2012). With the self-report questionnaire, we assessed childhood experiences in two developmental periods (0-6; 7-12 years): neglect, separation, emotional, physical and sexual abuse, witnessing, alcohol and drugs and other traumas. To examine the dissociative experiences of the participants, the *Hungarian version of the Dissociation Questionnaire* (DISQ-H, Vanderlinden, Van Dyck, Vandereycken, Vertommen & Verkes, 1993; Varga & Osvát, 1996) was applied, which assesses the experiences of identity confusion and fragmentation, loss of control over behavior, thinking and emotions, amnesia and absorption. Adult attachment characteristics were measured by the *Hungarian version of the Attachment Style Questionnaire* (ASQ-H, Feeney, Noller & Hanrahan, 1994; Hungarian adaptation: Hámori et al., 2016b). The Hungarian version of the scale measures five factors, which loaded on two main factors: Attachment and Self-advocacy, independency. The questionnaire contains the following subscales: Importance of the relationships for self (IRS); Ambivalence, Distance from relationships, Devaluation of self (ADD); Confidence in Relations (CR); Self-advocacy (against relationships) (SA); Dependency, Independency (DI) (Hámori, et al., 2016b). Emotion regulation deficits were assessed by the Difficulties in Emotion Regulation Scale (DERS, Gratz &

Roemer, 2004; Hungarian adaptation: Kökönyei, 2014). The 36-item questionnaire measures the following factors: Non-acceptance of Emotional Responses; Difficulties Engaging in Goal-Directed Behavior; Impulse Control Difficulties; Lack of Emotional Awareness; Limited Access to Emotion Regulation Strategies; Lack of Emotional Clarity.

Statistical analysis

In the first research phase the data were analysed using the IBM SPSS 25.0 and the Mathematica 12.2 (Wolfram Research) programs. Cronbach's alpha was applied to measure the reliability of the MDS-16-HU. We assessed the reliability of the TAS, and the Pearson correlation coefficient was calculated in order to measure the interrelationship between maladaptive daydreaming and absorption. When attempting to determine the cut-off score, we used cross tables to examine the allocation of respondents at different percentiles, and used chi-square statistic to measure the correspondence with the original allocation based on the three inclusion criteria. The ultimate cut-off score was defined by the score at which the chi-square was at a maximum. Cross tables were also used to investigate the relationship between the MDS-16-HU and the individual items of the ACE-10; then we performed Fisher's exact test to assess the significance of the correlation.

In the qualitative phase of the first research, based on the cut-off score, we analized the answers to 23 questions of 185 problematic daydreamers. We applied the inductive qualitative content analyses method described by Elo és Kyngäs (2008). To ensure increased reliability, the data were analysed by three independent coders. Each step of the process (identification of contents, formation of categories and overarching categories, creation of definitions) ended with consensus among the coders. During the second phase of the research, Intercooled Stata version 13.0 was used for statistical analyses. The normality of the data was checked with the Shapiro-Wilk test. The Mann-Whitney U test was performed due to the non-normal distribution, to compare the childhood traumatic experiences, the dissociative experiences, the atttachment characteristics and the emotion regulation deficits of the study groups, the maladaptive daydreamers' group (n=106) and the non-maladaptive daydreamers's group (n=611).

To assess the direct and indirect relationships between childhood traumatic experiences, dissociation and maladaptive daydreaming, Structural Equation Modeling (SEM) was performed. The first step of the analysis was the measure of the univariate and multivariate normality of the data, then, due to the non-normal distribution, the Kruskal-Wallis test was applied to measure the influence of each trauma type on

maladaptive daydreaming. Then, we applied robust regression to measure the direct impacts of childhood traumatic experiences, the dissociative experiences, the gender, the age group (cut at 18 and 35) and the level of education on maladaptive daydreaming. We tested the direct impact of each variable separately according to the two developmental periods of childhood traumatic experiences. The next step of the analysis aimed to reveal the direct and indirect relationships between the variables (childhood trauma, dissociation and maladaptive daydreaming) with SEM applying the Asymptotically Distribution-Free (ADF) estimation method.

RESULTS

The reliability, convergent validity and cut-off score of the Maladaptive Daydreaming Scale

The results showed that the MDS-16-HU is highly reliable (Cronbach $\alpha = 0.957$), and a moderate, significant correlation was found between the overall score of the MDS-16-HU and the overall score of the TAS (Pearson correlation coefficient value: $r(160) = 0.448$ ($p<0.001$)).

We used cross-tables to compare the a priori allocation of the respondents based on the three inclusion criteria (self-identification, control over daydreaming and frequency of

daydreaming) and the categorizations of the MDS cut-off scores. Then, we identified an optimal cut-off score in the position where the maximum value of the chi-squared could be obtained. The allocation of the respondents and the maximum chi-square were both obtained at 60 percentiles (cut-off score of 35).

The applicability of the MDS-16-HU; the findings of the ACE-10 questionnaire

The two study groups, maladaptive and non-maladaptive daydreamers' group, were established on the basis of the cut-off score, i.e. 35 points. Then, we compared them based on the adverse childhood experiences using cross tables and the Fisher's exact test. Five trauma types seemed to be risk factors for maladaptive daydreaming since emotional ($p<0.001$), physical ($p<0.05$) and sexual abuse ($p<0.05$), as well as emotional ($p<0.001$) and physical neglect ($p<0.05$) experienced in childhood significantly increased the likelihood of developing maladaptive daydreaming rather than non-maladaptive daydreaming. We did not find a significant correlation between the familial dysfunctions experienced in childhood and maladaptive daydreaming.

Qualitative analysis of the subjective experience of maladaptive daydreamers

To summarize the main results of the content analysis it can be seen that maladaptive daydreaming started at a young age in the case of 65.41% of problematic daydreamers, and only 2.16% reported that maladaptive daydreaming began in adulthood. A remarkable finding is that 56.22% of the respondents reported that nobody knows about their daydreaming activity.

Important triggers of maladaptive daydreaming are the following: sensory stimuli of different modalities (28.11%), free time (27.57%), emotions or emotionally charged situations (22.7%), thoughts, actual life situations and contemplation on these (21.08%). Three major categories of interrupting factors of the daydreaming activity emerged: external circumstances (69.19%), internal urge (38.92%) and the lack of time (2.16%). The most common theme of daydreams was related to relationships (43.24%): desire for relationships, positive and negative interactions and significant others appeared. The second most common theme was related to the subjective life world (38.38%): ideal self and life, personal success, hopes and unfulfilled dreams. Other daydreams were related to the individuals' life history (35.68%), including future events, future aims and plans, past events and actual life situations or work/carrier-related issues. The subjective meaning of the

daydreaming activity for the participants were: emotion regulation (29.73%); distraction from reality (29.73%); wishful thinking (16.22%); planning and contemplating (13.51%); spending time and easing boredom (8.65%); self-awareness (5.95%).

Two categories of emotions accompanying the daydreaming activity emerged: mostly positive emotions and pleasant emotional states (86.49%) appeared, but there can be negative emotions (16.76%) as well.

There are some advantages of excessive daydreaming, many participants like this mental activity. Daydreaming gives opportunity to regulate emotions (39.46%), fulfill wishes (27.03%), distract from the here and now (24.86%), plan or contemplate (17.3%) or spend time (7.57%). Despite the advantages, this form of daydreaming still cannot be considered adaptive, as it impairs the individuals' functionality. As a result of daydreaming, the following disadvantages may occur: impairment experienced in various area of life (49.19%), negative experiences due to daydreaming (38.92%), daydreaming viewed as a maladaptive coping strategy (20.54%). The specific impairments caused by the daydreaming activity are improductivity, attention deficit and general functional impairment. Absorption into daydreaming often causes negative experiences and emotions, such as the

disappointment (due to the discrepancy between reality and fantasy world); negative self-esteem; fear of the negative judgements of others. Some daydreamers perceive that the excessive daydreaming activity functions as a maladaptive coping, it serves as a tool of self-deception and creating illusion, or it gives opportunity to escape from reality.

Examination of the relationships between childhood traumatization, dissociation and maladaptive daydreaming

During the second phase of our research maladaptive (n=106) and non-maladaptive daydreamers (n=611) were compared in terms of childhood traumatic experiences and dissociative experiences. During the first developmental period (0-6 years) significant differences were found between the groups regarding Neglect ($p<0,01$), Separation ($p<0,01$), Emotional abuse ($p<0.001$), Physical abuse ($p<0.001$), Sexual abuse ($p<0.01$), Witnessing ($p<0.001$) and Other traumas ($p<0.001$). During the second developmental period (7-12 years) significant differences were found regardind the following subscales: Neglect ($p<0.001$), Separation ($p<0.05$), Emotional abuse ($p<0.001$), Physical abuse ($p<0.001$), Sexual abuse ($p<0.001$), Witnessing ($p<0.001$) and Other traumas ($p<0.001$). Regarding the subscale of Alcohol and drugs, no significant

difference was found between the groups in any of the two developmental stages.

Examining dissociative experiences, regarding the total of the DISQ-H score a strong, significant difference was found between the two groups ($p<0.001$). Examining the subscales of the DISQ-H further, significant differences were found between maladaptive and non-maladaptive daydreamers on each dimension of dissociation: Identity confusion and fragmentation ($p<0.001$), Loss of control ($p<0.001$), Amnesia ($p<0.001$), and Absorption ($p<0.05$). Maladaptive daydreamers scored significantly higher on each subscale.

To identify the direct and indirect relationships of maladaptive daydreaming with traumatic childhood experiences and dissociative experiences, the Structural Equation Modeling was used. The relationships between the variables were examined separately according to the two developmental periods of the traumatic experiences. The first model revealed that Identity confusion and fragmentation ($p<0.001$) and Loss of control ($p=0.001$) showed a significant direct relationship with maladaptive daydreaming. These dimensions of dissociation showed significant relationship only with Emotional abuse ($p<0.001$). The second path analysis revealed that Identity confusion and fragmentation ($p<0.001$) and Loss of control ($p<0.001$) showed significant direct relationships with

maladaptive daydreaming. Of the specific trauma types, Identity confusion and fragmentation was related to Emotional abuse ($p<0.001$) and Other traumas ($p=0.012$), while Loss of control was only related to Emotional abuse ($p<0.001$).

Examination of attachment characteristics and emotion regulation difficulties

The next step of our research was the analysis of the differences of adult attachment characteristics and emotion regulation deficits among maladaptive and non-maladaptive daydreamers. Regarding the three scales of the Attachment main factor, i.e. Importance of Relationship for self (IRS), Confidence in Relations (CR) and Ambivalence, Distance from relationships and Devaluation of self (ADD), significant differences were found between the groups. Maladaptive daydreamers scored significantly higher on the IRS ($p<0.001$) and ADD ($p<0.001$) scales, while on the CR scale ($p<0.001$) excessive daydreamers showed a significantly lower score compared to non-maladaptive daydreamers. Regarding the two scales of Self-advocacy, independency main factor, i.e. Self-advocacy (against relationships) (SA) ($p=0.0012$) and Dependency, Independency (DI) ($p=0.0046$), maladaptive daydreamers scored significantly higher than non-maladaptive fantasizers.

To examine the potential attachment type of maladaptive and non-maladaptive daydreamers, the mean scores and standard deviations of the two groups scored on each scale of the ASQ-H were calculated. Maladaptive daydreamers showed a moderate CR, a high IRS, a moderate ADD, a low/moderate SA and a high DI mean score, while non-maladaptive daydreamers showed a high CR, a moderate IRS, a low/moderate ADD, a low SA, and a igh DI score.

Regarding the emotion regulation difficulties, maladaptive daydreamers scored significantly higher on each subscale of the DERS compared to non-maladaptive daydreamers: Non-Acceptance of Emotional Responses ($p<0.001$), Difficulties Engaging in Goal-Directed Behavior ($p<0.001$), Impulse Control Difficulties ($p<0.001$), Lack of Emotional Awareness ($p=0.013$), Limited Access to Emotion Regulation Strategies ($p<0.001$), Lack of Emotional Clarity ($p<0.001$).

DISCUSSION

During the first stage of our research, we examined the psychometric properties of the MDS-16-HU. The validity score of the measure showed that the tool is appropriate for the identification of excessive daydreamers. Our results show that the cut-off score of 35 points on the scale can effectively discriminate between excessive and non-maladaptive

daydreamers. The applicability of the cut-off score established in the Hungarian sample was further tested by applying the ACE-10. The results of the ACE-10 – significant correlation between maladaptive daydreaming and the five types of childhood abuse and neglect, whereas no significant correlation between maladaptive daydreaming and the five types of household dysfunctions – confirmed the reliable and valid applicability of the MDS-16-HU, which seemed to differentiate well between maladaptive and non-maladaptive daydreamers.

The results of the qualitative research showed that maladaptive daydreaming is characterized by a number of features of behavioural addictions, which confirm previous studies' findings. Maladaptive daydreaming might have a rewarding effect in the short run; its mood enhancement effect might induce positive emotional states, and it might create the illusion of being distracted from difficult situations, problems and the experience of pain and loneliness. This mental activity also facilitates the creation of alternative, ideal worlds and self. However, our results also showed that this mental activity impairs functionality: causes a significant loss of time and attention deficit, the neglect of relationships and obligations, results in shame and guilt, - and causes psychological distress as well.

Maladaptive daydreaming, in the short run, might facilitate the emotion regulation process and the distraction from reality, but based on our participants' responses, it is not an effective coping strategy. It rather functions as a tool of creating illusion and self-deception, which results in disappointment and sadness as reality is not the same as the fantasy world.

In the second study, we aimed to examine specific segments of the etiology and maintenance of maladaptive daydreaming. The results of the Traumatic Antecedents Questionnaire indicated that seven of the eight trauma types (Neglect, Separation, Emotional, Physical and Sexual abuse, Witnessing and Other traumas) were significantly more prevalent among maladaptive daydreamers in both developmental periods (except for Alcohol and drugs). Based on our results, individuals screened as maladaptive daydeamers were more likely to live in abusive or neglecting family circumstances, which results are in line with the maladaptive daydreaming model previously described by Somer and his colleagues. A substantial proportion of individuals identified as maladaptive daydreamers in adulthood experienced significantly higher level of childhood trauma, and if these individuals possess innate capacity for vivid fantasy activity, they might use their imaginary world to escape from fearful, intolerable reality into the internal world, where they might find security. The present study highlighted that the

dissociative propensity is typical of maladaptive daydreamers. Maladaptive daydreamers scored significantly higher on each subscale of dissociative experiences compared to non-maladaptive daydreamers. Examining further the complex relationships between the variables, the SEM method was applied. The first path analysis showed that only Emotional abuse (between the age of 0 and 6 years) had a significant impact on Identity confusion and fragmentation and Loss of control, which had a significant effect on maladaptive daydreaming. These results confirmed previous studies' results as dissociation is an important mediator between emotional abuse and maladaptive daydreaming. The second path analysis confirmed the results of the first path analysis; Identity confusion and fragmentation and Loss of control influenced significantly the phenomenon of maladaptive daydreaming. The experience of Identity confusion and fragmentation was influenced by Emotional abuse and Other traumas, while Loss of control was influenced by Emotional abuse. The two estimated SEM models showed that emotional abuse during childhood can entail serious consequences for children's development. During school years, apart from emotional abuse, other forms of trauma also might function as a risk factor for dissociative experiences, which might directly influence the development of maladaptive daydreaming.

Results of the ASQ-H revealed a specific attachment pattern among maladaptive daydreamers: they feel more insecure in their relationships, they tend to see themselves as less valuable than others and believe to a lesser extent that other people would love and respect them. Problematic daydreamers seem to struggle with ambivalent feelings regarding their relationships: they feel more insecure in their relationships, expect lower level of love, understanding and caring from important others. Our results also revealed that relationships are indeed important for their self, with special regard to the presence, opinion and approval by other people. Due to their ambivalence, while they yearn for the closeness of others, also feel uncomfortable when they get too close to other people or other gets closer to them. Maladaptive daydreamers might show a kind of pseudo-independency that derives from their ambivalent, contradictory feelings and lower level of confidence in their relationships.

The results of the DERS revealed that maladaptive daydreamers showed a significantly higher level of emotion regulation deficits compared to non-maladaptive daydreamers. Maladaptive daydreamers are less attentive to their feelings and when they feel upset, they consider their feelings less important; also they do not take time to understand their feelings. They condiser negative emotions permanent, believe that they are less effective in coping with them, and rather wallow in their

negative feelings. Maladaptive daydreamers are less clear about their feelings, they are often confused about and experience difficulties with making sense of their feelings.

SUMMARY

The aim of our research was threefold: (1) the adaptation of the Maladaptive Daydreaming Scale to Hungarian, and the measurement of its psychometric properties and its applicability; (2) the qualitative analysis of maladaptive daydreamers' daydreaming-related habits and the subjective experience of maladaptive daydreaming; (3) the identification of potential segments of the etiology and maintenance of maladaptive daydreaming. Participants could access the questionnaires applied in the research via Internet. During the quantitative phase of the first study, data of 494 respondents was analysed. The results showed that the MDS-16-HU was highly reliable, and it can be used for the screening of problematic daydreaming applying the cut-off score of 35 points. Our results also indicated that specific childhood traumatic experiences may function as risk factors for maladaptive daydreaming.

In the qualitative phase of the first study, responses of 185 screened maladaptive daydreamers were analysed with inductive qualitative content analysis. Our findings revealed

that the yearning for relationships, the ideal form of self and life and the anticipation of future events were the most prevalent themes of daydreaming. Important functions of this mental activity were: the creation of the experience of calm and relief; the distraction from reality and wish fulfiment. Although daydreaming is often accompanied by positive emotions, based on our findings, this mental activity causes the impairment of productivity and attention, and significant loss of time.

717 participants were recruited during the second study, 106 of whom were sceened as potential maladaptive daydreamer. Our results revealed that among maladaptive daydreamers a significantly higher level of trauma and dissociative experiences occured, and they also reported more severe emotion regulation difficulties and attachment insecurities compared to non-maladaptive daydreamers.

The main aim of our research was to raise attention to the presence of maladaptive daydreaming among professionals. Our results revealed the potential role of childhood traumatization, dissociation, attachment anxiety and insecurity and emotion regulation deficits in the development and maintenance of the phenomenon. Taking these aspects into account during the planning of psychotherapeutical interventions might be relevant.

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List of other publications

4. **Sándor, A.**, Molnár, J.: Maladaptív álmodozás.
In: Trauma-eredetű disszociáció : Elmélet és terápia. Szerk.: Kuritárné Szabó Ildikó, Molnár Judit, Nagy Anikó, Oriold és Társai Kiadó, Budapest, 285-302, 2018, (A pszichológia gyakorlata, ISSN 2630-8207)

Total IF of journals (all publications): 15,35
Total IF of journals (publications related to the dissertation): 15,35

The Candidate's publication data submitted to the iDEa Tudóstér have been validated by DEENK on the basis of the Journal Citation Report (Impact Factor) database.

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