



ADHD IN THE WORKPLACE

Creating a Neurodiverse Environment

Centre for ADHD Awareness, Canada

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Executive Summary

ADHD is relatively common in the workforce, estimated to affect approximately 3.5% of workers globally.ⁱ Given its high prevalence, it is likely that employers will encounter employees with ADHD. Understanding and addressing the impact of ADHD on work performance can benefit both employers and employees. The workplace is argued to have the most significant impact on the quality of life for adults with ADHD. Access to effective workplace support can reduce individual burden, enhance job satisfaction, and improve overall well-being. By fostering a supportive, inclusive, and responsive work environment, employers can maximize the strengths of ADHD employees and mitigate the challenges, benefiting both the employee and the organization.

- Adults with ADHD are 61% more likely to have been fired, 33% more likely to be laid off, and 53% more likely to quit their job than those without ADHD (Kuriyan, et al., 2013)
- Adults with ADHD are 20% less likely to be employed and earn an average of 16% less than their counterparts (Biederman, et al., 2006)
- Adults with ADHD also have higher rates of unemployment or part-time employment and change jobs more frequency (Kuriyan et al, 2013).

Creating a supportive and inclusive workplace environment can have a significant impact on motivation and job satisfaction among neurodiverse employees, which in turn is likely to promote engagement and improve performance.ⁱⁱ Workplace accommodations can further aid in maximizing the employment and retention of employees with ADHD while also proving to be cost-effective for employers. Workplace accommodations are typically low cost and cheaper than the cost of employee turnover.ⁱⁱⁱ Employers often report positive returns on investment, including increased retention and productivity, along with cost savings related to reduced turnover.

By providing effective workplace supports, organizations can significantly enhance productivity, leading to increased company morale and team efficiency.^{iv} A motivating and supportive environment that accommodates their needs and strengths can significantly reduce impairments in the workplace and maximize potential, contributing to overall organizational performance.^v

Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is the most common neurodevelopmental disorder in children and adults, affecting 3-5% of adults and 5-9% of children or 1.8 million Canadians.^{vi} ADHD symptoms can be characterized by pervasive symptoms of attention dysregulation, hyperactivity, and impulsivity; however, hyperactivity and impulsivity may be less externalized in those diagnosed with inattentive ADHD. Once believed to primarily affect children and adolescents, ADHD is now widely recognized as a lifespan disorder with symptoms persisting into adulthood.^{vii} While some ADHD symptoms may diminish or improve over time, most adults with ADHD continue to experience a range of symptoms and functional impairments in multiple life domains, including employment.^{viii}

Research on labour market outcomes consistently indicate lower occupational functioning among adults with ADHD relative to their non-ADHD peers. These include higher rates of unemployment and underemployment,^{ix} less job stability,^x lower annual incomes,^{xi} and greater dependency on social assistance.^{xii} Adults with ADHD are also 60% more likely to have their employment terminated and 30% more likely to report chronic employment issues.^{xiii} Within the workplace, ADHD has been shown to have significant impacts on work performance and productivity. A study by the World Health Organization found that workers with ADHD have an average of 8.4 excess days of absence, 21.7 days of decreased work output, and 13.6 days associated with reduced work quality per year, resulting in a total of 22.1 excess days of lost role performance.^{xiv} In the United States, the impact of adult ADHD on workforce productivity is substantial, with over 120 million lost work days attributed to ADHD annually^{xv} and an economic cost estimated to range from \$87-\$138 billion per year.^{xvi}

ADHD is relatively common in the workforce, estimated to affect approximately 3.5% of workers globally.^{xvii} Given its high prevalence, it is likely that employers will encounter employees with ADHD. Understanding and addressing the impact of ADHD on work performance can benefit both employers and employees. The workplace is argued to have the most significant impact on the quality of life for adults with ADHD. Access to effective workplace support can reduce individual burden, enhance job satisfaction, and improve overall well-being. By fostering a supportive,

inclusive, and responsive work environment, employers can maximize the strengths of ADHD employees and mitigate the challenges, benefiting both the employee and the organization.

ADHD and Executive Functioning

ADHD is often accompanied by impairments in executive functioning, leading to its increasing recognition as an executive function deficit disorder.^{xviii} Executive functions encompass a range of higher-level skills crucial for successful functioning in daily life, including attention, planning, organization, task initiation, time management, working memory, processing speed, emotional regulation, and self-awareness.^{xix} This can effect the ability to stay focused, to remain organized, to efficiently plan, initiate and complete a task, process and recall information, manage time effectively and meet deadlines, and to navigate interpersonal relationships. Research consistently demonstrates the significance of impaired executive functions in individuals with ADHD, and it is commonly believed that many of its primary symptoms and functional implications result from these deficits.^{xx} Studies indicate that as many as 86-98% of adults with ADHD show notable deficits in multiple executive functions, with these deficits interacting and adversely affecting one another.^{xxi}

While everyone may encounter challenges in these areas occasionally, those with ADHD experience numerous and significantly more debilitating problems with executive functioning, which cause persistent difficulty executing a wide array of tasks and often interfere with daily life.^{xxii} In relation to occupational functioning, studies suggest that ADHD is more impairing than other chronic physical and psychiatric disorders, likely due to the range of executive functions affected with ADHD and the reliance of these skills in the workplace.^{xxiii} Impaired executive functioning may further be compounded by the presence of comorbidities:^{xxiv} ADHD often co-occurs with mood, anxiety, personality, and substance use disorders, and as many as 80% of adults with ADHD have at least one co-occurring disorder.^{xxv} However, like other neurodevelopmental disorders; ADHD is a spectrum disorder with significant variation in symptom severity, domains of impairment, and the degree of functional impairment among those affected.^{xxvi} Individuals with ADHD may be impaired in one or more executive functions, and thus may experience few, many, or most symptoms of executive dysfunction.

ADHD in the Workplace

Although many people with ADHD are likely to encounter some challenges in the workplace, not all symptoms of ADHD are linked to deficits or functional impairments. Symptoms of ADHD can also be associated with various strengths that enable individuals to excel in specific environments despite facing challenges in others.^{xxvii} How ADHD impacts job performance is likely to depend on several factors: the type and severity of symptoms, the suitability of the job with an individual's strengths, and whether strategies are successfully implemented to mitigate weaknesses. It is therefore beneficial for the employee and employer to understand how supporting impairments caused by ADHD and maximizing strengths increases job performance and satisfaction.

Strengths in the Workplace

Divergent thinking and creativity

Studies have found that individuals with ADHD tend to be more creative compared to their non-ADHD peers.^{xxviii} This creative ability is closely linked to divergent thinking and novelty seeking. Divergent thinking refers to the capacity to generate multiple ideas or solutions for a given problem, as well as the ability to develop original or novel ideas.^{xxix} High divergent thinking among adults with ADHD is correlated with impulsivity, which enables more spontaneous and unconstrained thinking.^{xxx} Individuals with ADHD are more likely to think outside the box and can be highly innovative, as they tend to be more willing to consider unconventional or novel ideas, take risks, and embrace uncertainty and ambiguity. They often excel in brainstorming and creative problem-solving, and many people with ADHD find success in jobs that require innovativeness and creativity, such as roles in the arts, design, advertising, and marketing.

Hyperfocus

While individuals with ADHD may have trouble focusing on certain tasks, they are able to hyperfocus on others. Hyperfocus refers to extended periods of intense focus, sometimes described as a state of flow where one is fully immersed in a task or project and tunes out their surroundings.^{xxxi} People with ADHD often experience hyperfocus when engaged in activities or projects of interest, or those they find rewarding.^{xxxii} Many also experience improved concentration in highly stimulating or motivating environments and excel in high-stress situations, such as during

a crisis or under the pressure of a deadline. The ability to hyperfocus can be an asset in the workplace that enables employees with ADHD to work with exceptional efficiency and increased productivity.

Workplace Challenges

Attention Dysregulation

Attention dysregulation, or the inability to regulate one's attention, is characterized by difficulties in under-focusing, over-focusing, shifting focus and the ability to prioritize focus on what is important. Individuals with ADHD may excel in concentrating on highly stimulating or engaging projects, but often struggle to sustain focus on less stimulating tasks. They often require a higher level of stimulation to maintain motivation and consistent task engagement. Repetitive and monotonous tasks can be particularly challenging for individuals with ADHD, as under-stimulation leads to boredom and frustration (Barkley, 2013). Attention dysregulation also manifests as distractibility. Individuals with ADHD tend to be hypersensitive to their environment, making them more prone to experiencing distractions. They may have difficulty filtering out external stimuli, such as noise or movement, as well as internal distractions like daydreaming. Staying focused and actively engaging in meetings can also be challenging, as lack of stimulation can lead to restlessness and difficulty maintaining focus can hinder their ability to follow discussions and maintain a train of thought. Distractibility is among the most prevalent workplace challenges for employees with ADHD, with one study reporting that 63% stated that difficulty ignoring distractions significantly impacts their productivity and participation at work. Attentional issues also contribute to errors, lack of attention to detail, difficulty following instructions, challenges with task completion, and difficulty managing workload.

Organization and Time Management

Adults with ADHD often struggle with poor organization skills, resulting in difficulty managing materials, tasks, and time effectively. Employees with ADHD may have trouble recalling and following multistep instructions, remembering important details, or keeping track of documents and important dates. Impaired working memory can also impede the ability to formulate plans and properly prioritize, which can make managing large projects, multiple tasks and competing deadlines, particularly challenging for employees with ADHD.^{xxxiii} They may have trouble

identifying the steps needed to complete a task or project, scheduling work by priority or importance, accurately estimating how long a task will take, and allocating their time efficiently. Difficulty planning and prioritizing can also create barriers to task initiation, as they may have trouble determining where or how to begin, which tasks to focus on and when, often leading to frustration and overwhelm. Poor planning is often compounded by problems sustaining attention and focus, which can make it difficult to follow through on set plans, adhere to a schedule, complete projects without digressing to other tasks, and effectively manage timelines.

Social Skills and Emotion Regulation

In addition to functional impairments, employees with ADHD often incur social and emotional challenges in the workplace. Successful social interactions require an attentiveness to unfolding dynamics and self-awareness of one's impact on others. For many adults with ADHD, symptoms can manifest as poor social skills and hinder the development and maintenance of positive relationships with colleagues. For instance, ADHD and executive functioning impairment symptoms can result in frequent interrupting, excessive talking, monopolizing discussions, and being overly blunt, which may lead colleagues to perceive them as thoughtless or abrasive. Symptoms of inattentiveness and distractibility may be perceived as a lack of engagement or rudeness when colleagues with ADHD appear distracted or seemingly not listening when spoken to.^{xxxiv} Chronic difficulties with forgetfulness, disorganization, and time management can make it difficult for employees with ADHD to work effectively with colleagues and may lead to conflict with supervisors. Executive functioning difficulties may be perceived as a lack of discipline or unprofessionalism, leading to frustration and resentment over failure to follow through on commitments and an over-reliance on team members.^{xxxv}

ADHD is also associated with symptoms of poor emotional regulation, closely associated with impulsivity.^{xxxvi} Emotional regulation refers to the ability to monitor and reflect on one's own and others' emotions and to adapt one's emotional response appropriately.^{xxxvii} Emotional reactivity, and problems managing emotions such as frustration, irritability, and impatience, may lead to strained relationships with colleagues and difficulty managing conflict constructively.^{xxxviii} Employees with ADHD often describe a hypersensitivity to criticism and failure leading to discouragement and demotivation, negatively impacting their work performance and

psychological well-being.^{xxxix} Functional, affective, and social challenges in the workplace contribute to low self-esteem and high levels of stress among employees with ADHD, as well as an increased risk for exhaustion and burnout.^{xl} Research indicates that employees with ADHD may be more susceptible to stress-related illness: one study reported that 24% of employees on long-term sick leave due to stress-related illness met the diagnostic criteria for ADHD.

Benefits of Supporting ADHD in the Workplace

Creating a supportive and inclusive workplace environment can have a significant impact on motivation and job satisfaction among neurodiverse employees, which in turn is likely to promote engagement and improve performance.^{xli} Studies indicate that employees with disabilities often report lower levels of job satisfaction, perceive fewer opportunities for career advancement, and experience a negative affect toward their workplace, including feelings of anger, contempt, guilt, and distress.^{xlii} Employees with ADHD often experience low self-confidence in the workplace and describe a perceived lack of understanding or responsiveness to their needs as discouraging.^{xliii} However, when employees perceive their workplace to be an inclusive environment, they report feeling higher levels of empowerment and positive emotions such as enthusiasm.^{xliv}

Workplace accommodations can further aid in maximizing the employment and retention of employees with ADHD while also proving to be cost-effective for employers. Workplace accommodations are typically low cost and cheaper than the cost of employee turnover.^{xlv} A recent survey of 3,528 employers revealed that 49% of accommodations were made at zero cost, while 43% had an average one-time cost of \$300.^{xlvi} Additionally, employers report positive returns on investment, including increased retention and productivity, along with cost savings related to reduced turnover: 85% reported accommodations resulted in retaining a valued employee, 53% reported increased productivity, and 46% stated that having made an accommodation eliminated the expenses associated with training a new employee.^{xlvii}

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environment that accommodates their needs and strengths can significantly reduce impairments in the workplace and maximize potential, contributing to overall organizational performance.^{xlix}

Recommendations for Employers

There are several ways an employer can help foster a neurodiverse and inclusive workplace environment. To start employers can implement neurodiverse hiring practices. This means expanding your recruiting efforts to ensure you are reaching neurodiverse candidates; for example, partnering with organizations and schools that have specific programs for neurodiverse individuals. It is also important to adjust the interviewing process. This could include providing interview questions prior to the interview, ensuring there is a quiet space to conduct the interview, individual interviews instead of a large group or panel interviews, blocking off more time to conduct the interview, and asking more direct questions relating to prior experience rather than open-ended or vague questions.

Another important step to creating an inclusive and supportive workplace environment is providing education and awareness training for employees. A great way to integrate neurodiversity training is during the onboarding process. This ensures that all employees receive the necessary information and support they need when first joining the company. For existing employees, employers should provide additional training sessions throughout the year. Emphasis should be placed on helping employees understand how to create a more inclusive environment and how to support those with neurodiverse needs.

Finally, employers need to ensure they have retention policies that support neurodiverse individuals. This can include offering mentor and coaching opportunities for neurodiverse employees or creating peer support networks within your organization. Embracing and engaging neurodiversity in the workplace can give organizations a competitive edge by increasing innovation, productivity, and retention.

References

- ⁱ De Graaf et al., “The Prevalence and Effects of Adult Attention-Deficit/Hyperactivity Disorder (ADHD) on the Performance of Workers.”
- ⁱⁱ Houdek, “Neurodiversity in (Not Only) Public Organizations.”
- ⁱⁱⁱ Nancy Doyle, “Neurodiversity at Work: A Biopsychosocial Model and the Impact on Working Adults,” *British Medical Bulletin* 135, no. 1 (October 14, 2020): 108–25, <https://doi.org/10.1093/bmb/ldaa021>.
- ^{iv} Robbins, “The Untapped Potential of the ADHD Employee in the Workplace.”
- ^v Lasky et al., “ADHD in Context.”
- ^{vi} De Graaf et al., “The Prevalence and Effects of Adult Attention-Deficit/Hyperactivity Disorder (ADHD) on the Performance of Workers”; Fayyad et al., “The Descriptive Epidemiology of DSM-IV Adult ADHD in the World Health Organization World Mental Health Surveys”; Barkley, Murphy, and Fischer, *ADHD in Adults*.
- ^{vii} Biederman, “Age-Dependent Decline of Symptoms of Attention Deficit Hyperactivity Disorder”; Faraone, Biederman, and Mick, “The Age-Dependent Decline of Attention Deficit Hyperactivity Disorder”; Wilens, Biederman, and Spencer, “Attention Deficit/Hyperactivity Disorder Across the Lifespan”; Mannuzza et al., “Adult Psychiatric Status of Hyperactive Boys Grown Up”; Weiss and Hechtman, *Hyperactive Children Grown Up*.
- ^{viii} Faraone, Biederman, and Mick, “The Age-Dependent Decline of Attention Deficit Hyperactivity Disorder”; Able et al., “Functional and Psychosocial Impairment in Adults with Undiagnosed ADHD.” Fayyad et al., “The Descriptive Epidemiology of DSM-IV Adult ADHD in the World Health Organization World Mental Health Surveys.”
- ^{ix} Küpper et al., “The Negative Impact of Attention-Deficit/Hyperactivity Disorder on Occupational Health in Adults and Adolescents”; Able et al., “Functional and Psychosocial Impairment in Adults with Undiagnosed ADHD.”
- ^x Barkley, Murphy, and Fischer, *ADHD in Adults*.
- ^{xi} Biederman and Faraone, “The Effects of Attention-Deficit/Hyperactivity Disorder on Employment and Household Income.”
- ^{xii} Hechtman et al., “Functional Adult Outcomes 16 Years After Childhood Diagnosis of Attention-Deficit/Hyperactivity Disorder”; Rietveld and Patel, “ADHD and Later-Life Labor Market Outcomes in the United States.”
- ^{xiii} Barkley, Murphy, and Fischer, *ADHD in Adults*.
- ^{xiv} De Graaf et al., “The Prevalence and Effects of Adult Attention-Deficit/Hyperactivity Disorder (ADHD) on the Performance of Workers.”
- ^{xv} Kessler et al., “The Prevalence and Effects of Adult Attention Deficit/Hyperactivity Disorder on Work Performance in a Nationally Representative Sample of Workers.”
- ^{xvi} Doshi et al., “Economic Impact of Childhood and Adult Attention-Deficit/Hyperactivity Disorder in the United States.”
- ^{xvii} De Graaf et al., “The Prevalence and Effects of Adult Attention-Deficit/Hyperactivity Disorder (ADHD) on the Performance of Workers.”
- ^{xviii} Brown, *A New Understanding of ADHD in Children and Adults*; Brown, “ADD/ADHD and Impaired Executive Function in Clinical Practice”; Barkley and Murphy, “Impairment in Occupational Functioning and Adult ADHD.”
- ^{xix} Goldstein et al., “A History of Executive Functioning as a Theoretical and Clinical Construct.”
- ^{xx} Antshel, Hier, and Barkley, “Executive Functioning Theory and ADHD.”
- ^{xxi} Antshel, Hier, and Barkley; Barkley and Murphy, “Impairment in Occupational Functioning and Adult ADHD”; Biederman et al., “Are Stimulants Effective in the Treatment of Executive Function Deficits?”; Linder et al., “Do ADHD and Executive Dysfunctions, Measured by the Hebrew Version of Behavioral Rating Inventory of Executive Functions (BRIEF), Completely Overlap?”
- ^{xxii} Brown, *A New Understanding of ADHD in Children and Adults*.
- ^{xxiii} De Graaf et al., “The Prevalence and Effects of Adult Attention-Deficit/Hyperactivity Disorder (ADHD) on the Performance of Workers”; Barkley, Murphy, and Fischer, *ADHD in Adults*.
- ^{xxiv} Hervey, Epstein, and Curry, “Neuropsychology of Adults With Attention-Deficit/Hyperactivity Disorder”; Halmøy et al., “Occupational Outcome in Adult ADHD.”
- ^{xxv} Torgersen, Gjervan, and Rasmussen, “ADHD in Adults”; Sobanski et al., “Psychiatric Comorbidity and Functional Impairment in a Clinically Referred Sample of Adults with Attention-Deficit/Hyperactivity Disorder (ADHD).”
- ^{xxvi} Antshel, Hier, and Barkley, “Executive Functioning Theory and ADHD.”

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- ^{xxvii} Sedgwick, Merwood, and Asherson, “The Positive Aspects of Attention Deficit Hyperactivity Disorder”; Houdek, “Neurodiversity in (Not Only) Public Organizations.”
- ^{xxxiii} Nadeau, “Career Choices and Workplace Challenges for Individuals with ADHD.”
- ^{xxxiv} Coetzer, “An Empirical Examination of the Mediating Influence of Time Management on the Relationship between Adult Attention Deficit and Role Stress.”
- ^{xxxv} Nadeau, *ADD in the Workplace*; Coetzer, “An Empirical Examination of the Mediating Influence of Time Management on the Relationship between Adult Attention Deficit and Role Stress.”
- ^{xxxvi} Corbisiero et al., “Emotional Dysregulation in Adults With Attention-Deficit/Hyperactivity Disorder-Validity, Predictability, Severity, and Comorbidity.”
- ^{xxxvii} Brackett, Rivers, and Salovey, “Emotional Intelligence.”
- ^{xxxviii} Coetzer, “An Empirical Examination of the Mediating Influence of Time Management on the Relationship between Adult Attention Deficit and Role Stress.”
- ^{xxxix} Oscarsson et al., “Stress and Work-Related Mental Illness among Working Adults with ADHD.”
- ^{xl} Andreassen et al., “The Relationships between Workaholism and Symptoms of Psychiatric Disorders.”
- ^{xli} Houdek, “Neurodiversity in (Not Only) Public Organizations.”
- ^{lii} Sarah Von Schrader, Valerie Malzer, and Susanne Bruyère, “Perspectives on Disability Disclosure: The Importance of Employer Practices and Workplace Climate,” *Employee Responsibilities and Rights Journal* 26, no. 4 (December 2014): 237–55, <https://doi.org/10.1007/s10672-013-9227-9>; Shengli Dong and Amy R. Guerette, “Workplace Accommodations, Job Performance and Job Satisfaction Among Individuals with Sensory Disabilities,” *The Australian Journal of Rehabilitation Counselling* 19, no. 1 (July 2013): 1–20, <https://doi.org/10.1017/jrc.2013.1>.
- ^{liii} Robbins, “The Untapped Potential of the ADHD Employee in the Workplace”; Oscarsson et al., “Stress and Work-Related Mental Illness among Working Adults with ADHD.”
- ^{liiv} Disability Case Study Research Consortium, “Conducting and Benchmarking Inclusive Employment Policies, Practices, and Culture: Final Report.” (Burton Blatt Institute, Syracuse University, 2008); Dong and Guerette, “Workplace Accommodations, Job Performance and Job Satisfaction Among Individuals with Sensory Disabilities.”
- ^{liv} Nancy Doyle, “Neurodiversity at Work: A Biopsychosocial Model and the Impact on Working Adults,” *British Medical Bulletin* 135, no. 1 (October 14, 2020): 108–25, <https://doi.org/10.1093/bmb/ldaa021>.
- ^{lv} Job Accommodation Network, “Workplace Accommodations: Low Cost, High Impact,” 2023.
- ^{lvii} Job Accommodation Network.
- ^{lviii} Robbins, “The Untapped Potential of the ADHD Employee in the Workplace.”
- ^{lix} Lasky et al., “ADHD in Context.”