UNIVERSITY OF SZEGED DOCTORAL SCHOOL OF EDUCATION



Through the lens of ADHD: Factors of academic attrition, rejection sensitivity and path to dropout intention

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DOCTORAL DISSERTATION SUMMARY

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CHAPTER 1. General Introduction

1.1. Attention deficit hyperactivity disorder (ADHD)

Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder (Simon et al., 2007), originating in childhood, with 40-80% of cases persisting into adolescence (Tandon et al., 2016) and approximately 50% continuing into adulthood (Caye et al., 2016). The prevalence among the general adult population is estimated to be 2.5-6.7% (Song et al., 2021), with a rate of 1.4% in Hungary (Bitter et al., 2010). ADHD is marked by persistent patterns of inattention, hyperactivity, and impulsivity, which can severely disrupt academic persistence, emotional regulation, and social relationships. Mak and colleagues (2022) reported that 15.9% of university students across nine countries screened positive for ADHD, while Shaw and Selman (2023) found that 8.4% of individuals currently applying for entry into universities reported having ADHD. These statistics are particularly relevant for Hungary, where significant demand for diagnosis far exceeds the capacity of available resources, resulting in a substantial lack of knowledge regarding the prevalence of ADHD among college students, its relationship with mental health status, and potential interventions for the affected population (Kilencz et al., 2024).

1.2. The etiology of ADHD

ADHD is a multifactorial condition with both genetic and environmental influences, but its exact causes remain unclear (Charney & Nestler, 2017). Genetic heritability is high, ranging from 70-80%, and if one parent has ADHD, there is a 25-50% likelihood their child will also be affected (Weiss et al., 2000). Environmental factors, such as prenatal exposure to alcohol or stress, and early childhood trauma, may also contribute to the disorder (Guney et al., 2015; Écsi, 2018). Evolutionary psychopathology suggests that ADHD traits, such as impulsivity and hyperactivity, may have once been adaptive for survival during times when humans relied on rapid response and risk-taking behaviors (Morgan, 1982; Jensen et al., 1997). While some ADHD traits remain advantageous in certain professions today, the industrial revolution shifted societal demands toward sustained attention and task-focused behavior (Miklósi et al., 2020).

1.3. Students with ADHD symptoms in the higher education

Historically, ADHD was considered a childhood disorder, which delayed the recognition of its impact in adulthood (Bitter et al., 2010). While symptoms typically emerge before age 12, they often only begin to impair daily functioning in young adulthood, a phenomenon described as "late-onset" ADHD (Riglin, 2022).

There has been increased interest in studying university students with ADHD, driven by a rise in the number of students reporting the disorder (DuPaul et al., 2021). Despite their challenges, those who reach higher education are often highly resilient (Frazier et al., 2007). Most research focuses on academic performance, with limited attention to psychosocial aspects. Longitudinal studies show that students with ADHD tend to have lower grades, higher rates of grade repetition, and poorer performance in university assessments compared to their peers (DuPaul et al., 2021). Interestingly, some studies suggest that ADHD can coexist with exceptional intelligence and creativity, contributing to divergent thinking that may benefit higher education careers (Cornoldi et al., 2013; Mahdi et al., 2017). Nonetheless, these students remain at high risk for academic dropout.

1.4. Statement of the Problem

Research on adult ADHD in Hungary, particularly among university-aged individuals, remains extremely limited, as do interventions aimed at supporting these students. Despite the United Nations Convention on the Rights of Persons with Disabilities (CRPD; 2006), which ensures equal access to higher education without discrimination, Hungary's specific institutional support structures are still developing. Act XCII of 2007 recognizes Hungary's commitment to the CRPD, and Decree 87/2015 (IV.9.) outlines mandatory accommodations, including adjusted exam protocols and access to course materials in alternative formats. However, these measures address academic challenges rather than the underlying supporting needs of students with ADHD symptoms. While some institutions exceed these legal obligations by offering flexible study plans and counseling services (Müller, 2020), most of the support remains minimal compared to international standards (Barakonyi, 2019).

Research consistently shows that students with ADHD complete fewer years of education and face higher dropout rates compared to their peers (DuPaul et al., 2021). These outcomes are often linked to executive function deficits that hinder focus, task management, and problem-solving (Dvorsky & Langberg, 2019), coupled with self-regulation difficulties that affect motivation and time management (Granziera et al., 2023). The lengthy 2–3-year waitlist for ADHD assessments in Hungary further complicates access to proper diagnosis and support (Kilencz et al., 2024). This delay leaves many students undiagnosed and without the help they need, negatively impacting their mental health, academic persistence, and overall quality of life (Arnold et al., 2020).

1.5. The present dissertation

Given the lack of research on university students with ADHD symptoms in Hungary, this dissertation aimed to explore various domains to gain a comprehensive understanding of their daily experiences. To address these gaps in the literature, three interconnected studies were conducted. The primary objectives were to (1) identify factors that predict the occurrence of ADHD symptoms in Hungarian university students, (2) examine the relationship between these symptoms and dropout intention, and (3) explore the factors and strategies that support their interpersonal experiences and relationships. In this dissertation, the research questions are designed to provide a comprehensive understanding of ADHD symptoms among Hungarian university students by addressing both academic and psychosocial aspects.

First, we aimed to explore whether students with ADHD symptoms exhibit different levels of academic boredom, procrastination (both active and passive), problematic smartphone use, and depression compared to their peers without such symptoms. We then examined how these factors contribute to the overall prediction of ADHD symptoms (Müller et al., 2023). Additionally, the role of academic resilience in mediating the relationship between ADHD symptoms and depression was investigated, along with how these variables, combined with ADHD symptoms, predict dropout intentions. A further objective was to assess whether self-efficacy could either mediate or moderate the relationship between ADHD symptoms and dropout intention, potentially easing the risk of leaving university (Müller et al., 2024a). Beyond academic outcomes, the study also looked into the psychosocial domain, exploring whether rejection sensitivity could be explained through the Maintainable Positive Mental Health Theory. Finally, we evaluated whether constructs such as resilience, self-regulation, creative efficiency, and well-being serve as mediators in the relationship between ADHD

symptoms and rejection sensitivity, while also considering whether higher savoring capacity could lessen rejection sensitivity (Müller et al., 2024b).

1.6. Structure of the Dissertation

This dissertation is structured into five chapters, aligned with the research aims and questions. Chapter 1 serves as a general introduction, while Chapter 5 provides the discussions and conclusions. Guided by the principles of a study-based — or multistudy — thesis, this dissertation is structured to weave together a series of interconnected studies. The main body consists of three independent studies presented in Chapters 2 through 4, each exploring different aspects of the dissertation topic. All three articles included in this dissertation were supervised by Prof. Dr. Bettina Pikó, who also served as a co-author. She contributed through supervision, securing funding, and providing guidance on revisions and editing.

CHAPTER 2. STUDY 1.

How to procrastinate productively with ADHD: A study of smartphone use, depression, and other academic variables among university students with ADHD symptoms

2.1. Introduction

University life presents many challenges, particularly for students with ADHD symptoms, who often struggle with academic and mental health difficulties. Students with ADHD syptoms are more susceptible to academic boredom, which undermines their success, as they may find it harder to sustain attention (Castens & Overbey, 2009). Research shows that individuals prone to boredom often experience higher levels of ADHD symptoms and depression (Malkovsky et al., 2012), with depression mediating the link between ADHD and poor academic outcomes (Riboldi et al., 2022). Beyond emotional challenges, ADHD students are also at a increased risk of substance dependence and behavioral addictions, such as smartphone overuse (Kim, 2018). These students may turn to smartphones as a coping mechanism for stress or depressive symptoms, but excessive use can also contribute to academic procrastination (Liu et al., 2022).

Procrastination, especially when related to self-regulation difficulties, is frequently observed among students with ADHD symptoms (Bodalski et al., 2022). Traditionally, procrastination was viewed as a negative behavior, but recent research distinguishes between passive and active procrastination (Choi & Moran, 2009). Active procrastination involves consciously delaying tasks to perform better under pressure, and it has been linked to positive traits such as creativity and self-efficacy (Howell & Watson, 2007). Despite skepticism within the scientific community regarding whether active procrastination is a legitimate form of procrastination or simply a time management strategy (Van Eerde, 2003), focusing on its adaptive elements can provide new insights into understanding the academic lives of university students with ADHD symptoms. The aim of this study was twofold: first, to examine potential differences between college students with and without ADHD symptoms across domains such as academic boredom, procrastination (both active and passive), problematic smartphone use, and depression, with the expectation that students with ADHD symptoms would score higher on these measures. Second, to identify the strongest predictors of overall ADHD scores, as well as specific attention deficit and hyperactivity scores.

2.2. Methods

A cross-sectional study was conducted among Hungarian university students from November 2021 to January 2022 using a self-administered online questionnaire via the Typeform platform. The sample consisted of 408 participants aged 18 to 35 (M = 23.37, SD = 3.87), with 274 females (67.2%) and 134 males (32.8%). Most were full-time students (78.9%), with 20.3% part-time and 0.7% distance learners. The majority of participants were pursuing a bachelor's degree (76.7%), followed by master's (13.5%), undivided master's (7.1%), and doctoral studies (2.7%). Participants responded to questions about basic demographics and completed validated questionnaires assessing ADHD, depression, procrastination, academic boredom, and problematic smartphone use. All items were fully answered, with no missing data, and the survey materials were administered in Hungarian.

2.3. Findings

The results revealed that students at risk for ADHD showed higher scores across all measured domains, except for active procrastination. A stepwise regression analysis identified passive procrastination, depression, and academic boredom as significant predictors of overall ADHD scores, with problematic smartphone use and active procrastination (negatively) also contributing to attention deficit scores. Interestingly, hyperactivity was less predictable by these variables compared to attention deficit. Consistent with previous research, students with ADHD symptoms reported higher levels of depression, with academic stress and failures likely contributing to this outcome. Furthermore, these students were more prone to problematic smartphone use, possibly due to impulsivity, sensation-seeking, and loneliness, which have been linked to ADHD symptoms in past studies. Our analysis also highlighted the importance of separating procrastination into active and passive forms, as passive procrastination was a strong positive predictor of ADHD, while active procrastination could be linked to positive outcomes such as resilience and self-efficacy. These findings suggest a need to reconsider the traditional view of procrastination as purely negative, particularly for students with ADHD symptoms.

2.4. Practical implications

Our findings stress the mental health challenges faced by university students with ADHD symptoms, particularly their vulnerability to depression, boredom, and behavioral addictions. This research supports the notion that when developing health interventions, it is influential to consider the connection between ADHD symptoms and problematic smartphone usage. Additionally, our findings contribute scarce insights into the role of procrastination, revealing that active procrastination can lessen the severity of inattention symptoms, though it has no significant effect on hyperactivity. Future studies could benefit from using longitudinal designs to further investigate these relationships and understand how they evolve over time. Greater attention should be given to cultivating adaptive forms of procrastination in students with ADHD symptoms, potentially offering new ways to enhance their academic and personal success. Although this study primarily focused on the risks linked to ADHD, the results highlight the need for a strengths-based approach, emphasizing the adaptive potential within this population.

CHAPTER 3. STUDY 2.

Dropout Intention among University Students with ADHD Symptoms: Exploring a Path Model for the Role of Self-Efficacy, Resilience, and Depression

3.1. Introduction

Research has consistently shown that internalizing symptoms, such as depression, significantly impact academic outcomes, particularly regarding dropout intentions. Depression, marked by persistent sadness, irritability, and cognitive impairments, reduces students' motivation and interest in academic activities, which in turn can lead to disengagement from classes and poor academic performance. For instance, Eisenberg et al. (2013) found a strong correlation between depression and increased dropout rates, showing that depressive symptoms directly predict academic failure. Similarly, Arbona et al. (2014) highlighted the role of depression in mediating college persistence. However, many of these studies did not consider ADHD symptoms, which have been shown to increase the risk of both dropout and depression. Research by Sahmurova et al. (2022) demonstrated that ADHD symptoms predict higher levels of depression, which may arise from strained relationships, victimization, and academic underachievement. Depression, therefore, may mediate the relationship between ADHD symptoms and dropout intentions, as ADHD symptoms contribute to stress and failure, amplifying depressive feelings.

On the other hand, academic resilience and self-efficacy are protective factors that can counteract these negative outcomes. Academic resilience enables students to thrive despite adversity (Devi et al., 2021), while self-efficacy fosters confidence in completing academic tasks (Newark et al., 2016). Given that resilience has a domain-specific nature, academic resilience is more relevant to university students as it directly influences their ability to manage academic pressures. Self-efficacy, based on Bandura's Social Cognitive Theory (1986), is another key factor, as students with higher self-efficacy are more likely to engage with challenging tasks and persist despite difficulties. While past research presents mixed findings on self-efficacy's direct impact on dropout intentions (e.g., Nemtcan et al., 2022; Fior 2022), it has been consistently shown to enhance academic performance. This study aims to clarify the relationships between ADHD symptoms, dropout intentions, academic resilience, and general self-efficacy, hypothesizing that resilience and depression mediate this relationship, while self-efficacy moderates it.

3.2. Methods

In this study, 395 Hungarian university students participated, with a mean age of 23.72 years (SD = 3.90), consisting of 263 females (66.6%) and 132 males (33.4%). The participants were predominantly full-time students (79%), with others enrolled in part-time (21%) or vocational programs (5.6%). Most students were pursuing bachelor's degrees (61.8%), followed by master's degrees (20.3%), undivided one-tier master's programs (7.8%), and doctoral studies (4.6%). ADHD symptoms were reported by 12 participants (2.9%), while none of the participants indicated any other learning disabilities, intellectual impairments, or psychiatric conditions. The data for this cross-sectional study were collected between May and September 2022 using a self-administered digital questionnaire via the Typeform platform. The measures used included the World Health Organization's Adult ADHD Self-Report Scale (ASRS-v.1.1), the Beck Depression Inventory, the General Self-Efficacy Questionnaire, and the Academic Resilience Scale-30. Data analysis involved multiple mediator and moderator analyses using PROCESS macro for IBM SPSS.

3.3. Findings

The findings revealed that both depression and academic resilience partially mediate the link between ADHD symptoms and dropout intention. Specifically, students with ADHD symptoms tend to struggle with depressive symptoms and reduced academic resilience, which in turn contribute to an increased likelihood of dropping out intention. These results align with previous research, suggesting that ADHD often leads to academic underachievement, which can foster feelings of disengagement and depression (Martin & Burns, 2021).

Self-efficacy, on the other hand, moderated the relationship between ADHD symptoms and dropout intention, meaning that students with higher self-efficacy were less likely to exhibit dropout intentions even when experiencing ADHD symptoms. This finding echoes the work of Samuel and Burger (2020), who also identified self-efficacy as a buffer against negative academic outcomes. Our study further supports the idea that while self-efficacy may not directly predict dropout intention, it can weaken the association between ADHD symptoms and dropping out, offering a potential protective factor for students facing academic challenges.

The theoretical framework provided by the maladaptive Adaptability–Buoyancy–Resilience cycle (Martin & Burns, 2021) helps explain the role of academic resilience in this context. Students with ADHD often struggle to bounce back from academic setbacks, which can lead to a cycle of underachievement, further reducing resilience. Interestingly, while academic resilience was found to mediate the ADHD-dropout relationship, the expected protective effect of resilience on depression was not observed in this study, suggesting that both factors may independently affect student outcomes.

3.4. Practical implications

These results suggest that interventions targeting self-efficacy and resilience may enhance academic persistence, which has significant implications for the treatment of adult ADHD symptoms. Specifically, intervention programs should adopt strength-based approaches that promote mastery experiences and resource-oriented strategies to empower students (Bartimote-Aufflick et al., 2016). This study suggests significant potential for psychosocial interventions, such as cognitive-behavioral therapy (CBT) and programs like ACESS (Anastopoulos & King, 2015), in addressing ADHD-related challenges. These interventions focus on enhancing adaptive thinking skills and target common co-occurring conditions like depression and anxiety through integrated therapeutic approaches. By centering on themes such as academic functioning, they provide a holistic method to improve student outcomes. Widespread adoption of the ACESS program and similar coaching interventions could bring essential benefits, particularly in countries like Hungary, where tailored programs for university students with ADHD symptoms are currently unavailable. These initiatives could fill critical gaps in mental health support for this population.

CHAPTER 4. STUDY 3.

Associations between ADHD symptoms and rejection sensitivity in college students:

Exploring a path model with indicators of mental well-being

4.1. Introduction

Rejection sensitivity (RS), characterized by an anxious anticipation of rejection, has been linked to adverse emotional responses and social challenges, especially for individuals with ADHD symptoms (Downey et al., 1997; Gardner et al., 2020). Individuals with ADHD symptoms often exhibit heightened RS, which may stem from early experiences of social rejection and criticism, particularly within family and peer contexts (Babinski et al., 2019). Previous research has also indicated that individuals with ADHD struggle with maintaining relationships and adapting to social norms, further exacerbating RS (Wymbs et al., 2021).

Given that RS is associated with a lower quality of life and an increased risk for depression, our study aimed to explore how resilience and other positive psychological traits might mitigate these effects. Resilience, for instance, helps individuals recover more quickly from stress and perceived rejection, which is crucial for students with ADHD symptoms (Sart et al., 2016). Similarly, self-regulation strategies, such as delayed gratification, may assist in managing emotional responses to social rejection (Ayduk et al., 2000).

Savoring capacity, the ability to actively seek and maintain positive experiences, emerged as a potential moderator. Research suggests that savoring can buffer against negative emotions, potentially weakening the relationship between ADHD symptoms and RS (Bryant & Veroff, 2007). We hypothesized that students with higher savoring capacity would experience reduced RS despite having ADHD symptoms, whereas lower savoring capacity could inflame these issues. Our study's exploratory nature sought to confirm these mediating and moderating roles, contributing to the broader understanding of how mental well-being influences the social experiences of students with ADHD symptoms.

4.2. Methods

This cross-sectional study, conducted between February and May 2023, engaged 304 Hungarian university students via an online Typeform survey. The sample comprised 237 females (78%) and 65 males (21.4%), aged 18 to 35 years (M = 24.38, SD = 4.39). Most participants were full-time students (71.4%), while 26.3% attended part-time, and 2.3% were distance learners. Academic enrollment varied, with 56.6% pursuing bachelor's degrees, 21.7% in undivided one-tier master's programs, 13.8% in doctoral studies, and 6.9% in master's programs. Eleven participants (3.62%) reported having been diagnosed with ADHD.

The study employed the Adult ADHD Self-Report Scale (ASRS-v.1.1), the Mental Health Test, and the Rejection Sensitivity Questionnaire to measure ADHD symptoms, well-being, and rejection sensitivity, respectively. Following data collection, descriptive and correlational analyses were conducted using SPSS. Multiple mediation and moderation analyses were also performed using Hayes' PROCESS macro v4.1. Bootstrapping techniques were applied with 5000 resamples to generate bias-corrected confidence intervals for indirect effects. All continuous variables were standardized prior to conducting the path analyses, ensuring rigorous data interpretation.

4.3. Findings

The results showed a direct positive link between ADHD symptoms and RS, with constructs such as well-being, creative and executive efficiency, self-regulation, and resilience partially explaining this connection. Savoring capacity emerged as a significant moderator, with lower levels of savoring intensifying the relationship between ADHD symptoms and RS. The mediating effect of well-being was the strongest, suggesting that reduced feelings of well-being in students with ADHD symptoms contribute to heightened sensitivity to rejection. Additionally, creative and executive inefficiency may lead individuals with ADHD symptoms to perceive their ideas as dismissed, increasing rejection sensitivity. Resilience played an important role as well, as those with lower resilience were less able to recover from social setbacks, further amplifying RS. Impaired self-regulation, often seen in ADHD, also aggravated the emotional reactions to perceived rejection.

The moderating role of savoring capacity focuses the attention to the importance of this construct in buffering against rejection sensitivity. Students with high savoring ability were less affected by rejection, whereas those with low savoring were more vulnerable. This suggests that enhancing savoring skills could ease the negative emotional consequences of ADHD. Interventions aimed at fostering savoring capacity, such as mindfulness or cognitive imagery exercises, may help students with ADHD symptoms manage social stressors more effectively.

4.4. Practical implications

Universities are currently experiencing a significant increase in student demand for mental health services, driven by rising mental health challenges among young adults. This trend spotlights the need for universities to become central hubs for mental health promotion, prevention, and early intervention (Duffy et al., 2019). Solmi et al. (2022) advocates for integrated models that address the needs of both at-risk students and those already experiencing difficulties. Cognitive-behavioral therapy (CBT) is a common intervention for students with ADHD symptoms, focusing on executive functioning, co-occurring conditions like depression and anxiety, and stress management (Anastropoulos et al., 2021; Bettis et al., 2017). Although mindfulness-based approaches are less prevalent, they show promise for enhancing emotional regulation (Hartung et al., 2022). A systematic review by x-Godos et al. (2023) advocates improvements in attention, executive functioning, and anxiety through such interventions. However, behavior regulation shows smaller gains, suggesting that additional approaches may be needed. Savoring-based interventions, such as the Behavioral Activation plus Savoring (BA + S) method, offer an emerging strategy for improving positive emotional outcomes (Klibert et al., 2022; Kumar et al., 2024). These approaches, particularly when tailored to ADHD populations, could enhance emotional well-being and reduce stress.

CHAPTER 5. GENERAL DISCUSSIONS AND CONCLUSIONS

5.1. General discussion

This dissertation's findings underscore the profound influence of ADHD symptoms on both the academic and emotional outcomes of university students. The research collectively suggests that ADHD symptoms contribute to depression, heightened rejection sensitivity, and diminished academic and emotional resilience, all of which increase dropout intentions. However, the studies offer a valuable perspective on protective factors and adaptive strategies that could help alleviate these challenges. For instance, distinguishing between passive procrastination, often maladaptive, and active procrastination, which involves delaying tasks purposefully to maximize productivity, may offer students a constructive way to manage pressure. This reframing of procrastination as a potential strength, rather than a source of shame, shifts the narrative for students with ADHD (Müller et al., 2023).

Moreover, the results point to the importance of self-efficacy (Müller et al., 2024a) and savoring (Müller et al., 2024b) as critical factors in counterbalancing the impact of ADHD symptoms. Higher self-efficacy allows students to tackle academic tasks with greater confidence, while savoring helps them focus on positive experiences, reducing stress and promoting a sense of well-being. Implementing strategies that enhance these qualities could be instrumental in supporting students' resilience and improving their academic persistence.

Overall, the results suggest that a comprehensive approach, which includes emotional and cognitive support like savoring-building, is needed for students with ADHD symptoms. Rather than exclusively emphasizing time management or planning skills, universities could focus on cultivating these adaptive strategies to support their students' long-term success.

General limitations and future directions

The primary limitations of the present studies stem from their cross-sectional design and reliance on self-reported measures, both of which can introduce potential biases. The use of self-reports may affect the accuracy of the data, as participants' perceptions might not fully align with objective assessments. Additionally, the demographic characteristics of the sample limit the generalizability of the findings to a broader university population. Most notably, a significant proportion of participants exhibited ADHD symptoms, yet only a small percentage had received a formal diagnosis. Specifically, in the first study, 3.70% (n = 15) of participants had been diagnosed; in the second study, 2.90% (n = 12); and in the third study, 3.62% (n = 11). This low diagnosis rate is likely influenced by the long waiting lists for ADHD assessments in Hungary, which often take 2-3 years.

Future research should replicate these findings using samples of students who have been formally diagnosed with ADHD. Additionally, accounting for the use of ADHD medications (such as Ritalin, Strattera, or Vyvanse) and medications for other comorbid conditions will provide a more comprehensive understanding of the academic and emotional challenges faced by this population.

To further improve the accuracy of the findings, longitudinal studies are recommended. This would allow for a deeper exploration of how ADHD symptoms and related psychological factors evolve over time. The integration of objective behavioral measures, such as eye-tracking during cognitive tasks, could significantly enhance the validity of the results, offering a more refined understanding of the attentional difficulties that university students with ADHD encounter. This could ultimately lead to the development of more targeted and effective support strategies.

5.2. General conclusions

The findings from this dissertation mark the need for practical changes in how Hungarian universities support students with ADHD symptoms, where mental health resources remain limited. In international settings, higher education institutions frequently include ADHD screening during admissions, ensuring early identification and access to necessary support (Aluri et al., 2024).

For instance, programs like West Virginia University's MindFit offer short-term coaching, while Southern Oregon University's U-CAM program provides year-long weekly sessions aimed at improving self-awareness and academic confidence (Kendal, 2018). Similarly, the University of Arizona's ADHD and Life Coaching service emphasizes fostering independence and life skills beyond academic performance, and Northeastern University's LDP program focuses on encouraging research engagement and self-regulated learning (Hannah, 2024). These examples reflect a broader commitment to social responsibility within higher education institutions, highlighting their role in supporting students with special educational needs (Barakonyi & Pankász, 2019).

A key gap, however, remains the lack of impact assessments regarding how these ADHD-specific services influence dropout rates. Cognitive Behavioral Therapy (CBT) has been shown to be highly effective in managing ADHD symptoms, particularly in group settings (Ingibergsdóttir et al., 2024). Counseling based on CBT principles, already used in some programs, can improve emotional regulation, motivation, and self-efficacy (Álvarez-Godos et al., 2023). Expanding group-based interventions, which caption goal-setting and social support, can reduce stress and improve resilience for students with ADHD symptoms (Hamilton et al., 2021).

Peer mentoring programs also hold significant potential. Studies show that mentoring can positively influence professional development, persistence, and academic success, making it a valuable intervention for students with ADHD symtpoms (Aguilera Rodríguez et al., 2024; Kreider et al., 2020). Universities should consider implementing peer mentor systems, along with workshops for staff, to foster a more inclusive environment for ADHD students.

Since structural changes take time, an immediate and impactful step could be to provide more accessible information on ADHD symptoms and available services on university websites. Some Hungarian institutions, like the Budapest University of Technology and Economics and Semmelweis University, have already begun to take such steps, and this proactive approach could be expanded to all universities (Barakonyi & Pankász, 2019). Clear information and early intervention can help students understand their symptoms and access the support they need to thrive academically.

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List of Related Publications

Article publications [*Correspondent Author]

- **Müller, V*.**, Mellor, D., & Piko, B. F. (2023). How to Procrastinate Productively With ADHD: A Study of Smartphone Use, Depression, and Other Academic Variables Among University Students With ADHD Symptoms. *Journal of Attention Disorders*, *27*(9), 951–959. https://doi.org/10.1177/10870547231171724
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Conferences

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