

**“I wish I could just be myself”: Social Camouflaging,
Internalized Stigma, and Internalizing Mental Health
Problems in Adult ADHD**

by
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Abstract

This study utilized a mixed-methods approach ($N = 202$) to explore social camouflaging in adults with ADHD and test whether social camouflaging was related to internalizing mental health problems. Using thematic analysis, motivations for camouflaging were to fit in with others, to be liked, to avoid adverse experiences, and to survive and succeed in a 'neurotypical society'. Camouflaging strategies included hiding and pretending, suppression, and compensation. Consequences included the facilitation of social interactions and outcomes, controlling perceptions, identity disturbance, exhaustion, mental health problems, reduced closeness and connection with others, interference with important cognitive functions, and the perpetuation of unrealistic expectations and ADHD stigma. Regression analyses revealed that social camouflaging was significantly related to social anxiety after controlling for age, gender and ADHD traits, but not generalized anxiety or depression. Internalized stigma did not moderate any of the relationships. Findings underscore the clinical and social considerations of camouflaging in adult ADHD.

Keywords: adult ADHD; social camouflaging; internalized stigma; social anxiety; generalized anxiety; depression

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Chapter 1.

Introduction

Attention-deficit/hyperactivity disorder (ADHD) is a prevalent neurodevelopmental disorder characterized by persistent patterns of inattention and/or hyperactivity/impulsivity (American Psychiatric Association [APA], 2013). Adults with ADHD may present with symptoms such as difficulty sustaining attention, forgetfulness in daily activities, distractibility, difficulty staying seated, excessive talking or fidgeting, interrupting, restlessness and difficulty relaxing (APA, 2013; Wilens et al., 2009). In addition to the core symptoms of inattention and/or hyperactivity/impulsivity, ADHD is also shown to be associated with emotional dysregulation (Skirrow et al., 2009), impaired social skills and difficulties maintaining social relationships (Barkley, 2018; Nixon, 2001; Shaw-Zirt et al., 2005). Formerly characterized as a childhood disorder, we now know that in many cases, ADHD is a lifelong condition that persists into adulthood, affecting approximately 2.5% of adults in the general population (APA, 2013; Simon et al., 2009).

Researchers and clinicians alike acknowledge that there are two widespread clinical problems that can complicate diagnoses and adversely impact outcomes for individuals with ADHD. These are: 1) the high rates of co-occurring psychiatric disorders in adults with ADHD and 2) the under-, mis- and/or late diagnosis of adult ADHD (e.g., Kooij et al., 2019). Approximately 60-80% of adults with ADHD have at least one co-occurring psychiatric disorder in their lifetime (Kooij et al., 2019; Sobanski et al., 2007), and among the most common are mood disorders, anxiety disorders, substance use disorders, and personality disorders (Katzman et al., 2017). In addition to the diagnostic issues that can arise when individuals present with co-occurring psychiatric disorders, such as difficulties disentangling overlapping symptoms, the overt presentation of ADHD itself can vary dramatically between individuals or groups of individuals (for e.g., men and women) (Biederman et al., 2002; Fedele et al., 2012; Nussbaum, 2012) which can raise further problems in detecting and accurately diagnosing ADHD. For example, adult ADHD is commonly misdiagnosed as depression, bipolar disorder, and borderline personality disorder (Asherson, 2005). Therefore, research examining factors that may contribute to the elevated rates of co-occurring conditions and the diagnostic issues

present in detecting adult ADHD is needed, and one of these possible complicating factors may be the occurrence of social camouflaging.

1.1. Social Camouflaging and ADHD

From the autism literature, 'social camouflaging' refers to the behaviours and strategies autistic individuals use to hide or mask their autistic traits in social situations (Hull et al., 2017; Lai et al., 2011). The core components of autism spectrum disorder (ASD) are persistent difficulties in social communication and interactions, as well as restricted and/or repetitive behaviours and interests (APA, 2013). To compensate for these difficulties, many autistic individuals learn social skills and strategies to appear non-autistic and to 'fit in' with others and the 'neurotypical world' at large (Milner et al., 2019). This can include behaviours such as imitating others' facial expressions, forcing eye contact and other nonverbal communication, suppressing repetitive or self-stimulatory behaviours, or performing neurotypical behaviours and routines such as small talk (Hull et al., 2017). As described in the autism literature, camouflaging behaviours can be conscious or unconscious (Hull et al., 2020). Some camouflaging behaviours may involve concerted efforts or active engagement, while other behaviours might be performed habitually due to many years of practice. It is likely that camouflaging behaviours exist on a spectrum of conscious to unconscious and effortful to effortless. Furthermore, specific camouflaging strategies, and their consequences, may differ across individuals (Hull et al., 2020).

While 'social camouflaging' is a term that has been used to describe strategies used by autistic individuals to hide *autistic traits*, this concept can be extended to other neurodevelopmental disabilities, particularly ADHD. Lai and colleagues (2019) define 'social camouflaging' broadly as "acting as if behaviourally neurotypical" as a way of coping in social situations (p. 2). This definition offers us a conceptual lens to examine this phenomenon in ADHD.

There are many psychosocial factors that might motivate individuals with ADHD to camouflage their ADHD traits from others. Many symptoms of ADHD involve behaviours that conflict with accepted social norms and thus, are considered undesirable in Western contemporary society (Beaton et al., 2020). As theorized by Koyuncu and colleagues (2018), individuals with ADHD often have maladaptive social behaviours,

such as forgetfulness, errors, talking out of turn, or speaking without forethought, and while these social-communicative difficulties are outcomes of executive dysfunction related to ADHD, many receivers interpret these behaviours to be intentional and controllable. Individuals with ADHD experience substantial stigmatization, including ridicule, devaluation and discrimination from teachers, peers, family members and society (Lebowitz, 2016; Mueller et al., 2012). Moreover, many people with ADHD experience social rejection (de Boer & Pijl, 2016; Paulson et al., 2005; Smit et al., 2020), criticism (Beaton et al., 2020; Psychogiou et al. 2007) and relationship problems (Nixon, 2001). Many adults with ADHD find it difficult to 'fit in' and meet societal expectations (Honkasilta et al., 2016) and report a need to feel 'normal', to feel a sense of belonging, and to feel accepted by others (Ghosh et al., 2016; Nehlin et al., 2015). Thus, the need to avoid negative social experiences and gain social acceptance from others may be two of the main psychosocial factors driving individuals with ADHD to camouflage their ADHD traits in social situations.

In general, camouflaging is a type of coping strategy that involves both masking and compensation techniques in social situations (Lai et al., 2019). Past research has examined general compensatory strategies utilized by adults with ADHD to cope (Canela et al., 2017) and "overcome inattention and hyperactivity/impulsivity symptoms" (Kysow et al., 2017, p. 2). For example, organizing one's environment and schedule, setting alarms and reminders, working harder at a task and receiving social support are described as adaptive compensatory strategies used to reduce the impact of symptoms on functional outcomes (Castagna et al., 2019; Kysow et al., 2017). Although social camouflaging may include compensatory strategies specific to *social situations* (for e.g., being extra focused on a social task or conversation (Kysow et al., 2017)), it also includes masking/performative techniques (e.g., *pretending* to be extra focused on a social task or conversation). For both forms of social camouflaging (i.e., compensatory and masking), the aim is to *hide* one's ADHD traits from others, rather than overcome them in a more general sense. Although some research on general compensatory strategies for ADHD has been conducted, we currently lack research on whether individuals with ADHD use *social* compensatory strategies and masking techniques to appear neurotypical.

1.1.1. Social Adaptation Vs. Camouflaging Traits

To some extent, everyone must adapt to the demands of their environment. Thus, it might be argued that everyone living in a social system must ‘camouflage’ aspects of themselves, in some form and to some degree, in order to conform to socially accepted norms. Indeed, research suggests that non-autistic individuals with poor social competence also report behaviours indicative of camouflaging autistic traits (Scheerer et al., 2020) and, more broadly, that many non-autistic people engage in social masking in the form of emotional suppression (Larsen et al., 2012), learnt nonverbal ‘display rules’ (Ekman & Friesen, 1969; Ekman et al., 1972) or ‘performances’ to manage impressions in different social situations and social roles (Goffman, 1959). Although the occurrence of social adaptation is well-documented and investigated, it can be argued that the phenomenological experience of *camouflaging neurodivergent traits* is likely different than this – both quantitatively (i.e., in magnitude) and qualitatively (i.e., in form). To begin, the increased threat of stigmatization and social rejection for neurodiverse individuals contributes to increased situational pressures to camouflage in many different social situations (Cage et al., 2019; Robinson et al., 2020). Moreover, the degree of self-alteration and effort required for neurodiverse individuals to camouflage and successfully ‘fit in’, in comparison to that of neurotypical individuals, is likely greater in magnitude (Bargiela et al., 2016; Beck et al., 2020). While some research indicates that the level of camouflaging is similar between autistic and non-autistic youth with social competency deficits (Jorgenson et al., 2020), it is the degree of effort required to execute camouflaging behaviours that may be quite different, though research in this area is limited. Secondly, in order to address unique social-communicative challenges, neurodiverse individuals may camouflage in ways that are distinctive. For example, camouflaging autism or ADHD by repressing repetitive self-stimulatory behaviours – which are behaviours that function to relieve stress (Kapp et al., 2019) and may increase concentration (Hartanto et al., 2016) – is not an experience many neurotypical adults have, and by camouflaging this unique behaviour, neurodiverse individuals are choosing to normalize themselves at the direct cost of their psychological well-being.

Although autism and ADHD share many overlapping symptoms (Antshel & Russo, 2019), many differences exist suggesting that social camouflaging may have some qualitative differences in individuals with ADHD in comparison to autistic individuals. For example, symptomatic differences in attention and hyperactivity (e.g.,

individuals with ADHD may struggle more with sitting still and carrying out a task more than autistic individuals), communication difficulties (e.g., ADHD individuals may talk excessively whereas autistic individuals may struggle with verbal expression) and the pattern of atypical social behaviours (e.g., individuals with ADHD may present with more intrusive social behaviours whereas autistic individuals may present with more aloof social behaviours) (APA, 2013; Mikami et al., 2019) may result in different types of camouflaging strategies used. As a result of differences in both magnitude and form of camouflaging, the consequences of camouflaging may be more impactful and detrimental on mental health among neurodivergent individuals (e.g., individuals with ADHD or autism) than neurotypical individuals. Preliminary research supports this claim, suggesting that, unlike typical impression management, camouflaging for autistic individuals is extremely effortful and conflicting to one's identity (Bargiela et al., 2016).

While experts in the field report that many individuals with ADHD may use compensatory strategies (e.g., Asherson, 2005) and qualitative studies suggest that individuals with ADHD feel a need to hide or mask aspects of themselves to 'fit in' (Ghosh et al., 2016; Hallberg, et al., 2010; Schrevel, et al., 2016), no published studies to date have integrated these findings to examine the concept of social camouflaging in ADHD. Moreover, no studies to date have explored the specific strategies, situations, motivations, and consequences of social camouflaging ADHD, *and* whether the frequency of social camouflaging is related to internalizing mental health difficulties in this population.

1.2. Social Camouflaging ADHD and Mental Health

Although social camouflaging may be perceived as a useful coping tool for navigating social situations and interactions, emerging research suggests that social camouflaging of *autistic traits* is related to increased levels of depression, generalized anxiety, and social anxiety (Beck et al., 2020; Hull et al., 2021; Livingston et al., 2019). As previously mentioned, camouflaging behaviours may complicate and interfere with an individual's ability to attain support and services as camouflaging may create the illusion that the individual is functioning at a higher level than they actually are and people in their lives, for example, clinicians, educators, friends and family, may dismiss their difficulties or not recognize the severity of their problems (Dean et al., 2017; Kooij et al., 2019). If supports are not provided, camouflaging may have an indirect negative

downstream effect on an individual's mental health. However, in addition to this, the act of camouflaging itself, and the proximal psychological consequences that follow, may directly elevate one's risk of developing internalizing mental health difficulties, such as depression and anxiety. Qualitative research on social camouflaging highlights that many autistic individuals perceive camouflaging to be mentally, physically and emotionally exhausting, stressful, and a contributing factor to mental health problems (Hull et al., 2017; Tierney et al., 2016). Considering the commonalities between autism and ADHD symptomology (e.g., shared social difficulties, executive functioning difficulties, and behavioural challenges (Antshel & Russo, 2019)), there will likely be some degree of overlap in camouflaging strategies and motivations between these populations, and thus, the negative consequences of social camouflaging as reported by autistic individuals will likely also emerge among individuals with ADHD.

Although individuals who engage in social coping strategies may outwardly appear to be functioning well, their internal experience might be much different. Experts in the field suggest that for adults with ADHD, distress and exhaustion are often consequences of routine engagement in coping and learnt compensatory strategies, and as a result, many individuals choose to adapt their lifestyles and occupations to avoid engaging in these effortful strategies (Asherson et al., 2012; Weiss & Weiss, 2004). Similarly, consistent and considerable efforts to camouflage ADHD and the added social pressure to perform or behave in a particular manner, may overtime lead to significant psychological distress and fatigue.

It is well established that chronic stress can increase the likelihood of developing mental health problems, including anxiety and mood disorders (see Cohen, 2000). Theoretically, the persistent stress of social camouflaging might contribute to higher overall physiological arousal and worrying characteristic of generalized anxiety (APA, 2013; Eysenck, 1992). Alternatively, persistent distress from social camouflaging may lead to fear and anxiety towards social situations specifically. The learned association between social settings and the effortful stress of camouflaging, excessive worries about anticipated camouflaging, and/or the fear of failing in one's attempts to camouflage and the aversive social consequences that could follow (Tierney et al., 2016), all may lead to higher levels of social anxiety (APA, 2013; Clark & Wells, 1995; Mowrer, 1939; Rachman, 2020). Furthermore, the direction might be reversed, such that high levels of social anxiety or generalized anxiety might predict greater use of camouflaging

strategies. In autistic individuals, social camouflaging has been found to be related to both social anxiety and generalized anxiety (e.g., Hull et al., 2021), thus, to begin to elucidate the relationship between social camouflaging and anxiety in ADHD, we aim to examine both types of anxiety to determine whether there are any differential associations.

Research on expressive suppression highlights the ways in which social camouflaging in ADHD may impact depression. Individuals with ADHD experience executive dysfunction which is shown to be associated with mood instability (Skirrow et al., 2009). To camouflage this ADHD symptom in social situations, individuals might attempt to hide, reduce or inhibit their outward display of emotions, engaging in an emotion regulation technique called *expressive suppression* (Gross & Muñoz, 1995). Although this strategy might appear effective, the habitual use of expressive suppression is associated with increased levels of depression in adults (Gross & John, 2003) and adolescents (Larsen et al., 2012).

1.3. Social Camouflaging ADHD and Identity-Related Stress

Camouflaging behaviours may also trigger identity-related stress. Many individuals with ADHD perceive their ADHD traits to be an integral component of their identity (Honkasilta et al., 2016) and their authentic self (Loe & Cuttino, 2008; Singh, 2007, 2013). To the extent this holds true, camouflaging one's ADHD to meet externally imposed social demands may lead to identity conflict and elicit feelings of inauthenticity. Indeed, autistic individuals report that frequent social camouflaging can lead to identity confusion or conflict (Hull et al., 2017), which may also contribute to an increased risk of internalizing problems.

As previously described, a possible camouflaging strategy for individuals with ADHD, may be expressive suppression, and more frequent expressive suppression is found to be associated with less sharing of both negative and positive emotions, reduced closeness to others and greater discomfort with close relationships (Butler et al., 2003; Gross & John, 2003). Thus, camouflaging ADHD, in the form of actively suppressing strong emotions, thoughts and/or behaviors related to one's ADHD, may not only be psychologically and physically exhausting, it may also obstruct one's ability to form authentic connections and relationships with others and may generate overall feelings of

inauthenticity and loneliness (Hull et al., 2017), both of which are related to increased levels of depression (Hagerty, & Williams, 1999; Turner et al., 2020; Wenzel & Lucas-Thompson, 2012). Similar to social camouflaging autism, social camouflaging ADHD may also be associated with reduced self-esteem and negative self-perceptions (Hull et al., 2017), further related to increased levels of depression (Cage et al., 2018).

1.4. Internalized Stigma of ADHD and Mental Health

Due to public skepticism about the validity of ADHD as a 'real disorder' (Mueller et al., 2012), misconceptions about ADHD and its etiology (Nguyen & Hinshaw, 2020) and stereotyped media depictions (Hinshaw, 2007), stigma exists with the diagnosis of ADHD (Lebowitz, 2016). Possibly emerging from people's tendency to attribute negative social behaviours to controllable causes, such as character traits, as suggested by attribution theory (Hinshaw, 2007), adults with ADHD are often stereotyped as 'lazy', 'incompetent', 'bad', 'aggressive' or 'dangerous' (Asherson et al., 2012; Kooij et al., 2019; Nguyen et al., 2020). As a result of public stigma, individuals may internalize stereotypes of ADHD and develop *internalized stigma*, believing negative statements about themselves and feeling a sense of shame (McKeague et al., 2015; Rüscher et al., 2005). Various studies show that children, adolescents and young adults with ADHD develop negative self-perceptions, viewing themselves as largely 'defective', 'broken or damaged' as if something were fundamentally wrong, bad or problematic in them (Brady, 2014; Honkasilta et al., 2016; McKeague et al., 2015).

According to the minority stress model (Meyer, 2003), minorities experience heightened levels of psychiatric symptoms, such as depression and anxiety, as a result of identity-related stressors such as internalized stigma, experiences of discrimination and social exclusion, and stressors related to concealment of one's stigmatized identity (Meyer, 2003). Although this theory was developed to explain the heightened mental health difficulties experienced by sexual minorities, recently the theory has been extended to explain the heightened rates of mental health difficulties among *neurominorities* who experience stigmatization, namely autistic individuals (Botha & Frost, 2020) and individuals with chronic mental health conditions (Lund, 2021), as well as individuals with physical disabilities (Brown, 2017). These studies suggest the applicability of this theory to people with disabilities, which is inclusive of individuals with ADHD. Indeed, Masuch and colleagues (2019) found that greater internalized stigma of

ADHD is related to many detrimental mental health outcomes, including greater clinical symptoms, psychological distress, and functional impairment, as well as poorer self-esteem and quality of life. As such, the minority stress model provides a theoretical framework to examine how identity-related stressors, specifically camouflaging ADHD and internalized stigma of ADHD, may be related to mental health difficulties in this population.

Sociologist Erving Goffman (1963) argues that when a stigmatized identity is concealable, such as the case with ADHD, individuals will attempt to conceal or “camouflage” to avoid being identified. Research supports this claim, as greater internalized stigma is related to greater concealment of one’s stigmatized identity (Botha & Frost, 2020; Pachankis, 2007). Although camouflaging may be a behavioural response to public stigma (Perry et al., 2022), high internalized stigma may lead to increased internal pressure to camouflage and may make the experience of camouflaging more stressful and higher stakes due to internalized shame and the fear of being identified. This additional layer of stress and fear may cause camouflaging to be a more distressing experience leading to worse mental health problems. Considering the potential link between camouflaging, internalized stigma and mental health, the study of camouflaging *and* internalized stigma on ADHD and mental health difficulties is needed to unravel how multiple social identity-related stressors may interact to impact the development and exacerbation of psychiatric symptoms in individuals with ADHD.

1.5. Possible Protective Mechanisms of Social Camouflaging

Although past research and theorizing suggests that social camouflaging ADHD may be related to increased mental health difficulties through various psychological mechanisms, social camouflaging may also function to *reduce* mental health difficulties through competing mechanisms, therefore complicating this relationship. Qualitative research suggests that a subset of autistic individuals perceive camouflaging to be adaptive and helpful for forming social relationships (Hull et al., 2017). Moreover, research on stigmatized sexual identities suggests that, while concealing one’s stigmatized identity has harmful psychological implications, it might *also* protect individuals from the consequences of stigma, such as directly experienced discrimination and victimization, that can contribute to worse mental health outcomes (Kanuha, 1999;

Pachankis, 2007). Considering that individuals with ADHD experience heightened amounts of stigma and social rejection (Lebowitz, 2016), social camouflaging in ADHD may also involve some of these competing protective mechanisms such as aiding in relationship formation and reducing experienced discrimination, thus research to discern the relationship between social camouflaging ADHD and mental health is needed.

In light of commonly missed or late diagnoses of adult ADHD, exceptionally high rates of co-occurring internalizing mental health problems among those with ADHD, and emerging evidence showing the link between social camouflaging and increased internalizing mental health difficulties among autistic individuals, an exploration into the phenomenon of social camouflaging in ADHD is an essential next step for the field. Furthermore, examining the relationships between camouflaging ADHD, internalized stigma and mental health outcomes (social anxiety, generalized anxiety and depression) is needed to begin to understand the impact of camouflaging. This line of inquiry will allow us to better understand important factors that might be contributing to diagnostic issues and mental health problems in individuals with ADHD.

1.6. The Current Study

Since social camouflaging in ADHD has yet to be investigated in a comprehensive manner, qualitative research is required to understand the construct in depth as it is experienced and described by individuals with ADHD. Although a quantitative scale has been developed for camouflaging *autistic traits* (CAT-Q; Hull et al., 2019), this scale does not capture the construct and experience of camouflaging *ADHD traits* which we are interested in. Therefore, from a pragmatic orientation, a systematic, inductive qualitative analysis is an integral first step to understand and describe this phenomenon within this new population, while subsequent quantitative analyses are also necessary to examine the relationship between social camouflaging ADHD, internalized stigma, and mental health difficulties. Utilizing both qualitative and quantitative methods in an overall mixed-methods design allows for depth and breadth, the adoption of methods best suited for the phenomenon and research questions of interest, and increased validity through triangulation of research findings (Greene et al., 1989; Kivunja & Kuyini, 2017).

1.6.1. Qualitative Research Questions

I am interested in exploring the following research questions:

1. Do adults with ADHD 'camouflage' their ADHD traits in social situations?
2. Why do people camouflage their ADHD?
3. What types of strategies do people with ADHD use to camouflage?
4. In what situations do people camouflage their ADHD?
5. What are the perceived consequences of camouflaging ADHD?

I anticipate that a large number of participants will have diverse experiences of social camouflaging ADHD. No hypotheses are made with regard to the types of motivations, strategies, situations, and consequences of social camouflaging.

1.6.2. Quantitative Hypotheses

I hypothesize that:

1. A higher frequency of social camouflaging is related to higher levels of **social anxiety** among adults with ADHD, while controlling for age, gender, and ADHD traits.
2. A higher frequency of social camouflaging is related to higher levels of **generalized anxiety** among adults with ADHD, while controlling for age, gender, and ADHD traits.
3. A higher frequency of social camouflaging is related to higher levels of **depression** among adults with ADHD, while controlling for age, gender, and ADHD traits.
4. **Internalized stigma of ADHD** will moderate the relationship between camouflaging ADHD and internalizing mental health difficulties (social anxiety, generalized anxiety, and depression), such that the relationships between camouflaging ADHD and internalizing mental health difficulties will be stronger for those with higher levels of internalized stigma.

Chapter 2. Methods

2.1. Participants

2.1.1. Recruitment

Participants were recruited to take part in this study through online advertisements posted on social media and online forums, including Facebook, Twitter and Reddit, through the *Simon Fraser University (SFU)* student weekly newsletter, and through *SFU's* Research Participation System (RPS). The study was advertised to participants as a study on "ADHD, Social Experiences, Self-Perceptions, and Mental Health". Participants recruited from the community (non-RPS participants) were invited to enter into a draw to win one of three \$100 Visa gift cards after completion of the online survey. RPS participants were granted 3% course credit for participating in the study.

2.1.2. Inclusion and Exclusion Criteria

Participants were eligible to participate if they were diagnosed with ADHD and were 16 years or older, which is the age of consent to engage in research in B.C. without a legal guardian (Government of Canada, 2019). To verify diagnosis status, a number of procedures were taken. First, a self-report item asking whether the individual had received an official clinical diagnosis of ADHD (with options to select 'yes', 'no, but I suspect I have ADHD', or 'no') was presented in the demographic section of the questionnaire. If a participant responded 'yes' to this question, items asking at what age and by what type of professional they were diagnosed followed. Participants were included in the present study only if they reported being diagnosed by a pediatrician, medical doctor, psychologist or psychiatrist. For participants who reported being diagnosed by a professional unqualified to make such diagnosis (e.g., counsellor, nurse), the self-reported ADHD diagnosis was considered unreliable and the participant was excluded from analyses. In total, only one participant was excluded based on this exclusion criteria. An additional four participants were excluded from the sample for extensive missing data (i.e., no responses on all the qualitative questions or any of the main variables) resulting in a final sample size of 202.

2.1.3. Sample Characteristics

Table 1 presents the characteristics of the final sample ($N = 202$). Participants' ages ranged from 16 to 73 years old ($m_{\text{age}} = 29.20$; $SD = 10.83$). With regard to gender identity, 70.8% of participants identified as woman, 16.3% identified as man, 8.9% identified as non-binary, and 3.5% identified as 'other' and described their gender identity, which included gender-fluid, agender, and demigirl identities. Overall, 16.8% ($n = 34$) of the sample identified themselves as gender diverse, transgender and/or Two-Spirit. Just over half of the sample (55%) reported having a minority sexual orientation (e.g., gay, lesbian, bisexual, asexual, queer). These transgender, gender diverse and sexual identity prevalence rates are consistent with a growing body of literature which indicates that neurodivergent individuals are more likely to have diverse sexual orientations, transgender and gender diverse identities relative to neurotypical individuals (Warrier et al., 2020). This research has mostly focused on autistic individuals; however, Goetz and Adams (2022) conducted a systematic analysis of 17 studies and found a significantly increased prevalence of ADHD in trans and gender diverse persons.

Most participants spoke English at home (84.2%), while some participants spoke two languages at home, one of which being English (10.9%), and a few participants only spoke a language other than English at home (5.0%). Most participants identified their ethnicity/race as White (72.3%) and reported some post-secondary education (28.7%) as the highest level of education received. Detailed characteristics of the sample, including current education status, employment status, and annual family income are outlined in Table 1.

Information on ADHD diagnosis and co-occurring psychological and medical conditions was also collected. Most participants (55.5%) reported receiving an ADHD diagnosis in young adulthood (aged 19-35 years old). When diagnosed, 41.1% of participants were diagnosed with ADHD Predominantly Inattentive Subtype, 4.5% were diagnosed with ADHD Predominantly Hyperactive/Impulsive Subtype, 31.7% were diagnosed with ADHD Combined Subtype, and 22.8% were not sure or did not receive a diagnostic subtype specifier. The majority of participants (78.7%) reported currently taking prescription medication for their ADHD and many participants also reported receiving other forms of treatment within the last three months, including psychotherapy /

counselling services (51.0%), mindfulness training (18.8%), cognitive training / coaching (14.4%), among others. Participants also self-reported co-occurring psychological conditions, with 79.2% of participants reporting at least one additional co-occurring psychological condition, including anxiety disorders (58.9%), depression disorders (54.0%), autism (17.9%), post-traumatic stress disorder (12.9%), among others; see Table 1. This high rate of co-occurring psychological conditions is representative of the ADHD population (e.g., Kooij et al., 2019). Moreover, approximately half of participants (52.5%) reported having one or more medical conditions, including autoimmune diseases, asthma, eczema, fibromyalgia, hypothyroidism, irritable bowel syndrome, and polycystic ovary syndrome, among others.

Table 1. Sample Characteristics

| Demographic Information | Frequency <i>N</i> | Percentage % |
|--|-------------------------------|-------------------------|
| Age | | |
| 16-24 | 84 | 41.6 |
| 25-34 | 61 | 30.2 |
| 35-44 | 38 | 18.8 |
| 45-55 | 13 | 6.4 |
| 55-64 | 4 | 2.0 |
| 65-74 | 2 | 1 |
| Gender Identity | | |
| Woman | 143 | 70.8 |
| Man | 33 | 16.3 |
| Non-binary | 18 | 8.9 |
| Other ¹ | 7 | 3.5 |
| Prefer not to say | 1 | 0.5 |
| Sexual Identity | | |
| Minority sexual orientation ² | 110 | 54.5 |
| Heterosexual | 89 | 44.1 |
| Prefer not to say | 3 | 1.5 |
| Language Spoken at Home | | |
| English | 170 | 84.2 |
| English & another language | 22 | 10.9 |

| | | |
|--|-----|------|
| Non-English language | 10 | 5.0 |
| Ethnicity/Race | | |
| White | 146 | 72.3 |
| Indigenous (Métis, Crée, Mi'kmaw, Chippewa) | 18 | 8.9 |
| South Asian (East Indian, Pakistani, Indonesian) | 9 | 4.5 |
| East Asia (Chinese, Taiwanese) | 8 | 4.0 |
| West Asian (Iranian, Persian) | 4 | 2.0 |
| Black | 4 | 2.0 |
| Latin American/Hispanic | 4 | 2.0 |
| Mixed ethnicity | 4 | 2.0 |
| Prefer not to say | 5 | 2.5 |
| Highest Level of Education | | |
| Elementary School | 8 | 4.0 |
| High School | 36 | 17.8 |
| Some Post-Secondary Education | 58 | 28.7 |
| Professional Diploma | 18 | 8.9 |
| Undergraduate Degree | 51 | 25.2 |
| Graduate Degree | 20 | 9.9 |
| Other | 11 | 5.4 |
| Current Education Status | | |
| Not a Student | 99 | 49.0 |
| Full-time Student | 75 | 37.1 |
| Part-time Student | 25 | 12.4 |
| Prefer not to say | 3 | 1.5 |
| Employment Status | | |
| Full-time Employment | 84 | 41.6 |
| Part-time Employment | 48 | 23.8 |
| Income Assistance (IA) | 15 | 7.4 |
| Employment Insurance (EI) | 12 | 5.9 |
| Unemployed without IA or EI | 34 | 16.8 |
| Retired | 3 | 1.5 |
| Prefer not to say | 6 | 3.0 |
| Annual Family Income | | |

| | | |
|---|-----|------|
| < \$20,000 | 27 | 13.4 |
| \$21,000 - \$49,999 | 45 | 22.3 |
| \$50,000 - \$79,999 | 37 | 18.3 |
| \$80,000 - \$109,999 | 20 | 9.9 |
| \$110,000 - \$139,999 | 18 | 8.9 |
| \$140,000 - \$169,999 | 9 | 4.5 |
| >\$170,000 | 11 | 5.4 |
| Prefer not to say | 35 | 17.3 |
| Age of ADHD Diagnosis | | |
| Childhood (age 0-11) | 24 | 11.9 |
| Adolescence (age 12-18) | 40 | 19.8 |
| Young Adulthood (age 19-35) | 112 | 55.5 |
| Middle Adulthood (age 36-55) | 22 | 10.9 |
| Older Adulthood (age 56+) | 3 | 1.5 |
| ADHD Diagnosis Subtype | | |
| Predominantly Inattentive | 83 | 41.1 |
| Predominantly Hyperactive/Impulsive | 9 | 4.5 |
| Combined | 64 | 31.7 |
| Not sure | 46 | 22.8 |
| Currently Taking Prescription ADHD Medication | | |
| Yes | 159 | 78.7 |
| No | 41 | 20.3 |
| Prefer not to say | 2 | 1.0 |
| Other Recent Treatments for ADHD | | |
| Psychotherapy / counselling | 103 | 51.0 |
| Mindfulness Training | 38 | 18.8 |
| Cognitive Training/Coaching | 29 | 14.4 |
| Dietary Treatment | 12 | 5.9 |
| Music / Art / Recreational Therapy | 11 | 5.4 |
| Occupational Therapy | 10 | 5.0 |
| Behavioural Intervention | 7 | 3.5 |
| Social Skills Classes | 5 | 2.5 |
| Other | 12 | 5.9 |

| Co-occurring Psychological Conditions ³ | | |
|--|-----|------|
| Anxiety (GAD, panic, phobias, unspecified) | 119 | 58.9 |
| Depression (MDD, PDD, dysthymia, SAD, unspecified) | 109 | 54.0 |
| Autism | 36 | 17.9 |
| Post-Traumatic Stress Disorder | 26 | 12.9 |
| Obsessive Compulsive Disorder | 12 | 5.9 |
| Learning Disability | 12 | 5.9 |
| Eating Disorder | 10 | 5.0 |
| Bipolar Disorder (I, II) | 9 | 4.5 |
| Borderline Personality Disorder | 9 | 4.5 |
| Social Anxiety | 8 | 4.0 |
| Substance Use Disorder | 2 | 1.0 |
| Selective Mutism | 1 | 0.5 |
| Giftedness | 1 | 0.5 |
| Dissociative Identity Disorder | 1 | 0.5 |
| None | 38 | 18.8 |
| Prefer not to say | 4 | 2.0 |
| Medical Conditions | | |
| One or more | 106 | 52.5 |
| None | 95 | 47.0 |
| Prefer not to say | 1 | 0.5 |
| Engagement in Social Camouflaging ADHD | | |
| Yes | 185 | 91.6 |
| No | 17 | 8.4 |

Note. *N* = 202

¹Including a range of gender identities, including Two-Spirit, gender-fluid, agender, demigirl, transgender.

²Including a range of sexual identities, including lesbian, gay, bisexual, asexual, queer, pansexual.

³Co-occurring psychological conditions include self-identified conditions as well as diagnosed conditions.

Abbreviations: *GAD*, Generalized Anxiety Disorder; *MDD*, Major Depression Disorder; *PDD*, Persistent Depressive Disorder; *SAD*, Seasonal Affective Disorder.

It is important to note that, in addition to ADHD, 17.9% of participants also self-identified as autistic, indicating an overlap in neurodivergent identities. This is consistent with past research indicating a considerable overlap between ADHD and autism (Ronald et al., 2008). The majority of research on co-occurring ADHD and autism is conducted on populations of autistic adults, wherein the prevalence of ADHD in autistic people is estimated at 30 to 50% (Rong et al., 2021). Unfortunately, there is a paucity of research conducted on the prevalence of autism in adults with ADHD. However, one study estimated that 22% of children with suspected ADHD also met criteria for autism (Ronald et al., 2008). Considering this data, the prevalence of autism in the current sample of adults with ADHD is consistent with the available data we have in this area and may even slightly under-represent the true overlap between ADHD and autism found in the broader population of adults with ADHD. Since we were interested in understanding the experience of camouflaging among adults with ADHD, which in the real-world includes a large proportion of folks who are both ADHD and autistic, excluding participants who self-identify as autistic would be unrepresentative of the true adult ADHD population and thus, would not provide an accurate account of this phenomenon as it is experienced by real people who have multiple co-occurring conditions.

2.2. Procedure

Ethics approval for this study was obtained from *Simon Fraser University's* Office of Research Ethics. The study was conducted online through Qualtrics^{XM} (Provo, Utah, United States). Individuals who volunteered to participate in the study were emailed a unique hyperlink that directed them to the survey hosted by Qualtrics^{XM}. The survey consisted of a number of questionnaires and open-ended text-based questions and took approximately 50-80 minutes to complete. The Qualtrics^{XM} system saved participant survey responses as they were entered which allowed participants to stop and start the survey as they chose by returning to the survey link that was emailed to them. This flexibility was put in place to ensure participants had the option to take breaks as needed without the risk of losing their survey responses.

This study utilized a convergent mixed methods design such that the qualitative data and quantitative data were collected simultaneously from participants with the qualitative questions preceding the majority of quantitative questionnaires in temporal order, except for a screener questionnaire on ADHD. The qualitative analyses and

results were conducted and finalized first, followed by the quantitative analyses and results. The results from the two methods were then compared and discussed in relation to each other.

2.3. Measures

2.3.1. Demographics Questionnaire

Participants were asked a number of questions related to general participant characteristics (e.g., gender identity, race/ethnicity, language used at home, employment/education status, and annual family income), ADHD diagnosis subtype (i.e., predominantly inattentive, predominantly hyperactive-impulsive or combined), recent treatment, and co-occurring mental health conditions and medical conditions (see Table 1 above).

2.3.2. Adult ADHD Self-Report Scale (ASRS-18) Symptom Checklist

The 18-item Adult ADHD Self-Report Scale (ASRS-18) Symptom Checklist, rated on a 4-point Likert scale (0 = *Never*; 4 = *Very often*) with scores ranging from 0 to 72, was used to measure ADHD traits, with a higher total score indicating more ADHD traits (Kessler et al., 2005). The scale measures symptoms of ADHD, including inattention, hyperactivity and impulsivity. The ASRS-18 total score has high internal consistency ($\alpha = .88$; Adler et al. 2006) and test-retest reliability ($r = .86$; Matza et al. 2011). Reliability analyses revealed that the ASRS-18 had good internal consistency in the current sample ($\alpha = .83$).

2.3.3. Social Camouflaging ADHD: Qualitative Questions

Eight questions adapted from Hull et al. (2017) were used to explore social camouflaging in ADHD. To begin, participants were asked: "Have you ever had the experience of 'camouflaging', 'masking', or hiding your ADHD from others?" (*yes/no*) which was followed by a description of 'camouflaging': "In this survey, we use the term 'camouflaging' to refer to coping skills, strategies, and techniques that function to "mask" features of ADHD during social situations". Those who responded 'yes' to this question were directed to seven open-ended questions exploring situations, strategies,

motivations and consequences of camouflaging (see Appendix A), while those who responded 'no' were redirected to the SIAS-6 questionnaire. These qualitative questions were originally constructed by Hull et al. (2017) and were used to explore camouflaging in autistic adults. The qualitative findings from this study were later utilized to derive a quantitative scale for measuring camouflaging autistic traits (*CAT-Q*; Hull et al., 2019). The success of these past studies demonstrates the usefulness of these questions for the initial exploration of camouflaging in the current population of adults with ADHD.

Considering that this study was conducted during the Coronavirus (COVID-19) pandemic, there was a reduction in face-to-face social situations during this time, so when responding to the qualitative questions on social camouflaging we asked participants to “think about their social interactions (virtual and face-to-face) both now and before the pandemic”. By framing the question in this way, we measured social camouflaging as a trait-like behavioural strategy employed over a long period of time to capture social camouflaging in both pandemic and non-pandemic circumstances. This was an important measure to take to avoid introducing systematic variance in the data from continuously changing government restrictions over the multiple months of data collection, and to improve the external validity of the findings beyond the current context of the pandemic.

2.3.4. Frequency of Social Camouflaging ADHD

Six items adapted from Cage and Troxell-Whitman (2019) were used to assess the frequency of social camouflaging ADHD in different social contexts (e.g., in public, with friends, online etc.) using a 5-point Likert scale (1 = *Never*, 5 = *Always*) (see Appendix B). The internal consistency of the scale in the current sample was strong ($\alpha = .89$).

2.3.5. Autism-Spectrum Quotient (AQ)

The Autism-Spectrum Quotient (AQ; Baron-Cohen et al., 2001), a 50-item self-report questionnaire, was used to measure autistic traits, with items rated on a 4-point Likert scale (1 = *Definitely Disagree*, 4 = *Definitely Agree*) with applicable reverse scoring. Considering the overlap between ADHD traits and autistic traits, the AQ was used to describe the average level of autistic traits present in the current sample. The

AQ yields five theoretically derived subscale scores: Social Skills, Attention Switching, Attention to Detail, Communication, and Imagination, as well as a total score, ranging from 50 to 200, with higher scores indicating greater levels of autistic traits. Baron-Cohen and colleagues (2001) originally proposed a dichotomous scoring method (agree/disagree scored as 1/0) for the AQ to identify individuals with clinical levels of autistic traits; however, a continuous Likert scoring method, with scores ranging from 50 to 200, has been growing in popularity in recent years as it retains important details (Cath et al., 2008) and improves internal consistency and test-retest reliability (Stevenson & Hart, 2017). The continuous scoring method was utilized in the current study for statistical analyses and the dichotomous scoring method was utilized for categorization of participants with clinically significant levels of autistic traits. Moreover, the AQ using both the continuous and dichotomous scoring method has also been validated for use among non-autistic adult populations and demonstrated good internal consistency ($\alpha = .79$; $\alpha = .74$, respectively) and test-retest reliability ($r = .78 - .90$; $r = .70 - .93$, respectively) in these studies (Stevenson & Hart, 2017). In the current sample, the internal consistency of the AQ using the continuous scoring method and dichotomous scoring method was high ($\alpha = .88$; $\alpha = .84$, respectively).

2.3.6. Internalized Stigma of Mental Illness – Brief version (ISMI-10)

The ISMI-10, a ten-item self-report questionnaire, was used to measure internalized stigma of ADHD, with items rated on a 4-point Likert scale (1 = *Strong disagree*, 4 = *Strongly agree*) ($\alpha = .75-.81$) (Boyd et al., 2014). The internal consistency of the ISMI-10 in the current sample was good ($\alpha = .74$). To assess and describe the level of internalized stigma in the current sample, total scores were divided by the number of items (i.e., 10) which resulted in transformed total scores ranging from 1.00 to 4.00. Following the 2-category method, scores above the midpoint (i.e., at or above 2.51) indicated high internalized stigma and scores at or below 2.50 did not indicate high internalized stigma (Boyd et al., 2014; Lysaker et al., 2007; Ritsher & Phelan, 2004).

2.3.7. Social Interaction Anxiety Scale – Short Form (SIAS-6)

The SIAS-6, a six-item self-report questionnaire, was used to measure social anxiety with items rated on a 5-point Likert scale (0 = *Not at all characteristic or true of me*, 4 = *Extremely characteristic or true of me*) (Peters et al., 2012). Using a clinical cut-

off point of 7 or higher, the SIAS-6 has shown to be an excellent predictor of social anxiety disorder (sensitivity, 84.89%; specificity, 97.67%; AUC, .97) (Peters et al., 2012). The internal consistency of the SIAS-6 in the current sample was good ($\alpha = .79$).

2.3.8. Generalized Anxiety Disorder (GAD-7)

The GAD-7, a seven-item self-report questionnaire, was used to measure generalized anxiety experienced within the last two weeks, with items rated on a 5-point Likert scale (0 = *Not at all*, 4 = *Nearly every day*) (Spitzer et al., 2006). Using a clinical cut-off point of 10 or higher, the GAD-7 has very good sensitivity (89%) and specificity (82%) for detecting generalized anxiety and excellent internal consistency ($\alpha = .92$) (Spitzer et al., 2006). Similarly, the internal consistency of the GAD-7 in the current sample was strong ($\alpha = .86$).

2.3.9. Patient Health Questionnaire (PHQ-9)

The PHQ-9, a nine-item self-report questionnaire, was used to measure depression experienced within the last two weeks, with items rated on a 5-point Likert scale (0 = *Not at all*, 4 = *Nearly every day*) (Spitzer et al., 1999). Using a clinical cut-off point of 10 or higher, the PHQ-9 has very good sensitivity (88%) and specificity (88%) for detecting major depression and strong internal consistency ($\alpha = .89$) (Kroenke et al., 2001). Similarly, the internal consistency of the PHQ-9 in the current sample was also strong ($\alpha = .85$).

2.4. Qualitative Data Analysis

2.4.1. Theoretical Orientation

Falling within the branch of interpretivism, encompassed by the overarching pragmatic framework of the current study, this qualitative research adopted a phenomenological theoretical orientation. Based on the philosophical tradition put forth by Edmund Husserl (1859-1938), the aim of phenomenology is to understand and describe the essence of a phenomenon through the perspective of individuals with lived experience (Giorgi, 2009; Moustakas, 1994). Phenomenology asserts that there are multiple socially constructed realities, but there are shared features among lived

experiences that constitute the essence of the experience or phenomenon (Bhattacharya, 2017). A phenomenological approach is particularly well suited for mixed-methods research because it is flexible and has some epistemological and axiological parallels with more objective, post-positivist inquiries used in quantitative methods (Mayoh & Onwuegbuzie, 2015). For example, in contrast to other qualitative approaches, both phenomenology and post-positivist inquiries aim to systematically explore and uncover commonalities across experiencers and actively work to reduce researcher biases to protect the validity of findings (Mayoh & Onwuegbuzie, 2015). Given that our aim was to describe and understand the phenomenon and meaning of social camouflaging in adults with ADHD, a phenomenological theoretical approach was ideal, while also pragmatic and compatible with the quantitative component and larger scope of the current study.

2.4.2. The Intersection of Identities: Neurodivergent, Sexual, and Gender Identities

As previously mentioned, the characteristics of the current sample mirrored the multi-faceted identities shown to exist in the broader population of adults with ADHD as 17.6% of participants in the current study identified as autistic, 54.5% identified having a minority sexual identity, and 16.8% identified as gender diverse, transgender or Two Spirit.

In the current study we specifically set out to understand the experience of camouflaging the traits and identity of ADHD; however, identity does not exist in a vacuum. All humans have unique identities that interact and intersect to shape their behaviours and experience; thus, it is difficult and incomplete to examine behaviours linked to one identity without also recognizing how the behaviours are linked to other identities that are experienced simultaneously. Crenshaw (1989) first proposed the concept of intersectionality to explain how marginalization is experienced at the intersection of different identities. From an intersectional framework, we cannot understand the experience of camouflaging an ADHD identity without also considering how the identity of ADHD intersects with other identities, including minority sexual identities, gender diverse identities and other neurodivergent identities (e.g., autistic identity) to influence camouflaging motivations, behaviours, and consequences. In the current study, we asked participants about camouflaging ADHD specifically, in order to

conceptually examine an “isolated” phenomenon through a phenomenological framework with a flavour of post-positivism emerging as a result of conducting a mixed-methods study. Responses were provided about ADHD-specific camouflaging strategies, motivations, and consequences regardless of individuals’ other identities. For instance, participants who self-identified as autistic still spoke about their experience of camouflaging *ADHD* specifically. From a post-positivist framework, isolating a phenomenon in this manner increases validity and reliability. However, from an intersectional framework, focusing on one singular facet of identity limits our understanding of the true human experience. The focus on one facet of identity, ADHD, in the qualitative inquiry of the current study initiates exploration, but does not capture the complete experience of participants, which is one important limitation. Given the growing body of work indicating the overlap between sexual and gender diverse identities and neurodivergent identities, future research in this area should explore the experience of social camouflaging specifically in those who have multiple diverse identities.

2.4.3. Thematic Analysis

Within the phenomenological approach, the specific method of thematic analysis was conducted in NVivo 12 (QSR International, released in March 2020) to identify patterns (i.e., themes) inductively within the qualitative data (Braun & Clarke, 2006). The thematic analysis followed the six phases outlined by Braun and Clarke (2006) (see Figure 1). After reading through the data to get a general feel for it (phase 1), initial coding began by reading through the raw data line-by-line and noting interesting ideas and content systematically (phase 2). While the research questions were derived from past theory and research, the coding was data-driven, such that I gave full and equal attention to each data item which then formed the basis of broader repeated themes. No exclusionary restrictions were set for coding, such that segments of data were coded once or multiple times as relevant because one data segment may encompass multiple ideas and thus fit into a number of different themes. Importantly, inconsistent accounts that were contradictory to the emerging patterns were noted and included as codes. Once a completed list of codes had been generated and saturation had been reached, the codes were collated into themes marked by shared characteristics (phase 3). Next, the themes were reviewed in relation to the coded data extracts to assess whether the

themes accurately captured the data and provided a coherent pattern (phase 4). At this stage, smaller themes were grouped together under broader themes. Then, themes were defined and named to capture the essence of the data as described by participants and categorized into two levels of superordinate themes and subthemes (phase 5) (Braun & Clarke, 2006). These themes were exhaustive and representative of the content they contained (Merriam & Tisdell, 2015). Finally, the results were written up, and inconsistent accounts were included to ensure the nuance and depth of the data was not lost (phase 6).

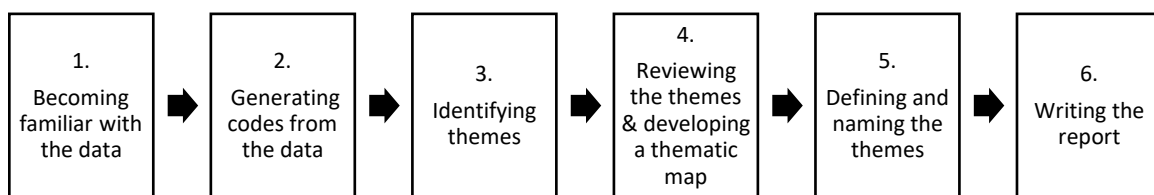


Figure 1. Six Phases of Thematic Analysis (Braun & Clarke, 2006)

2.5. Trustworthiness

2.5.1. Thematic Validity

An iterative process was used to ensure the credibility (internal validity) and trustworthiness of the thematic analysis. The conformability (objectivity) of the qualitative analysis was strengthened through systematic coding of the data and collaboration between researchers during the analysis process (Morrow, 2005). The extraction of themes from various codes were compared between two different investigators to ensure the themes were valid in relation to the codes and the larger dataset and were consistent and reliable between investigators. Inconsistencies are expected to occur between two researchers, as different researchers may differ in their interpretations of patterns and the way they group ideas together (Byrne, 2022). When inconsistencies emerged between myself and my colleague, a reflexive and collaborative discussion was held to examine our interpretations and resolve the inconsistency through the additional insight obtained from the discussion (Braun & Clarke, 2019). Moreover, an audit trail of detailed memoing and journaling was conducted throughout the research process.

Notes, thoughts, and insights were recorded in time-stamped memos as a way to track ideas, interpretations, self-reflections and assumptions.

To check the face validity of the themes, five participants who provided consent to be recontacted were randomly selected and asked to review and provide feedback on the resultant themes – a process called ‘member checking’. Three participants responded and participated in this process. They confirmed the veracity of the derived themes in relation to their own lived experience, as well as in relation to the broader group experience of adults with ADHD. These participants also provided additional thoughts and comments about the themes and how they play out in their own life. Upon receiving this feedback, themes were finalized. The entirety of the qualitative analysis was conducted and completed first, before analyzing any of the quantitative data, with the exception of generating descriptive statistics on the demographics of the sample. This was to ensure that the results of the quantitative analyses did not bias the researchers’ interpretations of the qualitative data. Since this was the temporal order of procedures taken, the qualitative results are reported prior to the quantitative results, and the qualitative findings are discussed prior to the quantitative findings.

2.5.2. Positionality and Researcher Bias

When conducting qualitative research, it is essential for me to acknowledge how my own social positioning and beliefs may affect my research. In regard to my positionality, I am an able-bodied, white settler, cis-woman, middle-class, graduate student. Although I have clinical experience working with clients with ADHD and personal relationships with folks with ADHD, I do not have ADHD myself. Thus, I approach my work from an outsider perspective and from a position of privilege. As a clinical psychology student with a background in social psychological research, I personally adhere to the social model of disability. I acknowledge that difficulties of ADHD result from living within a social system that is not constructed to accommodate the neurobiological differences of ADHD and from society’s unwillingness to accept those considered non-normative and the resultant barriers, exclusion, and stigmatization that follow (Haegele & Hodge, 2016). ADHD is also associated with intrapersonal differences independent of social factors, such as difficulties with attentional control and emotion regulation; however, all neurotypes have strengths and weaknesses, and the

decision to deem some neurotypes as “disabling” is determined by societal systems, structures, norms and expectations.

A core element of phenomenological research is the process of ‘bracketing’ also called ‘phenomenological reduction’ (Finlay, 2014; Giorgi, 2009). Originally, in the purist or idealist form of bracketing, the researcher was thought to be able to step outside their subjective experience and ego in a process called ‘transcendental phenomenological reduction’ (Husserl, 1970). Although this process is widely recognized as unachievable and impracticable, current researchers recommend a modified form called ‘psychological phenomenological reduction’ whereby the researcher identifies, acknowledges and temporarily suspends and sets aside previous experiences and personal preconceptions concerning the psychological phenomenon to accurately understand and describe the phenomenon from the participants’ perspective (Giorgi, 2009). For instance, it is critical that I temporarily set aside my previous understandings of camouflaging *autism* as described in the literature, so these understandings do not interfere or bias my analysis and interpretations of camouflaging *ADHD*. Thus, awareness of my positionality, theoretical views, and previous understandings was a critical and essential first step that was followed by continuous reflexivity and bracketing (e.g., reflexive journaling and perspective-taking) throughout the research process to ensure my analyses and interpretations were inductively derived and relatively free from subjective biases.

2.6. Quantitative Data Analysis

Descriptive and statistical analyses were conducted using SPSS version 25.0 (Armonk, NY: IBM Corp). Three hierarchical multiple regression analyses were conducted to test whether the frequency of social camouflaging ADHD and the interaction between social camouflaging and internalized stigma were related to social anxiety (SIAS-6) (Model 1), generalized anxiety (GAD-7) (Model 2), and depression (PHQ-9) (Model 3), while controlling for the effects of age, gender, and ADHD traits. Age, gender, and ADHD traits were entered at Step 1, social camouflaging was added at Step 2, internalized stigma was added at Step 3, and the interaction term was added at Step 4 for each separate model.

Assumptions of normality of errors and homoscedasticity were assessed. To check the integrity of the data, various diagnostics were assessed, including

multicollinearity. To control for multiple comparisons and thus the inflation of Type I error rate (i.e., family-wise error rate), a Bonferroni correction was employed by dividing my alpha value ($\alpha = .05$) by the number of models tested ($\alpha' = .05/3 = .017$).

2.6.1. Preliminary Analyses

Considering that differences in ADHD medication-use might impact camouflaging frequency and mental health difficulties (e.g., medication use may reduce the need for camouflaging while also reducing mental health difficulties), preliminary analyses were run to check whether medication-use was significantly correlated to the outcome variables. If so, then medication-use would be built it into the regression models as an interaction term and main effect.

Chapter 3. Results

3.1. Descriptive Results: Do people with ADHD camouflage in social situations?

The vast majority of the sample, specifically 91.6% of participants ($n = 185$), reported camouflaging their ADHD in social situations, at least sometimes (see Table 1 above). Engagement in some degree of camouflaging was relatively consistent across ADHD subtypes, as 88%, 88.9%, and 95.3% of those diagnosed with the Predominantly Inattentive Subtype, Predominantly Hyperactive/Impulsive Subtype, and Combined Subtype endorsed camouflaging, respectively. Furthermore, the average frequency of camouflaging was similar across all three subtypes as well as the unspecified subtype group ($m_{\text{Inattentive}} = 20.10$, $m_{\text{Hyperactive/Impulsive}} = 19.22$, $m_{\text{Combined}} = 21.80$, $m_{\text{Not Sure}} = 21.44$). The descriptive statistics for the variable, frequency of social camouflaging, is outlined in Table 4.

3.2. Qualitative Results: Exploration into Social Camouflaging ADHD

Themes fell into four broad categories to adequately describe the motivations for camouflaging ADHD, the strategies and behaviours used to camouflage, the context they occur in, and the consequences, as specified in research questions 2, 3, 4 and 5. These four broad categories were: Motivations, Strategies, Situations, and Consequences. In regard to Motivations for camouflaging ADHD, the following four themes were identified: *“To seem ‘normal’”, to be liked, to avoid adverse experiences, and it’s necessary: “Camouflaging is a survival tactic”*. In regard to camouflaging Strategies, three themes were identified: *hiding and pretending, suppression, and compensation*. In regard to Situations of camouflaging, five themes were identified: *professional settings, new people, close relationships, large groups, and public spaces*. Finally, in regard to Consequences of camouflaging, eight themes were identified: *facilitates social interactions and outcomes, “I’m in control of perception”, identity disturbance: “I am hiding my true self”, “it’s exhausting”, effects on mental health, reduced closeness and connection, interferes with important cognitive functions, and perpetuates unrealistic expectations and ADHD stigma* (see Table 2).

Themes were derived inductively from the data; therefore, no themes were pre-specified or selected from the literature. The following sections describe the identified themes, as well as the subthemes, thoroughly and are supplemented with raw excerpts from the data to support their credibility. Participants' age and self-identified gender identity are included with excerpts; however, gender identity was omitted in cases where very specific descriptions may threaten participant confidentiality.

Table 2. Identified Superordinate Themes and Subthemes Describing Motivations, Strategies, Situations, and Consequences of Camouflaging ADHD

| Category | Superordinate Themes | Subthemes |
|-------------------------------------|--|---|
| Motivations for Camouflaging | <i>"To seem 'normal'"</i> | To fit in with others To meet societal expectations |
| | <i>To be liked</i> | To make and maintain relationships To improve the experience for others Driven by internalized stigma of ADHD |
| | <i>To avoid adverse experiences</i> | To avoid negative experiences To avoid negative emotions To alleviate anxiety |
| | <i>It's necessary: "Camouflaging is a survival tactic"</i> | To protect against discrimination and stigma Necessary for survival in a "neurotypical society" |
| Camouflaging Strategies | <i>Hiding and pretending</i> | Hiding ADHD traits and avoiding social situations Performing (e.g., pretending to pay attention, be social, organized etc.) Intense monitoring Providing alternative explanations |
| | <i>Suppression</i> | Suppressing verbal impulses (e.g., talking, thoughts, ideas) Suppressing behavioural impulses (e.g., fidgeting, movements) |
| | <i>Compensation</i> | Attention and engagement strategies (e.g., asking questions, socializing via physical activities) Planning ahead (e.g., using tools, overpreparing) Substance use (i.e., prescription medication and illicit drugs) |

| | | |
|---|--|--|
| Situations | <i>Professional settings</i> | n/a |
| | <i>New people</i> | n/a |
| | <i>Close relationships</i> | n/a |
| | <i>Large groups</i> | n/a |
| | <i>Public spaces</i> | n/a |
| Consequences of Camouflaging | <i>Facilitates social interactions and outcomes</i> | n/a |
| | <i>"I'm in control of perception"</i> | n/a |
| | <i>Identity disturbance: "I am hiding my true self"</i> | "I am hiding my true self" "I feel like a fraud" Identity confusion: "I don't know who I am" |
| | <i>"It's exhausting"</i> | Mentally, physically and emotionally taxing Requires considerable effort and resources to sustain |
| | <i>Effects on mental health</i> | Stress Anxiety Depression |
| | <i>Reduced closeness and connection</i> | Reduced connection with others Reduced ability and desire to engage socially |
| | <i>Interferes with important cognitive functions</i> | n/a |
| <i>Perpetuates unrealistic expectations and ADHD stigma</i> | Creates unrealistic expectations Difficulties receiving help and support Perpetuates ADHD stigma | |

3.2.1. Motivations for Camouflaging

"To seem "normal"'"

Many participants described camouflaging in order to "fit in" and "be like everyone else" because they felt different from others and didn't want people to notice these differences.

"i don't want people to notice that i'm different and make fun of me or think less of me." (non-binary, 21)

“As much as I want to overshare about interests, or get out of my seat at inappropriate times, I avoid these things because the last thing I want is to draw attention to myself.” (woman, 24)

A number of participants described that they camouflaged in order to meet societal expectations, follow social norms, and appear “normal”. They felt that their ADHD traits conflicted with social expectations and rules in ways that would draw negative attention to them.

“I've internalized this to understand that there's a role that society expects me to play, and being myself, isn't it. So I camouflage because I know what I want to do is not welcomed or appreciated.” (woman, 31)

“I don't want to be the “weird” person with the incorrect social response - laughing randomly in conversation (yes, I have done this). Generally, I just want to be perceived as normal.” (woman, 22)

To be Liked

It was the belief that fitting in and following social norms increased the chances of being accepted and liked by others which then opens the door to making friends. Once relationships were developed and job positions were granted, camouflaging was used to maintain those relationships and positions. Many participants reported camouflaging in order to be respected and taken seriously as a professional.

“At work, I need to be organised and motivated and so in order to keep my job, I try very hard to act like everyone else on my team.” (woman, 38)

“I have always considered myself intelligent and competent but often felt that others don't see me that way. This leads me to feel a need to mask my symptoms in order to “prove” my competency and intelligence.” (male, 33)

Many participants expressed concern about how they impacted other people and perceived camouflaging as a way to improve the experience for others. Since difficulties with inattentiveness, fidgeting, and forgetfulness can be misinterpreted by others as intentional and can be perceived as “odd”, participants described that they camouflaged

to make others comfortable, and to not “annoy”, “offend”, or “burden” others, or disrespect others by appearing rude or disinterested.

“[It] seems to be easier to mask everything while I’m in public because it makes others more comfortable and it makes me more likeable.” (woman, 16)

“Don’t want friends to think I don’t care when I can’t pay attention or remember all of what they’re saying.” (woman, 27)

“it sucks. i wish it weren’t that i would seem disrespectful or rude if i just let my adhd show.” (non-binary, 16)

Some participants described feeling shame about their ADHD traits and internalizing stigma they have experienced throughout their life. For some participants, the shame and negative self-stereotypes lifted after they were diagnosed and began to understand themselves better.

“Being ADHD but not knowing it meant that I thought I was being lazy, stupid and annoying. I bottled my behaviours and learned to find other ways of expressing them that didn’t show to neurotypical teachers.” (non-binary, 17)

However, a small group of participants described current self-stereotypes related to their ADHD, and their internalized stigma of ADHD was a motivation for camouflaging. They believed that others would not like them or want to spend time with if they revealed parts of themselves linked to their ADHD.

“Failure to me is my ADHD symptoms for example a careless mistake. In my experience my ADHD is my down fall.” (woman, 16)

“...people seeing who I really am and how I really behave and will not want to spend time with me anymore because I’m weird or too much or not ‘normal’.” (non-binary, 28)

“To try and make people hate being around me a little less. In the hopes that maybe someday someone will be annoyed little enough by me that I could maybe have a friend.” (woman, 38)

To Avoid Adverse Social Experiences

Participants explained that they camouflaged in order to avoid a number of negative experiences, such as rejection, criticism, and punishment, and associated emotions, such as feeling embarrassed, fearful, anxious, judged, dismissed, left out, questioned and threatened. Some participants described the negative past experiences they suffered, such as childhood bullying and/or rejection in adulthood, which they viewed as influencing and motivating their current camouflaging behaviours.

“I’ve been alternately teased, mocked, chastised, shunned and scorned throughout my life in countless work, school or social situations when I’ve spoken out of turn or out of context or impulsively or otherwise acted weird or inappropriate. I have a lifetime of shame from these encounters” (woman, 41)

“Since I was little, my family would get mad at me anytime I presented signs of neurodivergency and would often yell at me. Camouflaging would limit the yelling.” (non-binary, 20)

“Had a lot of social ostracization and bullying as a kid, partially because I wasn’t able to mask as well and that’s pretty strongly imprinted into my behaviours and defense mechanisms.” (non-binary, 28)

Of all the negative experiences, the vast majority of participants explained that they camouflaged in order to avoid judgement, criticism and rejection from others. Participants described that they did not want to be negatively judged to be “annoying”, “lazy”, “incompetent”, “weird”, “immature” or “dumb”, among other descriptors, and to be treated differently because of these judgements.

“I fear these people will draw specific attention to any instances where I’m forgetful, late, clumsy, or make a mistake and have frequently experienced that type of judgement and ridicule throughout my life from friends, family, coworkers, and acquaintances.” (male, 33)

“I would rather walk around ‘masking’ and let people think something of me that I have intentionally put together, then walk around being my authentic self and people misinterpreting or not understanding that.” (woman, 25)

"I don't want people to judge me and think I am lazy, because I know they will -- they'll think it's so easy to clean, when really it's a huge mental block that I can't explain. I don't want people to think I'm a mess." (woman, 22)

Some participants viewed camouflaging as a necessary behaviour to alleviate their "anxiety of being othered or judged". They felt that camouflaging gives them a sense of control over social outcomes which provides relief from their anxiety.

"I think that because I have bad anxiety I mask much more and am careful in social situations because I overthink everything and worry so much. My anxiety makes me question all of my actions, so I try to mirror others because it seems right." (woman, 16)

"I am an extremely anxious person so I constantly think that people will judge me if I say or do the wrong thing. I'm terrified that I will expose myself as a wierdo or a bad person, or just generally wrong. I'm afraid that if I show my real self, then people will judge me and it will really hurt." (woman, 24)

It's Necessary: "Camouflaging is a survival tactic"

Many participants viewed camouflaging as a necessary safety measure and a means to protect themselves from mistreatment, discrimination and emotional pain.

"Camouflaging for me is also safe. It's like I have walls built around me." (woman, 17)

"Camouflaging comes out of a feeling of necessity as I am treated differently in a negative way when I don't, but I would much rather not have to." (woman, 26)

"If I mask, I am treated like everyone else and people treat me as equals."
(woman, 23)

There was a level of uncertainty around how others would respond to their ADHD traits, and since there was a perceived risk that others would not accept them and treat them equally as a result of their ADHD traits, many participants opted to camouflage as their default response. One participant captured this uncertainty by stating that it's "*Better to be safe than sorry*". Many participants acknowledged that there is a difficult tradeoff for safety which involves behaving in ways that they wish they didn't have to.

“And because I’m not always certain when my behaviour will be received with compassion and understanding or judgement and contempt, I mask most of my symptoms in social situations (i.e. it’s better to be safe than sorry).” (non-binary, 21)

“I am afraid that if I take off my calm facade, people would not accept me for who I am” (woman, 28)

“Useful? Yes. Do I want to? No. I do it otherwise people don’t take me seriously or believe me or accommodate me.” (non-binary, 30)

“sometimes I feel like there’s a lot of misconception and stigma surrounding ADHD, so people assume the worse or see you as weak or dumb. It’s easier to hide it because of that” (woman, 18)

A number of participants viewed camouflaging as a useful practical necessity to survive in a society that awards and values neurotypical traits with social and career opportunities. It was acknowledged that building connections with others is an essential ingredient for success in modern society and, for many participants, it was felt that camouflaging was required to achieve this.

“I pretend I am neurotypical so I don’t spook people, or make them feel I have poor judgement which will limit my opportunities socially and professionally. It is not just “useful” it is essential for operating in society.” (male, 52)

“I’ve also learned that to be successful — which I need to do so that I can look after myself — I have to act “normal.”” (woman, 41)

“I’ve internalized this to understand that there’s a role that society expects me to play, and being myself, isn’t it. So I camouflage because I know what I want to do is not welcomed or appreciated.” (woman, 31)

One participant spoke about the compounded challenge to gain respect in society when one has multiple intersecting marginalized identities.

“I feel as if to be respected, you have to be neurotypical. As well as being someone who was assigned female at birth, a person of colour and a queer person, you have to work harder than a cis het man would.” (non-binary, 16)

3.2.2. Types of Camouflaging Strategies

Hiding and Pretending

Participants reported engagement in performative behaviours of hiding their ADHD traits from others, pretending to not have ADHD traits, and adopting other characteristics and personas that depart from their true behaviours and experience.

Many participants described hiding ADHD traits and their impact from others, including hiding, fidgeting, disorganization, mistakes, work habits, awkwardness, and money problems. Many participants learnt to fidget discreetly, such as fidgeting with their hands or rings inside their pockets or under the table, moving their toes in their shoes, moving their tongue, biting their lips, grinding their teeth, digging their nails into their hands, and fidgeting with their hands offscreen during virtual meetings. Some participants reported outwardly fidgeting, but in ways that were more socially accepted, such as scrolling on their phone, eating or drinking, and playing with their hair.

“A teacher taught me when I was little that if I need to fidget I can do something hidden like push each toe into my shoe one at a time so no one can see it. I do this a lot and also fidget by counting my teeth with my tongue since no one can see that.” (woman, 24)

Some participants described hiding ADHD traits by diverting focus towards other characteristics they possess, such as humour. Some participants used humour in a self-deprecating manner to lighten the mood or segue into a new topic.

Falling within the category of ‘hiding’, was the avoidance of situations. A number of participants reported that their primary camouflaging strategy was to avoid social situations all together. By not showing up to the social event, they avoided having to actively camouflage, and as a result, they avoided the associated stress of camouflaging.

“My biggest camouflage is not being there in the first place.” (man, 33)

“i isolate myself from situations and people when i’m emotionally overwhelmed and i don’t socialize often at all out of fear of my symptoms becoming evident.”
(woman, 25)

Others employed strategies to limit their social interactions by avoiding specific social situations where they felt camouflaging was required (e.g., work events), arriving late and leaving early to social functions, and incorporating breaks from socializing by sneaking away for a period of time.

Similar to hiding traits perceived to be undesirable, participants also pretended to behave in ways and hold characteristics they perceived to be desirable. A large number of participants reported pretending to pay attention in situations where they were expected to. They described altering their body language and facial expressions by forcing eye contact, smiling, and nodding their head along while also adding indistinct verbalizations, such as “yeah”, “mhm”, “really?”, to appear that they were listening to someone speak, when in reality their mind was somewhere else.

“Pretending that I’m listening by saying “interesting”, “I know what you mean”, “cool”, letting them do all of the talking and I look at them and nod so it looks like I’m paying attention.” (woman, 18)

“Reminding myself to make eye contact, to nod my head, to stop fidgeting, to respond to what they last said to make it sound like I’m listening.” (woman, 29)

Participants also reported a range of other personality traits they tried to embody, for example pretending to be friendly, happy, calm, polite, motivated, and social. A small group of participants described the process of putting on a ‘character’ like an actor/actress. Many participants described mimicking and mirroring others’ behaviours, attitudes, speech patterns and emotions in order to determine the social expectations and how to fit in with others around them.

“I carefully observe the body language and behaviour of others and mimic it. I don’t intend to copy others but I consider myself somewhat of a chameleon and definitely alter my behaviour depending on who I’m with.” (woman, 32)

“I also think I’ve watched and mimicked the ‘appropriate’ social interaction styles of other people often enough that it’s almost like I have a “social face” that I put on” (woman, 41)

“I don’t really know what it means to be « normal » so I try to mimic my coworkers behavior.” (woman, 39)

For certain participants, performative behaviours have become so routine and habitual that they do them without conscious thought. However, for many others, these types of behaviours are performed consciously and require considerable effort and close monitoring of themselves, others and their environment to carry out effectively. Participants reported that they must be hyper-vigilant to their own behaviours and that of others to know when and how to act in a given social situation. This level of monitoring was described as exhausting and anxiety provoking for many.

“i always have to look around and make sure where everything and everyone is, i’m super aware of every movement i make it’s exhausting” (woman, 19)

“I also have to be aware of how much eye contact I’m giving someone and be sure to relax my body so I don’t look unapproachable. I also pay attention to my breathing because I tend to breathe loudly and gasp and sigh a lot, without any intention to convey meaning.” (woman, 30)

Finally, some participants hid their ADHD traits by providing alternative explanations, unrelated to ADHD, for their behaviour after the fact. This was a form of ‘damage control’ if they were unable to hide their behaviour in the moment. For example, participants described reframing their procrastination as a “working style” and their lapses in focus as tiredness or absent-mindedness. Others reported lying and making excuses to hide time management difficulties or forgetfulness when they are late or miss appointments.

Suppression

Other camouflaging strategies included active suppression of both verbal impulses (e.g., talkativeness, interrupting, discussing hyperfixations, and sharing ideas and thoughts) as well as behavioural impulses (e.g., fidgeting, movement needs). Suppression involves inhibiting the expression of an urge which differs from “hiding”

which allows the urge to be expressed, to some degree and form, in a discreet or unnoticeable way. As a camouflaging technique, suppression was thought to be especially harmful to participants overtime as continuous suppression was felt to lead to a buildup of physical and emotional stress in the mind and body.

Suppression took the form of verbal suppression, in which participants camouflaged their ADHD by engaging in minimal talking. Participants were aware of their tendency to be talkative, interrupt others, and finish people's sentences, so they actively withheld from talking, especially in group social settings.

"interrupting was how I made sure not to forget an on-topic thought in conversations (especially prior to being medicated); when I was informed that I interrupted people and that it was annoying, I switched to being as quiet as possible and hoped it passed for mysterious and alluring." (25)

"I will often be silent and listen instead of conversing with people, as I often go off topic or ramble something when I'm in a social setting." (woman, 33)

In other instances, when speaking was expected, it was preferred to speak directly about the given topic and withhold sharing personal thoughts, ideas, feelings, jokes, or interests. Participants felt that discussing personal topics or ideas may threaten the security of their mask and lead them to speak more rapidly with enthusiasm, overshare and reveal their differences.

"I also hold back from releasing any personal information including simple things like what I enjoy as I fear either being viewed strangely or being prompted to talk about my interests (which easily reverts to mindless rambling in excitement)" (non-binary, 18)

"Other times I chat but hold back and only talk about what everyone else wants to about. I suppress a lot when around others, views, ideas, topics, feelings because I know I am so different than others and I don't really fit in if I don't pretend." (woman, 48)

To suppress their urge to speak, a number of strategies were used. Participants described slowing down their speech by taking a moment to pause before responding and speaking at a slower rate and in a lower volume and tone. Others reported

intentionally focusing on something other than the conversation because to them, inattention was easier to mask and recover from than outwardly interrupting someone with an impulsive comment. Some participants reported withholding their urge to speak by writing their thoughts down or silently expressing them through American Sign Language, others described physically clenching their mouth or biting their tongue.

"I clench my mouth shut whenever I feel the impulse to say something." (woman, 22)

Many participants camouflaged by suppressing behavioural impulses, particularly their movement needs, as these behaviours were perceived to be outward expressions of ADHD that set them apart from others and were deemed to be disruptive and distracting to other people. Participants described withholding the urge to fidget or 'stim' (e.g., suppressing the urge to bounce their leg, pick their skin, flap their hands etc.) and forcing themselves to sit still despite the urge to get up and move their body.

"I also try my best to stop my fidgeting, things like bouncing my leg or flapping my hands. That usually doesn't work though, and I end up either chewing up the inside of my mouth, clenching my jaw, or just letting myself fidget outwardly" (17)

"I'm very aware of my body language, I try to be as still as possible to the point it physically hurts in social situations such as in class, out at a restaurant, and even watching a movie with someone." (woman, 20)

A number of specific strategies were described, such as sitting on their hands or holding their hands together in their lap to keep them still, pressing their feet into the floor, and clenching the muscles in their body. One participant described the great length and physical pain she inflicted and endured in order to camouflage her ADHD-related fidgeting during her teenage years.

"In high school I would cut the bottoms of my feet with a razor so when I was in a social situation/class I always had a little bit of grounding and I would realize immediately if I started bouncing." (woman, 20)

Compensation

Another form of camouflaging involved strategies aimed to compensate for ADHD-related difficulties through planning and/or engagement in other behaviours. These strategies fell into the following three categories: attention and engagement strategies, planning ahead, and using substances.

Participants reported exerting extra effort to pay attention and utilized a number of strategies to increase their engagement in social situations. For example, asking a lot of questions, focusing on the face of the person speaking, keeping busy with tasks such as knitting, or arranging social occasions around games, like trivia or physical activities, like running or hiking, were all ways people stayed engaged with others.

Other forms of compensation involved taking steps to plan ahead to reduce the impact and appearance of ADHD traits. Many participants reported using helpful tools and altering external factors to camouflage their ADHD. For instance, participants described using timers, alarms, calendar apps, planners, and recording devices. Others described always having a notepad handy to aid their memory and always having headphones to cancel auditory distractions. One participant described compensating for their disorganization through their physical appearance by dressing in a way that looks “put together”, while others described wearing baggy clothing to hide fidgeting and styling their hair in specific a way to limit hair twirling.

Overpreparing and overworking were other ways participants camouflaged their ADHD traits. Participants described overpreparing for work meetings and job interviews by creating detailed scripts. Participants described overworking at school or at work out of fear of making a mistake, revealing one’s difficulties, or being labelled as “lazy” or “incompetent”. Some participants described their actions as “overcompensating” and becoming “hyper-organized” or “hyper-productive”, and this high level of work often came at the cost of other important needs, including sleep and time with loved ones.

“in school I overcompensated by using the majority of my time to work on school work, so I would still get excellent grades even though it took away from my ability to have a healthy balance of other life aspects.” (woman, 31)

“Preparing detailed scripts for simple meetings (ex- team huddles) so that I don't forget what to say/ don't forget what I'm talking about mid-sentence.” (woman, 27)

A small group of participants described using substances to reduce the impact of their ADHD traits in social situations. A few participants described that their ADHD medication helps camouflage and compensate for some of their difficulties. Others described self-medicating with cannabis or alcohol to reduce anxiety, stress and overstimulation in social situations. While others reported using psilocybin, recreational stimulants, and alcohol to elevate mood and engagement in social situations.

“I use cannabis as a means of camouflaging or masking. It helps to slow my brain down so I'm not tripping over my own words and eases the anxiety I feel from being overstimulated or just general anxiety. It seems to create a protective barrier around me and I can function better. I burnt out less and am able to unwind. But then I'm also kinda stoned so that in itself is a mask.” (non-binary, 30)

“I found in certain social settings (parties etc.) I would drink to make myself more sociable and less anxious. Now that I think of it, drinking was one of my most common camouflaging strategies.” (male, 26)

3.2.3. Situations Where People Camouflage

Camouflaging was reported to be used in a number of different contexts falling within the five broad categories: professional settings, situations with new people, close relationships, large groups, and public spaces. A group of participants described camouflaging in all social situations, and within this group, a few participants reported camouflaging in *all* situations, even when they are alone.

“I find it difficult to stop masking, even when I'm by myself, because the behaviour and expectation is so ingrained in me.” (17)

Professional Settings

Many participants described camouflaging in professional settings, including the workplace, job interviews and other formal or professional settings, like doctor's offices

or funerals. These situations operate under a strict set of social rules and expectations, so camouflaging was highly utilized in order to meet these rules and expectations.

New People

Many participants reported camouflaging in situations with new people they were not yet comfortable with. Camouflaging was seen as a way to make a good impression among new people, including strangers, new friends, or potential romantic partners.

Close Relationships

Some participants described camouflaging in close relationships, including situations with friends, family, roommates, and partners.

“I still mask my disorganization and hyperactivity to my fiancé, and we’ve lived together for 2 years.” (woman, 24)

Large Groups

Many participants reported camouflaging in large groups of people, including family or friend gatherings, parties, weddings, or crowded places.

Public Spaces

Some participants described camouflaging in public spaces, such as at the grocery store, at restaurants, on public transit, on social media, at school, and at church.

3.2.4. Consequences of Camouflaging

Camouflaging had many perceived consequences which can be grouped into two broad categories: positive consequences and negative consequences. Most participants identified multiple consequences of camouflaging acknowledging the complexity of camouflaging and how consequences can differ based on the situational demands.

Facilitates Social Interactions and Outcomes

Similar to the section on ‘Motivations’, many participants reiterated that camouflaging facilitated the development and maintenance of social relationships. Participants highlighted that camouflaging led to more positive and successful interactions which enabled desired social and practical outcomes, such as achieving

success at work, maintaining positive ties to family and friends, and attaining more opportunities.

"I'm able to come across more socially adjusted, and appearing more "normal" provides me with more opportunities." (woman, 24)

"This is difficult to answer. I think it is useful because it has helped me get pretty far in life without anyone noticing my ADHD, which has led to practical advantages like keeping jobs and making friends." (woman, 32)

"I'm in control of perception"

Many participants described how camouflaging led others to perceive them more positively and in a way they desired. For example, camouflaging enabled others to perceive them as 'normal', successful, professional, capable, intellectual, and socially adjusted. By controlling people's perceptions of them, participants felt less anxiety about possible negative judgements.

"It makes me feel that I have some control over my behaviour and also how people see me and what they think about me." (woman, 60)

However, positive sentiments about camouflaging were often described with some ambivalence as participants weighed the perceived positive impacts of camouflaging on their social life with the perceived negative impacts in other important areas of their life, such as their mental health and identity, and many were largely unsure of whether camouflaging was an adaptive strategy overall.

"I guess it detracts from my feeling authentic with others. And adds a worry that I'll be "found out"? Otherwise, I'd say the fitting in thing is the more important and positive impact." (woman, 26)

"Often it helps keep my relationships running smoothly, especially with neurotypical people who just don't understand it but it can also put a wall up between me and the people I know." (21)

"I want to think it's helping and limiting any social damage. But in reality I know it causes other mental health problems for me." (woman, 38)

Identity Disturbance: “I am hiding my true self”

Many participants felt that camouflaging caused them to hide their true self and their personality and was an inauthentic way of living. They felt that people didn't know their true self which was uncomfortable and upsetting for them to acknowledge.

“Masking also makes me feel sad generally when I reflect on it, feeling like I can't truly be myself is sad, my impulses, random rants and burst of energy are a core part of me, concealing them in order to follow social norms feels like I'm covering up myself as a person.” (woman, 22)

“I also wish I was able to be my “true” self around other people because I want them to know the real me.” (woman, 20)

A number of participants described feeling like a “fraud” or “imposter” because they felt untruthful about who they were when they're around others.

“In some ways it feels like I am deceiving people which is not a feeling I like.” (woman, 39)

“It also sets in my mind that in any situation, I do not belong there. In professional situations, it feeds heavily into my imposter syndrome. If I disclose all of myself I will not be accepted.” (man, 32)

A smaller group of participants described how camouflaging has caused them to question their identity and who their “true self” really is. After years of camouflaging and mimicking others, it became difficult to differentiate their own personality from the personalities of those around them leading them to feel disconnected from their true sense of self.

“I've camouflaged for so long that I don't know who I am.” (woman, 17)

“To be honest, I'm not certain where it is that I mask and where it is that I as a person genuinely exist. I'm too caught up in possible perceptions that I hardly introduce an actual person to people. I feel like I am a sim being tasked with the bare minimum of getting through an interaction, meanwhile my mind is racing with every single way I move, speak, hold myself, present myself, etc. Nothing feels genuine, but I don't know what genuine even looks like.” (non-binary, 18)

“It’s exhausting”

The most consistently reported consequence of camouflaging ADHD was that it was mentally, physically and emotionally exhausting. Camouflaging was described to require considerable effort and resources to sustain.

“it’s very very exhausting. It feels like you’re holding your breath or holding yourself back and it’s draining.” (non-binary, 21)

Participants described feeling “drained” and “burnout” after a period of camouflaging, having less cognitive and emotional resources for other areas of functioning and life, and needing time, sometimes days, to recharge and regain their energy.

“On days when I do a lot of camouflaging, I come home exhausted and have no emotional space for my loved ones, homework, or house chores.” (woman, 26)

Effects on Mental Health

Camouflaging was also described to lead to considerable psychological distress in the form of stress, anxiety and depression. Participants described that the pressure to camouflage leads them to feel overwhelmed and stressed both during the social interaction and afterwards. Certain participants described how the physical act of camouflaging strategies, like active suppression of hyperactivity and impulses, led to an accumulation of stress and tension which was experienced in their body through physical pain and discomfort.

“If I try to focus a lot on the way I am presenting myself and consciously trying not to fidget and to make eye contact with the other person, my body will heat up, start tingling and I start to feel dizzy and as though I might pass out.” (woman, 25)

“Additionally, repressing hyperactivity has been difficult for me, and this summer when a job required me to be mostly sedentary (physically and mentally) I developed eczema from the stress for the first time in my life.” (woman, 24)

In addition to stress, many participants described feeling more irritable, tense, grumpy, and angry after a period of camouflaging. One participant described the

metaphor of *spoon theory*, where each spoon represents the amount of physical and mental energy required to carry out a task and people only have a finite number of spoons per day (Miserandino, 2003). The participant explained how they use up many of their “daily spoons” with camouflaging which causes them to “become irritated, grumpy, stressed and tired at the end of the day” (woman, 29). Some participants linked this increase in irritability to fatigue and burnout from camouflaging while others viewed it as an outcome of suppressing their impulses and thoughts.

“I find that I’m very irritable, a trait that I think was heightened by not allowing myself to stim/fidget when I need to, and constantly internalizing what I’m passionate about.” (17)

Similarly, certain participants viewed their experience of anxiety as an outcome of suppressing their fidgeting and ‘stimming’ behaviours.

“since I restrict myself from stimming, a lot of emotional pressure builds up in my mind and it plays into my anxiety and makes me more anxious than I feel I would be if I let myself stim.” (man, 18)

Many participants described experiencing heightened anxiety during social situations, with many also experiencing anxiety before and after the situation has occurred. Having to monitor and be hyper-aware of their behaviours and their surroundings in the moment caused a feeling of anxiety, with some describing it as social anxiety or performance anxiety. Others described feeling anxious before a period of camouflaging because they worried about failing in their camouflaging attempts. Failing in their camouflaging behaviours was viewed as exacerbating problems as it made them feel negative about themselves and made the social situation more difficult. Some participants spoke about the anxiety they felt after a period of camouflaging, as they replayed the situation in their head and worried about whether their behaviours were actually effective.

“There is a lot of stress and anxiety involved in making sure I don’t slip up and let the camouflage fail.” (man, 33)

“If my masking does not actually work, it puts me in a position of feeling even more vulnerable and confused than before.” (woman, 32)

In addition to anxiety, many participants described experiencing depressive symptoms as a result of camouflaging, including low mood, reduced self-esteem, feelings of loneliness and withdrawal from others. Feeling the need to camouflage ADHD traits that are central to their sense of self, negatively impacted many participants' self-esteem. They described feeling 'defective' and shameful about themselves, and many struggled to accept themselves.

"It makes me feel awful, even though I know I am not really the problem it makes me feel like it is ME (as I am, not by choice) who is wrong/broken/defective and deserves this." (woman, 26)

"Not feeling like myself makes me insecure because I guess it kind of puts shame on who I am since I have to "mask" that person." (woman, 20)

"You feel like you have to mask so certain people will accept you and that really impacts your self-esteem and confidence in yourself as a person. You just feel like there's something wrong with you that you need to fix so that people will like you and that's so hard." (woman, 26)

Reduced Closeness and Connection

Although camouflaging was thought to aid in the initial development of social relationships, it was also discussed as a limiting factor on the development of close relationships based on genuine connection and understanding. The vast majority of participants described that camouflaging reduces their ability to connect with others because it prevents them from sharing their true self with others and thus, prevents others from truly understanding them and getting to know them. Because of this, many participants reported having fewer close friends.

"I think it means I never develop a close relationship to people. Since i'm always "wearing a mask" nobody gets to see the true me so nobody can get truly close to me." (non-binary, 21)

"Disadvantages to camouflaging are that I never learned how to let my guard down in social situations and so I have many superficial relationships where I don't feel truly comfortable." (woman, 32)

Many participants believed that camouflaging made others perceive them negatively. They felt that camouflaging strategies they used made them appear 'stand-offish', shy, bored, disinterested, and/or ingenuine in the eyes of others which was not an accurate representation of themselves. Appearing this way to others also made building a genuine connection with others more difficult.

"People think I'm rude, or disinterested when they first meet me because I'm so quiet. But it's just me trying to make sure I don't interrupt, say something without thinking it out first, talk too much, or get too loud." (woman, 18)

"I just become a wallflower because I don't know how to act and I don't want to draw attention to myself." (woman, 32)

For some participants, camouflaging was seen as a helpful short-term strategy to allow them to eventually fade out their camouflaging behaviours. Some participants described this strategy to be effective; however, some participants reported that changing their behaviours with friends caused the relationships to fall apart.

"As I started to stop masking more and more, I had some relationships end as some individuals believed I was "full of it" and making excuses for myself." (man, 39)

"I am capable of appearing capable. To my own detriment because then when things fall apart people feel like I tricked them or lied to them about who I am." (woman, 39)

For many participants, the exhaustion and stress of camouflaging limited the amount of socializing they were capable of tolerating as well as the amount they desired. As a result, many participants described not enjoying socializing and withdrawing socially.

"It can be exhausting which means I run out of social energy sooner and can't socialize as long" (woman, 24)

"it makes me want to socialize less and less because it's too exhausting and labour intensive for me to keep up all the time" (male, 18)

“Restraining yourself too much in social situations so you can’t enjoy them and don’t participate” (woman, 32)

Interferes with Important Cognitive Functions

Many participants reported that engagement in active camouflaging behaviours, which require considerable cognitive resources to carry out, interfered with important cognitive functions in a number of areas, including attention, concentration, and memory, as well as their ability to participate in discussions and complete work. A core camouflaging strategy was to pretend to pay attention to others by altering facial expressions and non-verbal cues; however, by focusing intensely on these actions, individuals were less able to pay attention to, and process, the content being communicated as a result.

“It is very mentally exhausting and makes my other ADHD symptoms worse. I’m spending so much energy trying to appear normal that I end up having a harder time concentrating, remembering things, staying focused etc.” (woman, 30)

“Focusing on making eye contact so that they know I’m listening, but being too focused on making eye contact and not hearing anything they say.” (woman, 16)

This pattern was identified in many different situations. For example, participants found that suppressing forms of hyperactivity and impulsivity, such as fidgeting or interrupting, interfered with their ability to focus and stay present in the conversation.

“But, in the case of stopping myself from bouncing my leg because I don’t want people to make fun of me or think that I am nervous, it is not useful, as fidgeting often helps me focus on the task at hand.” (woman, 22)

“I guess it takes more mental energy. For people with ADHD who already have such a hard time focusing, it’s an extra distraction from the task at hand to monitor your ADHD traits and suppress them. Like if in in a meeting and start thinking about avoiding interrupting, then I am not thinking about the meeting anymore.” (woman, 24)

Participants discussed how the act of camouflaging can actually exacerbate problems often associated with ADHD by making them more prone to missing key

information they need or care about and making more mistakes. Others noted how the cognitive demands of camouflaging interfered with their ability to be present, listen, engage and enjoy the social interaction which can make the overall quality of the social interaction poorer.

“It impacts because, I will nod my head like I understand but have no idea what was just said which leads me to making mistakes.” (man, 38)

Perpetuates Unrealistic Expectations and ADHD Stigma

Camouflaging was thought to restrict the degree of understanding and support participants received from other people in their life. Many participants described how camouflaging led people in their life to develop expectations of them based on the version of themselves they presented when camouflaging. As a result of these expectations, participants reported that people were often even more judgmental and dismissive of their difficulties when they were expressed or when they failed to continue to meet the expectations over time.

“Also I think that camouflaging means it is a bigger deal to other people when i do talk too loudly or flap or something because it is so out of what they consider ordinary for me based on our previous interactions. I think sometimes this makes peoples reactions harsher or more judgey because they already have a standard for you and if they haven't seen you act like this before they can't comprehend why you are acting like it now.” (woman, 20)

“People judge you by neurotypical expectations and then jump on you when you inevitably falter.” (woman, 30)

Many participants reported that because of camouflaging, their ADHD was not taken seriously by family, friends, teachers or mental health professionals and camouflaging made it much more difficult to ask for and receive the help they needed.

“People think I don't have problems or that I've made up my diagnosis. My entire family thinks since I am successful in many areas of my life, I am just lazy when it comes to executive functioning” (woman, 26)

“Camouflaging delayed professional treatment that is much more likely to be successful in the long-term” (woman, 24)

“When accessing disability accommodations at school, I have been denied accommodations because I don’t look disabled enough.” (woman, 29)

Camouflaging ADHD traits was also discussed to have large group-based social implications. Camouflaging was thought to send a negative message about ADHD to others, and society at large, by deeming ADHD traits as unacceptable and deserving of being hidden.

“It Immediately puts ADHD into a negative category, something to be ashamed of, something to hide.” (male, 32)

As a result, a number of participants believed that camouflaging perpetuates stigma associated with ADHD. By camouflaging ADHD traits in social situations, people are not exposed to these traits as often and thus, are less likely to learn about and begin to understand ADHD, especially as it exists in adulthood. Moreover, by camouflaging ADHD traits in order to pass as neurotypical, many felt that they were conforming to and perpetuating ableism which further harms them and others with ADHD.

“Camouflaging is important for a lot of people in order to succeed professionally and socially, but I believe the need to camouflage is rooted in ableism. The more we hide from neurotypical people, the less they understand, help, or connect with us.” (woman, 28)

“The more you hide from other people, the more you are unable to normalize ADHD symptoms, the more you alienate yourself from other people who may be feeling the same way.” (woman, 31)

A table describing the number of participants who referenced each of the above themes at least once is outlined in Appendix D.

3.3. Quantitative Results: Testing the Relationships between Social Camouflaging ADHD, Internalized Stigma, and Mental Health Difficulties

3.3.1. Descriptive Statistics

Table 3 presents the descriptive statistics for the main variables in this study.

Table 3. Descriptive Statistics

| | Mean | SD | Min | Max |
|--|--------|-------|-----|-----|
| Age | 29.20 | 10.83 | 16 | 73 |
| ASRS-18 Total Score | 51.19 | 9.03 | 13 | 70 |
| AQ Continuous Total Score | 129.90 | 18.54 | 67 | 185 |
| AQ Dichotomous Total Score | 27 | 7.75 | 7 | 48 |
| Frequency of Social Camouflaging Total Score | 20.90 | 5.40 | 6 | 30 |
| ISMI-10 Total Score | 19.67 | 4.46 | 10 | 33 |
| SIAS-6 Total Score | 11.65 | 5.30 | 0 | 23 |
| GAD-7 Total Score | 11.84 | 5.29 | 0 | 21 |
| PHQ-9 Total Score | 13.13 | 6.23 | 0 | 27 |

Note. $N = 202$

Abbreviations: *SD*, Standard Deviation; *ASRS-18 Total Score*, Adult ADHD Self-Report Scale Total Score; *AQ Continuous Total Score*, Autism-Spectrum Quotient Total Score using the continuous scoring method; *AQ Dichotomous Total Score*, Autism-Spectrum Quotient Total Score using the dichotomous scoring method; *ISMI-10 Total Score*, Internalized Stigma of Mental Illness Total Score; *SIAS-6 Total Score*, Social Interaction Anxiety Scale – Short Form Total Score; *GAD-7 Total Score*, Generalized Anxiety Disorder Scale Total Score; *PHQ-9 Total Score*, Patient Health Questionnaire Total Score.

In the current sample, 97% of participants ($n = 196$) scored at or above the clinical cut-off score of 35 on the ASRS-18, which indicates the presence of ADHD with strong sensitivity (0.80) and specificity (0.88) (Kessler et al., 2005; Brevik et al., 2020).

Given the considerable diagnostic overlap between autism and ADHD, autistic traits were assessed in the sample using the Autism Quotient (AQ) dichotomous scoring method, with scores ranging from 0 to 50, to describe the proportion of participants who demonstrated clinically significant levels of autistic traits. In the current sample, 30.2% of

participants (n = 58) scored at or above the clinical cut-off score of 32 on the AQ, indicating clinically significant levels of autistic traits with strong sensitivity (.79) and specificity (.98) (Baron-Cohen et al., 2001).

In the current sample, 7.3% of participants (n = 14) reported high internalized stigma of ADHD as indicated by total transformed scores at or above 2.51 (Boyd et al., 2014; Ritsher & Phelan, 2004).

3.3.2. Correlation Analysis

Table 4 presents the Pearson correlations between all main variables.

Table 4. Correlations among all variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------------------|---------|-------|--------|--------|--------|--------|-------|--------|--------|----|
| 1. Age | - | | | | | | | | | |
| 2. Gender | -.073 | - | | | | | | | | |
| 3. ADHD Traits | -.032 | .076 | - | | | | | | | |
| 4. Autistic Traits | .003 | .200* | .252** | - | | | | | | |
| 5. Freq. Social Camouflaging | -.013 | -.030 | .386** | .180* | - | | | | | |
| 6. Internalized Stigma | .014 | .085 | .288** | .358** | .306** | - | | | | |
| 7. Medication Use | .099 | -.088 | -.073 | -.039 | -.104 | -.076 | - | | | |
| 8. Social Anxiety | -.136 | .125 | .209** | .704** | .312** | .444** | -.070 | - | | |
| 9. Generalized Anxiety | -.176* | .039 | .392** | .283** | .227** | .301** | .031 | .284** | - | |
| 10. Depression | -.252** | .090 | .287** | .224* | .092 | .292** | .008 | .256** | .642** | - |

Note. **ADHD Traits:** Adult ADHD Self-Report Scale (ASRS-18) Symptom Checklist Total Score; **Autistic Traits:** Autism-Spectrum Quotient (AQ) Continuous Total Score; **Freq. Social Camouflaging:** Frequency of Social Camouflaging ADHD Total Score; **Internalized Stigma:** Internalized Stigma of Mental Illness – Brief version (ISMI-10) (in reference to ADHD) Total Score; **Social Anxiety:** Social Interaction Anxiety Scale - Short Form (SIAS-6) Total Score; **Generalized Anxiety:** Generalized Anxiety Disorder (GAD-7) Total Score; **Depression:** Patient Health Questionnaire (PHQ-9) Total Score.

* $p < .017$; ** $p < .001$ (2-tailed)

3.3.3. Results of Preliminary Analyses

The majority of the sample (78.7%) reported current use of prescription medication to treat their ADHD. Correlations between medication use and the main outcome variables were examined to determine whether medication use was an important predictor to include in the three hierarchical regression models. Medication use was not significantly correlated to any of the outcome variables, and thus was not included in the three focal regression analyses (see Table 4 above).

3.3.4. Results of Hierarchical Regression Analyses

Before variable total scores were computed in SPSS, relevant items were reverse coded, and the data was checked for missing values. For cases where there were less than 20% of the items missing in a subscale, the existing items were averaged, and the average score was manually inserted into the dataset in place of missing items. For cases where there were more than 20% of the items missing in a particular subscale, a total score was not created. There were 13 cases that were missing responses on all items of multiple measures, including measures used to assess the three primary outcome variables (i.e., the SIAS-6, GAD-7, and PHQ-9). These 13 cases were excluded from analyses as missing data within variable total scores were handled using listwise deletion. Thus, the hierarchical regression analyses were conducted on a total of 189 participants ($N = 189$).

For each hierarchical multiple regression analysis, with an estimated small effect size ($f^2 = .07$) (Cohen et al., 2003; Hull et al., 2021), a Bonferroni corrected alpha value of .017, and 6 predictors in the model, our sample size of 189 gave us a Power estimate of .82 using statistical software G*Power 3.1 (Faul et al., 2007).

Three hierarchal multiple regression analyses were conducted to test whether the frequency of social camouflaging ADHD traits and the interaction between social camouflaging and internalized stigma were related to social anxiety (SIAS-6) (Model 1), generalized anxiety (GAD-7) (Model 2) or depression (PHQ-9) (Model 3), while controlling for the effects of age, gender, and ADHD traits. For all three regression analyses, a four-step procedure was used. Control variables of age, gender, and ADHD traits were entered at Step 1, social camouflaging was entered into Step 2, internalized

stigma was entered into Step 3, and the two-way interaction term between social camouflaging and internalized stigma was entered into Step 4 for each separate model. To create the interaction term, the two relevant variables were mean centered first to reduce multicollinearity between the interaction term and the predictor variables (Aiken & West, 1991).

Assumption Checking

For all three linear regression analyses, relevant assumptions were met. All hierarchical regressions met the assumption of linearity, as assessed by a plot of studentized residuals against unstandardized predicted values and by partial regression plots between each independent variable and dependent variable. There was independence of the residuals as all Durbin-Watson statistics were within the acceptable range from 1.50 to 2.50, and there was homoscedasticity of residuals, visually assessed through inspection of a plot of studentized residuals versus unstandardized predicted values. The data was formally checked for unusual scores, including outliers, high leverage points, and influential cases by assessing a number of statistics in relation to critical cut points (i.e., studentized deleted residuals, leverage values, Cook's Distance) and no unusual scores were detected. There was no multicollinearity, as none of the independent variables have correlations greater than 0.7 (see Table 4) and VIF values were all well below 10. Finally, the residuals for all three models were normally distributed, as assessed visually by Normal P-P Plots of regression standardized residuals and Normal Q-Q Plots of the studentized residuals.

Social Anxiety

A hierarchical multiple regression analysis was conducted to test Model 1 with social anxiety as the outcome variable. Step 1 of the model indicated that age, gender, and ADHD traits significantly predicted social anxiety scores (Adjusted $R^2 = .056$, $F(3, 185) = 4.739$, $p = .003$). The addition of social camouflaging total scores in Step 2 led to a significant increase in R^2 of .067 (Adjusted $R^2 = .120$, $F(4, 184) = 7.380$, $p = .000$), therefore accounting for an additional 6.7% of the variance in social anxiety. Adding internalized stigma of ADHD total scores to the model in Step 3 also led to a significant increase in R^2 of .118 (Adjusted $R^2 = .236$, $F(5, 183) = 12.630$, $p = .000$), indicating that internalized stigma of ADHD accounted for an additional 11.8% of the variance in social anxiety. Finally, the addition of the interaction term between social camouflaging and

internalized stigma of ADHD in Step 4 did not lead to a significant change in R^2 (Adjusted $R^2 = .243$, $F(6, 182) = 11.035$, $p = .000$), indicating that the interaction term did not improve the overall fit of the model. Overall, the initial model with only the control variables (i.e., age, gender, and ADHD traits) accounted for 5.6% of the variance in social anxiety, whereas the final model, with all six variables, accounted for a total of 24.3% of the variance in social anxiety scores; see Table 5.

These findings supported hypothesis 1, as a higher frequency of social camouflaging significantly predicted greater social anxiety, over and above the effects of age, gender, and ADHD traits ($\beta = .281$, $p = .000$). As expected, greater internalized stigma of ADHD significantly predicted greater social anxiety, over and above the effects of age, gender, ADHD traits, and social camouflaging ($\beta = .371$, $p = .000$). However, unexpectedly, the interaction between social camouflaging and internalized stigma did not significantly predict greater social anxiety ($\beta = .117$, $p = .113$).

Table 5. Hierarchical regression model predicting social anxiety (Model 1) from age, gender, ADHD traits, frequency of social camouflaging, internalized stigma of ADHD and interaction between social camouflaging, and internalized stigma ($N = 189$)

| Predictor | <i>B</i> | <i>SE</i> <i>B</i> | β | <i>t</i> | <i>F</i> | <i>p</i> | Adj. <i>R</i> ² | ΔR^2 | ΔF |
|--------------------------------|----------|-----------------------|---------|----------|----------|----------|-------------------------------|--------------|------------|
| Model 1: Social Anxiety | | | | | | | | | |
| Step 1 | | | | | 4.739** | .003 | .056 | .071 | 4.739* |
| Age | -.060 | .034 | -.125 | -1.758 | | | | | |
| Gender | .622 | .417 | .106 | 1.491 | | | | | |
| ADHD Traits | .114 | .041 | .197* | 2.768 | | | | | |
| Step 2 | | | | | 7.380** | .000 | .120 | .067 | 14.282** |
| Age | -.060 | .033 | -.125 | -1.817 | | | | | |
| Gender | .727 | .404 | .124 | 1.799 | | | | | |
| ADHD Traits | .051 | .043 | .087 | 1.170 | | | | | |
| Social Camouf | .274 | .072 | .281** | 3.779 | | | | | |
| Step 3 | | | | | 12.630** | .000 | .236 | .118 | 29.118** |
| Age | -.064 | .031 | -.133 | -2.089 | | | | | |
| Gender | .512 | .379 | .087 | 1.353 | | | | | |
| ADHD Traits | .013 | .041 | .022 | .312 | | | | | |
| Social Camouf | .182 | .070 | .187* | 2.613 | | | | | |
| InternStigma | .444 | .082 | .371** | 5.396 | | | | | |
| Step 4 | | | | | 11.035** | .000 | .243 | .010 | 2.532 |
| Age | -.065 | .031 | -.135 | -2.125 | | | | | |
| Gender | .513 | .377 | .087 | 1.362 | | | | | |
| ADHD Traits | .018 | .041 | .031 | .437 | | | | | |
| Social Camouf | .238 | .078 | .244** | 3.060 | | | | | |
| InternStigma | .423 | .083 | .353** | 5.096 | | | | | |
| SC*ISMI | .025 | .016 | .117 | 1.591 | | | | | |

Note. ADHD Traits: Adult ADHD Self-Report Scale (ASRS-18) Symptom Checklist; Social Camouf: Frequency of Social Camouflaging ADHD; InternStigma: Internalized Stigma of Mental Illness – Brief version (ISMI-10) (in reference to ADHD); SC*ISMI: Interaction term; Social Anxiety: Social Interaction Anxiety Scale - Short Form (SIAS-6).

* $p < .017$; ** $p < .001$ (2-tailed)

Generalized Anxiety

A hierarchical multiple regression analysis was conducted to test Model 2 with generalized anxiety as the outcome variable. Step 1 of the model indicated that age, gender, and ADHD traits significantly predicted generalized anxiety scores (Adjusted $R^2 = .166$, $F(3, 185) = 13.486$, $p = .000$). The addition of social camouflaging total scores in Step 2 did not lead to a significant increase in R^2 , however the model remained significant (Adjusted $R^2 = .169$, $F(4, 184) = 10.538$, $p = .000$). Adding internalized stigma of ADHD total scores in Step 3 led to a significant increase in R^2 of .036 (Adjusted $R^2 = .201$, $F(5, 183) = 10.449$, $p = .000$), indicating that internalized stigma of ADHD accounted for an additional 3.6% of the variance in generalized anxiety. However, the addition of the interaction term between social camouflaging and internalized stigma of ADHD in Step 4 did not lead to a significant increase in R^2 , but the model remained significant (Adjusted $R^2 = .197$, $F(6, 182) = 8.666$, $p = .000$). Overall, the initial model with only the control variables (i.e., age, gender, and ADHD traits) accounted for 16.6% of the variance in generalized anxiety scores, whereas the final model, with all six variables, accounted for a total of 19.7% of the variance in generalized anxiety scores; see Table 6.

These findings are inconsistent with hypothesis 2. Unexpectedly, higher frequency of social camouflaging did not significantly predict greater generalized anxiety, over and above the effects of age, gender, and ADHD traits ($\beta = .091$, $p = .212$). As expected, greater internalized stigma of ADHD significantly predicted greater generalized anxiety over and above the effects of age, gender, ADHD traits and social camouflaging ($\beta = .204$, $p = .004$). However, inconsistent with hypothesis 4, the interaction between social camouflaging and internalized stigma did not significantly predict greater generalized anxiety, over and above the other predictor variables ($\beta = -.013$, $p = .868$).

Table 6. Hierarchical regression model predicting generalized anxiety (Model 2) from age, gender, ADHD traits, frequency of social camouflaging, internalized stigma and interaction between social camouflaging, and internalized stigma ($N = 189$)

| Predictor | <i>B</i> | <i>SE B</i> | β | <i>t</i> | <i>F</i> | <i>p</i> | Adj. R^2 | ΔR^2 | ΔF |
|-------------------------------------|----------|-------------|---------|----------|----------|----------|---------------|--------------|------------|
| Model 2: Generalized Anxiety | | | | | | | | | |
| Step 1 | | | | | 13.486** | .000 | .166 | .179 | 13.486** |
| Age | -.078 | .032 | -.162* | -2.423 | | | | | |
| Gender | .029 | .392 | .005 | .075 | | | | | |
| ADHD Traits | .223 | .039 | .385** | 5.768 | | | | | |
| Step 2 | | | | | 10.538** | .000 | .169 | .007 | 1.570 |
| Age | -0.78 | .032 | -.162* | -2.425 | | | | | |
| Gender | .063 | .392 | .011 | .161 | | | | | |
| ADHD Traits | .203 | .042 | .350** | 4.835 | | | | | |
| Social Camouf | .088 | .070 | .091 | 1.253 | | | | | |
| Step 3 | | | | | 10.449** | .000 | .201 | .036 | 8.398 |
| Age | -.080 | .031 | -.166* | -2.548 | | | | | |
| Gender | -.055 | .387 | -.009 | -.142 | | | | | |
| ADHD Traits | .182 | .042 | .314** | 4.360 | | | | | |
| Social Camouf | .038 | .071 | .039 | .529 | | | | | |
| InternStigma | .244 | .084 | .204* | 2.898 | | | | | |
| Step 4 | | | | | 8.666** | .000 | .197 | .000 | .028 |
| Age | -.080 | .032 | -.166* | -2.538 | | | | | |
| Gender | -.055 | .388 | -.009 | -.142 | | | | | |
| ADHD Traits | .181 | .042 | .313** | 4.322 | | | | | |
| Social Camouf | .032 | .080 | .032 | .395 | | | | | |
| InternStigma | .246 | .085 | .206* | 2.880 | | | | | |
| SC*ISMI | -.003 | .016 | -.013 | -.166 | | | | | |

Note. *ADHD Traits:* Adult ADHD Self-Report Scale (ASRS-18) Symptom Checklist; *Social Camouf:* Frequency of Social Camouflaging ADHD; *InternStigma:* Internalized Stigma of Mental Illness – Brief version (ISMI-10) (in reference to ADHD); *SC*ISMI:* Interaction term; *Generalized Anxiety:* Generalized Anxiety Disorder Questionnaire (GAD-7).

* $p < .017$; ** $p < .001$ (2-tailed)

Depression

A hierarchical multiple regression analysis was conducted to test Model 3 with depression as the outcome variable. Step 1 of the model indicated that age, gender, and ADHD traits significantly predicted depression scores (Adjusted $R^2 = .130$, $F(3, 185) = 10.404$, $p = .000$). The addition of social camouflaging total scores in Step 2 did not lead to a significant increase in R^2 , however the model was significant (Adjusted $R^2 = .126$, $F(4, 184) = 7.777$, $p = .000$). Adding internalized stigma of ADHD total scores in Step 3 led to a significant increase in R^2 of .054 (Adjusted $R^2 = .177$, $F(5, 183) = 9.072$, $p = .000$), indicating that internalized stigma of ADHD accounted for an additional 5.4% of the variance in depression. However, the addition of the interaction term between social camouflaging and internalized stigma of ADHD in Step 4 did not lead to a significant increase in R^2 , but the model remained significant (Adjusted $R^2 = .117$, $F(6, 182) =$

7.716, $p = .000$). Overall, the initial model with only the control variables (i.e., age, gender, and ADHD traits) accounted for 13.0% of the variance in depression, whereas the final model, with all six variables, accounted for a total of 17.7% of the variance in depression; see Table 7.

These findings do not support hypothesis 3. Higher frequency of social camouflaging did not significantly predict greater depression, over and above the effects of age, gender, and ADHD traits ($\beta = -.017$, $p = .816$). Greater internalized stigma of ADHD significantly predicted greater depression, over and above the effects of age, gender, ADHD traits and social camouflaging ($\beta = .251$, $p = .001$). However, inconsistent with hypothesis 4, the interaction between social camouflaging and internalized stigma did not significantly predict greater depression, over and above the effects of age, gender, ADHD traits and social camouflaging ($\beta = -.074$, $p = .331$).

Table 7. Hierarchical regression model predicting depression (Model 3) from age, gender, ADHD traits, frequency of social camouflaging, internalized stigma and interaction between social camouflaging, and internalized stigma ($N = 189$)

| Predictor | <i>B</i> | <i>SE B</i> | β | <i>t</i> | <i>F</i> | <i>p</i> | Adj. R^2 | ΔR^2 | ΔF |
|----------------------------|----------|-------------|---------|----------|----------|----------|------------|--------------|------------|
| Model 3: Depression | | | | | | | | | |
| Step 1 | | | | | 10.404** | .000 | .130 | .144 | 10.404** |
| Age | -.136 | .039 | -.240* | -3.159 | | | | | |
| Gender | .413 | .471 | .060 | .878 | | | | | |
| ADHD Traits | .186 | .046 | .274** | 4.015 | | | | | |
| Step 2 | | | | | 7.777** | .000 | .126 | .000 | .054 |
| Age | -.136 | .039 | -.240* | -3.510 | | | | | |
| Gender | .406 | .473 | .059 | .858 | | | | | |
| ADHD Traits | .191 | .051 | .281** | 3.780 | | | | | |
| Social Camouf | -.020 | .085 | -.017 | -.233 | | | | | |
| Step 3 | | | | | 9.072** | .000 | .177 | .054 | 12.338 |
| Age | -.139 | .038 | -.246** | -3.706 | | | | | |
| Gender | .235 | .462 | .034 | .509 | | | | | |
| ADHD Traits | .161 | .050 | .237* | 3.234 | | | | | |
| Social Camouf | -.093 | .085 | -.081 | -1.093 | | | | | |
| InternStigma | .353 | .100 | .251* | 3.512 | | | | | |
| Step 4 | | | | | 7.716** | .000 | .177 | .004 | .949 |
| Age | -.139 | .038 | -.245** | -3.688 | | | | | |
| Gender | .234 | .462 | .034 | .507 | | | | | |
| ADHD Traits | .157 | .050 | .231* | 3.147 | | | | | |
| Social Camouf | -.135 | .095 | -.118 | -1.416 | | | | | |
| InternStigma | .369 | .102 | .262** | 3.622 | | | | | |
| SC*ISMI | -.019 | .019 | -.074 | -.974 | | | | | |

Note. *ADHD Traits*: Adult ADHD Self-Report Scale (ASRS-18) Symptom Checklist; *Social Camouf*: Frequency of Social Camouflaging ADHD; *InternStigma*: Internalized Stigma of Mental Illness – Brief version (ISMI-10) (in reference to ADHD); *SC*ISMI*: Interaction term; *Depression*: Patient Health Questionnaire (PHQ-9).

* $p < .017$; ** $p < .001$ (2-tailed)

Chapter 4. Discussion

The current study explored social camouflaging in a population of adults with ADHD and tested whether the frequency of social camouflaging and the joint role of camouflaging and internalized stigma was related to internalizing mental health outcomes of social anxiety, generalized anxiety and depression among this population.

4.1. Motivations, Strategies, Situations and Consequences of Camouflaging ADHD

The qualitative analysis explored whether adults with ADHD camouflage their ADHD in social situations, what motivates camouflaging, what types of strategies are commonly used, in what situations they are used, and what the perceived consequences of camouflaging are from the unique perspective of adults with ADHD. The vast majority (91.6%) of participants endorsed camouflaging their ADHD, at least to some extent. Experiences of social camouflaging ADHD varied among participants, but there were considerable commonalities between experiences which were identified and grouped into a number of core themes to describe the overall essence and phenomenon of social camouflaging ADHD.

In the current study, we found that motivations for camouflaging ADHD fell into the following core themes: *“To seem ‘normal’”, to be liked, to avoid adverse experiences, and It’s necessary: “Camouflaging is a survival tactic”*. Motivations to camouflage emerged from multiple sources, all of which were perceived to be prompted by external demands (e.g., others and/or the social environment). Although people were motivated to camouflage by their own internal desire to be liked, to appear ‘normal’, to avoid discrimination, and to feel safe, the need to camouflage in order to achieve these basic needs was perceived to be triggered by societal demands which were beyond individual control. As a result, most people felt as if they had little choice and freedom to authentically behave and express themselves. The motivations for camouflaging ADHD are relatively consistent with the identified motivations for camouflaging autism (Hull et al., 2017). Moreover, similar motivations and attempts to fit in with others and be viewed as ‘normal’ have also been reported by teens with ADHD in previous qualitative studies (Hallberg et al., 2010).

With regard to camouflaging strategies, three core themes were identified: *hiding and pretending, suppression, and compensation*. For example, many people hid their fidgeting from others, avoided social situations, pretended to pay attention, and monitored and mirrored others' behaviours. Participants also suppressed urges to express themselves verbally and suppressed urges to fidget and move their body. Participants also planned ahead by using tools and overpreparing and utilized attention and engagement strategies, tools, and substances (prescription and illicit) to compensate for perceived ADHD-related difficulties. Overall, people reported engaging in a large range of camouflaging strategies and different strategies were associated with different consequences. For example, active *suppression* was reported to lead to considerable mental and physical discomfort and distress and *pretending* was reported to lead to identity disturbance and self-esteem difficulties, whereas some *compensation* strategies, including planning ahead by using helpful tools and utilizing attention and engagement strategies, were viewed to be helpful with minimal negative consequences. Given the heterogeneity within adult ADHD presentations and individual preferences, there is likely to be diversity in the types of strategies people typically use. Moreover, the demands of the environment may also influence the specific strategy used. For example, pretending to pay attention through non-verbal behaviours is likely to be utilized at school and work when a high level of attention is typically expected.

With regard to situations of camouflaging, five themes were identified: *professional settings, new people, close relationships, large groups, and public spaces*. Overall, camouflaging is a behaviour that can occur in any social situation, but it was described to occur more in situations with increased social demands and new, unfamiliar people.

Finally, with regard to consequences of camouflaging, eight themes were identified: *facilitates social interactions and outcomes, "I'm in control of perception", identity disturbance: "I am hiding my true self", "it's exhausting", effects on mental health, reduced closeness and connection, interferes with important cognitive functions, and perpetuates unrealistic expectations and ADHD stigma*. Most participants identified multiple consequences of camouflaging which underscores the complex effects camouflaging has on people. Overall, both positive and negative consequences of camouflaging were identified and were thought to co-exist. One participant captured the dialectical nature of camouflaging by describing it as a "double-edged sword". However,

the degree of impact and importance of the various positive and negative consequences was different for each person.

4.2. Relationships Between Social Camouflaging, Internalized Stigma and Internalizing Mental Health Outcomes

4.2.1. Social Anxiety

Overall, 60.8% of the sample scored at or above the clinical cut-off point of 7 on the SIAS-6, which indicates the presence of social anxiety disorder. In accordance with the first hypothesis, a higher frequency of social camouflaging ADHD was associated with greater social anxiety, over and above the effects of age, gender, and ADHD traits. This finding is consistent with and extends past research on social camouflaging autistic traits. Specifically, Hull et al. (2021) found that greater social camouflaging, as measured by the CAT-Q, was associated with greater social anxiety among autistic adults. Hull et al. (2021) also examined whether social camouflaging was associated with generalized anxiety and depression and found the association between social camouflaging and social anxiety to be the strongest out of all three relationships. In the current study, social anxiety was the only outcome variable that was significantly associated with social camouflaging after controlling for age, gender, and ADHD traits. Together, these results underscore the tightly intertwined nature of social camouflaging and social anxiety in both ADHD and autistic populations.

The finding that greater social camouflaging is related to greater social anxiety among adults with ADHD is also consistent with previous research on concealing identities and mental health implications among LGBTQIA2S+ communities, wherein greater concealment of one's sexual identity was found to be related to greater mental health problems, including rumination and anxiety (Lewis et al., 2014; Pachankis, 2020).

This quantitative relationship was further expanded on by the qualitative data. Utilizing these two different, yet complimentary methods greatly enhances our ability to understand the relationship between social camouflaging and social anxiety within this population of adults with ADHD and elaborate the nature of these experiences and their meaning (Kazdin, 2016). In the qualitative data, numerous participants discussed how

anxiety acted as both a motivating factor for camouflaging and a negative consequence of camouflaging. Specifically, participants described that they camouflaged as a way to attempt to alleviate their anxiety around socializing by providing them with a sense of control over how others view them, while many also reported explicitly that camouflaging increased their anxiety around social situations. Participants described that during a period of camouflaging they felt more stressed, uncomfortable, jittery and nervous, were “hyperaware” of themselves and others, worried about how they are being perceived, and worried about failing in their attempts to camouflage. Worrying about whether camouflaging strategies are effective in the moment is an experience that is also reported by autistic adults (Tierney et al., 2016). Participants also described that mentally and tactically preparing for a situation where they felt camouflaging was required (e.g., flying on a plane) led to heightened anticipatory anxiety. As described above, the association between social camouflaging and social anxiety was supported by the results of the thematic analysis. Based on participant responses, there is evidence that this relationship is likely bidirectional, and may potentially operate within a feedback loop or vicious cycle, such that social anxiety, or worries about social situations, gives rise to camouflaging behaviours to cope, but the act of camouflaging increases social anxiety (e.g., through increased hypervigilance, worries, stress, overthinking and/or avoidance of social situations all together), which further reinforces and worsens the anticipatory social anxiety felt next time, and the cycle repeats and grows in strength. Future research should explore the directionality of the relationship between social camouflaging and social anxiety and/or test the described hypothesis of a feedback loop.

4.2.2. Generalized Anxiety

A higher frequency of social camouflaging ADHD was not associated with greater generalized anxiety when the effects of age, gender, and ADHD traits were controlled for. This finding is not consistent with previous research on social camouflaging autistic traits which demonstrated a significant relationship between social camouflaging and generalized anxiety, albeit a small effect size (Hull et al., 2021).

There are a number of reasons why the current study did not find this relationship. Firstly, our sample had exceptionally high rates of anxiety as 58.9% of the sample self-reported having an anxiety disorder other than social anxiety (i.e.,

generalized anxiety disorder, phobias, panic disorder or unspecified anxiety). The prevalence of generalized anxiety in the current sample was also determined by the percentage of participants who scored at or above the clinical cut-off point of 10 on the GAD-7 (Spitzer et al., 2006). Based on the GAD-7, 60.8% of the sample met criteria for generalized anxiety disorder. Considering the high levels of anxiety in the current sample, there may be other stronger causal factors explaining anxiety in this group, regardless of social camouflaging. For example, factors that have been shown to be linked to ADHD with co-occurring anxiety problems include emotion dysregulation (Antony et al., 2022), lower self-esteem (Brown, 2000), fear of deficits in cognitive or social functioning (Roth et al., 2004), slow cognitive tempo (Carlson & Mann, 2002), and differences in neurobiological factors (Bradshaw & Sheppard, 2000).

Secondly, the measure used to capture generalized anxiety in the current study, the GAD-7, may have introduced statistical problems. The GAD-7 measures current symptoms of generalized anxiety within the last two weeks, thus it captures state anxiety at a particular point in time rather than trait anxiety. Since environmental factors often trigger anxiety (e.g., an interpersonal conflict, a presentation at work, the changing day-to-day effects of climate change), people with generalized anxiety disorder may have periods of elevated anxiety and periods of lower anxiety. By measuring state anxiety using the GAD-7, we introduced a number of possible extraneous variables, including environmental factors that may have occurred in participants' lives within the last two-weeks, resulting in an unstable measure of anxiety. This measure differed from the measures used to capture the frequency of social camouflaging, which measured camouflaging broadly as a trait-like behaviour, and social anxiety, the SIAS-6, which measured trait social anxiety by asking participants to indicate the degree to which each statement is characteristic of them. Thus, our results tell us that a higher frequency of social camouflaging (as a trait) was unrelated to *current* generalized anxiety symptoms; however, we don't know whether a higher frequency of social camouflaging is related to greater generalized anxiety (more broadly as a general trait or characteristic). Future research should replicate the current study using a trait measure of generalized anxiety rather than a state measure as this will provide a more stable and less confounded estimate of anxiety.

The themes from the qualitative data were reviewed in order to better understand the possible relationship between generalized anxiety and social camouflaging from the

perspective of participants. The majority of participants who reported feeling more anxious as a result of social camouflaging, described the anxiety in relation to social functioning or a social context (e.g., worrying about camouflaging and whether their attempt will be effective and engaging in intense self-monitoring during social interactions). There were no consistent patterns of generalized anxiety symptoms that emerged in the data. These qualitative findings corroborate the quantitative findings, indicating that social camouflaging ADHD may not be related to generalized anxiety. However, a relationship may exist, but it may operate outside conscious awareness and perception. It may also be the case that camouflaging has competing effects on generalized anxiety, as camouflaging was reported to alleviate immediate anxiety, while it was also reported to perpetuate anxiety over time. As previously mentioned, future research is needed to further examine the possible link between social camouflaging and generalized anxiety.

4.2.3. Depression

Inconsistent with the third hypothesis, a higher frequency of social camouflaging ADHD was not associated with greater depression when the effects of age, gender, and ADHD traits were controlled for. This finding is not consistent with previous research on social camouflaging autistic traits which demonstrated a significant relationship between social camouflaging and depression, albeit a small effect size (Hull et al., 2021).

A number of reasons may explain why this relationship was insignificant in the current study. These reasons are similar to the ones stated in the above section on generalized anxiety; however, they will be summarized briefly as they are relevant to this specific finding as well. Similar to the high prevalence of participants with a co-occurring anxiety disorders, 54% of the sample reported having a depressive disorder (i.e., major depressive disorder, persistent depressive disorder, dysthymia, seasonal affective disorder, or unspecified depression). The prevalence of depression was even higher when the scores on the PHQ-9 were evaluated as 69.8% of the sample scored at or above the clinical cut-off point of 10 on the PHQ-9. Indeed, there may be other stronger causal factors explaining the high levels of depression in this group, regardless of social camouflaging. For example, Roy et al., (2014) found that peer dislike, victimization, and ADHD traits all predicted the development of depression in adolescents over a period of years. Moreover, emotion dysregulation (Antony et al., 2022), behavioural avoidance

(Knouse et al., 2013), and lower self-esteem (Arsandaux et al., 2021) are also found to predict depression among individuals with ADHD.

Secondly, the measure used to capture depression in the current study, the PHQ-9, may have introduced statistical problems. Similar to the GAD-7, the PHQ-9 measures current symptoms of depression within the last two weeks and captures state depression at a particular point in time rather than trait depression. Since environmental factors (e.g., interpersonal conflict, job stress, loss, illness etc.) often trigger low mood and depressive episodes, people with a history of major depressive disorder, may experience specific periods of lower mood and associated physical and cognitive depressive symptoms and periods of higher mood and less associated symptoms. By measuring state depression using the PHQ-9, we introduced a number of possible extraneous variables, including environmental factors that may have occurred in participants' lives within the last two-weeks, which may have influenced the stability of the measure and the results of the regression analysis. Future research should replicate the current study using a trait measure of depression rather than a state measure as this will provide a more stable and less confounded estimate of depression.

Although there was no statistical relationship found between social camouflaging and depression, many participants reported that a negative consequence of camouflaging was that it negatively impacted their mood and view of themselves. Certain participants explicitly stated that camouflaging increases their depression, and others indicated experiences closely associated with depression by stating that camouflaging lowers their self-esteem and self-worth, makes them feel sad, lonelier, misunderstood, ashamed, and defective and makes them feel emotionally, mentally, and physically exhausted and fatigued. From the perspective of adults with ADHD, social camouflaging leads to emotional, cognitive, and physical symptoms characteristic of depression. The themes and subthemes found in the qualitative data directly conflict with the quantitative results which suggests that the selected quantitative scale may not have adequately measured depression in this sample. Moreover, camouflaging may lead to both benefits and costs applicable to depression which may compete and cancel each other out. For example, camouflaging may facilitate positive interactions and equal treatment from others which may protect against depression, while simultaneously it may also decrease self-esteem and increase shame which may predict depression. The

possibility of competing mechanisms may explain the overall null relationship found between social camouflaging and depression.

4.2.4. Internalized Stigma and Internalizing Mental Health Problems

Although not an a priori hypothesis, we found that higher internalized stigma of ADHD significantly predicted greater social anxiety, generalized anxiety and depression, over and above the effects of age, gender, ADHD traits, and social camouflaging. This is consistent with previous research that demonstrates the deleterious effects of internalized stigma on mental health outcomes of adults with ADHD (Masuch et al., 2019). These findings indicate the clinical importance of addressing client self-perceptions, feelings of shame associated with one's ADHD diagnosis (Hallberg et al., 2010) and subjective processing of stigmatization as a means to prevent and/or treat mental health problems in adult ADHD (Masuch et al., 2019).

4.2.5. The Interaction between Social Camouflaging and Internalized Stigma on Internalizing Mental Health Outcomes

Unexpectedly, internalized stigma did not moderate the relationships between social camouflaging and internalizing mental health problems of social anxiety, generalized anxiety or depression, as hypothesized. Camouflaging and internalized stigma of ADHD did not interact to explain worse mental health in adult ADHD. For example, social camouflaging had a similar effect on social anxiety, regardless of the level of negative thoughts and beliefs participants held about their ADHD. One possible reason for these three insignificant interaction effects may be the type of stigma measured. Regardless of how one views their own ADHD, they may still feel that they have no other choice but to camouflage if they perceive public stigma about ADHD to exist. Theoretically, for those with high public stigma, who believe that others view ADHD negatively, camouflaging may provoke more anxiety and/or depression because the stakes are higher – they might believe that if they make a mistake, they will be publicly identified and will be subjected to adversity such as judgement or criticism. Moreover, those with high public stigma may feel that they have *no choice* but to camouflage in order to stay safe and avoid discrimination and this reduced self-agency while camouflaging may lead to worse mental health problems. Future studies should

measure and examine perceived public stigma to determine whether it moderates the relationship between camouflaging and internalizing mental health problems.

4.2.6. ADHD Traits and Internalizing Mental Health Problems

Results revealed that more ADHD traits predicted increased generalized anxiety and depression, but not social anxiety, indicating a link between ADHD symptomology and co-occurring internalizing disorders of depression and generalized anxiety. This finding is consistent with past research demonstrating the co-occurring nature of ADHD and internalizing problems (Bron et al., 2016; Fischer et al., 2007; Knouse et al., 2013; Pehlivanidis et al., 2014). Among other explanations, difficulties in emotion regulation have been proposed as a reason for this relationship (Anastopoulos et al., 2011). In a longitudinal study, Antony and colleagues (2022) demonstrated that emotion dysregulation mediated the relationship between ADHD traits and internalizing problems, such that individuals with ADHD were more likely to have dysregulated emotions which in turn lead to greater anxiety and depression. Other factors may also play a role in this relationship. For instance, people with greater ADHD traits have also been found to have lower self-compassion (Beaton et al., 2020) and self-esteem (Bussing et al., 2000), which may lead to greater internalizing problems of anxiety and depression.

4.3. Social and Clinical Implications

The findings from this study suggest that adults with ADHD camouflage their ADHD traits in order to achieve a desired end in a social environment that values and rewards particular neurotypes; however, the majority of participants acknowledged that this strategy comes at a price. The negative consequences of camouflaging, as identified in the current study, should not be ignored or overshadowed by the motivations to camouflage. Adults with ADHD view camouflaging as a coping strategy but the numerous negative consequences indicate that this is not an adaptive coping strategy. In fact, clinicians providing psychological treatment to clients with ADHD, may want to screen, target and reduce camouflaging behaviours to treat or prevent interpersonal, identity, self-concept, mood or anxiety problems. This would be especially important when working with a client who presents with ADHD and social anxiety as the findings from the current study suggest that social camouflaging is a contributing or maintaining

factor of social anxiety in adults with ADHD. Moreover, social and educational initiatives may utilize these findings to raise awareness of the potential harms of camouflaging to help improve the social and psychological well-being of adults with ADHD.

Considering the exceptionally high rates of social camouflaging found in the current study, social camouflaging might be contributing to the late and misdiagnosis of adult ADHD. These coping strategies may distort the expected clinical presentation of adult ADHD, creating obstacles to the identification and diagnosis of this condition. Clinicians should be vigilant to signs of camouflaging behaviours in their clients, so they do not misdiagnose the individual. Moreover, clinicians should reflect on the ways in which their own therapy techniques or interventions may inadvertently encourage camouflaging behaviours in their clients. For example, social skills interventions may encourage and teach clients how to camouflage and, as a result, may be damaging to the client. It also might be increasingly difficult for schools, workplaces, friends and family to support an individual who camouflages their ADHD from others (Griffin & Pollak, 2009). Educators, employers, friends and family should be aware of the ways their responses to neurodivergent traits may encourage or reinforce camouflaging behaviours and instead they should try to encourage a space where a diverse range of social behaviours and styles are accepted.

Despite the association with social anxiety and the reported negative consequences of social camouflaging, there are compelling reasons why an individual might still feel as though they have no choice but to camouflage their ADHD. The voices in the current study echoed findings from past research which indicates that, in general, ADHD traits are not accepted in our society (Beaton et al., 2020) and individuals with ADHD experience high rates of stigma (Masuch et al., 2019; Mueller et al., 2012) and social rejection (de Boer & Pijl, 2016; Paulson et al., 2005), all of which may drive individuals to conceal their identity and camouflage their ADHD traits. The results of the current study underscore the critical need for increased understanding and acceptance of ADHD traits by society and its systems (e.g., workplaces, schools), so individuals with these traits do not feel the need to camouflage. It is our hope that the results of the current study contribute to greater awareness and understanding of the experience of adult ADHD, and that other scholars utilize these findings to inform social initiatives aimed to reduce stigma and increase acceptance of ADHD traits. It is expected that greater awareness of the experienced difficulties and social behaviours and processes

involved in adult ADHD will foster understanding and begin to dismantle the current stereotypes and stigma this group faces. When others create spaces where ADHD is accepted and accommodated ADHD, this reduces stigma and paves the way for individuals to accept and take pride in their ADHD and express themselves in ways that enhance well-being.

4.4. Limitations of the Current Study

There are a number of limitations in the current study. Firstly, since the analyses were cross-sectional, we cannot determine directionality of the relationship between social camouflaging and social anxiety nor can we infer causation. Longitudinal and/or experimental research is needed to determine directionality and causation. Secondly, there is no validated scale to measure frequency of camouflaging ADHD, so an adapted scale was used in the current study. Reliability analyses indicated strong internal consistency of the scale; however, no further tests of psychometric properties were conducted on this scale.

Although steps were taken to assess the validity of participants' self-reported ADHD diagnoses, we did not verify diagnoses with official documentation or conduct independent ADHD assessments to confirm that they met diagnostic criteria. Since ADHD can be diagnosed by multiple different practitioners, there is variability in assessment procedures which can impact the validity of diagnoses. Thus, in the current study we lack knowledge on how diagnoses were made and the validity of those diagnoses.

Although we have a large sample size ($N = 202$) in relation to typical qualitative tradition, caution should be taken when generalizing the results to individuals who are not represented by the sociodemographic and clinical profiles of the current sample. Importantly, the vast majority of our sample (70.8%) identified as being a woman which does not represent the gender ratio in the general population of adults with ADHD, which is estimated to have a male:female ratio of 2.28:1 (Ramtekkar et al., 2010). Given the unequal distribution of gender in the current sample, caution should be taken when considering the application of the results to individuals who identify as male or as a man. Thus, the generalizability of the current study is limited.

Finally, there was a risk of a self-selection bias due to our non-probability sampling method through online participant recruitment. It is likely that a substantial proportion of our sample was comprised of people who follow ADHD social media accounts or are members of online ADHD community groups. The affiliation with online supports could potentially contribute to levels of internalized stigma and/or camouflaging behaviours. For example, individuals affiliated with ADHD support groups may have greater personal acceptance of their ADHD, may have less internalized stigma of ADHD, and may camouflage their ADHD less than others who lack these community connections. There is some evidence for this hypothesis as only 7.3% of participants in the current sample reported high internalized stigma of ADHD which is lower than a previous study which indicated that 23.3% of their sample reported high internalized stigma on the ISMI-29 using the same transformed categorical method and cut-off score of above 2.5 as used in the current study (Masuch et al., 2019). However, this is a measure of internalized stigma, not public stigma. Regardless of lower internalized stigma, it may also be the case that individuals affiliated with ADHD support groups experience more public stigmatization, thus camouflage more, and are seeking community supports to cope as a result. Thus, the findings in the current study may not represent the true prevalence of camouflaging behaviours and internalized stigma beliefs in comparison to the general population of adults with ADHD.

4.5. Future Research

Research following the current study should utilize the qualitative results to develop and validate a quantitative scale for measuring social camouflaging in ADHD. As previously mentioned, future research should replicate the quantitative analyses performed in this study using trait measures of social anxiety, generalized anxiety, and depression to evaluate whether this leads to differing results.

Given the large overlap between neurodivergent identities and LGBTQIA2S+ identities and the shared experience of camouflaging or concealing one's identity among these groups, the experience of camouflaging should be qualitatively explored through an intersectional lens using a smaller sample size in order to capture the depth and intricacies of lived experience. The intersection of other identities (e.g., racialized identities) should also be addressed and included.

Future quantitative research on this topic should include a comparison group to determine whether the relationship between social camouflaging and mental health difficulties differs between adults with ADHD and adults without ADHD. While non-ADHD and non-autistic individuals in the general population may socially adapt various aspects of themselves to manage their self-image, social camouflaging neurodivergent traits is theorized to involve much more effort, identity conflict, and stress (Bargiela et al., 2016). Thus, further exploration into the differential outcomes and psychological implications of camouflaging neurodiverse traits, such as ADHD, in comparison to social adaptation found in the general population is needed.

Further research is also needed to discern quantitative and qualitative differences in camouflaging strategies and mental health outcomes between distinct neurodiverse populations, namely between autistic individuals and individuals with ADHD. A comparative study could be conducted to better understand the similarities and differences between camouflaging ADHD, camouflaging autism, *and* camouflaging both autism and ADHD simultaneously. Future research in these areas will enhance our understanding of social camouflaging by outlining the similarities and differences of this phenomenon in different populations.

4.6. Conclusions

The current study utilized a mixed-methods approach to explore, for the first time, social camouflaging in a population of adults with ADHD. Extending upon previous research on other populations, we identified the motivations, strategies, contexts, and consequences of social camouflaging in adults with ADHD using a phenomenologically informed thematic analysis. Core motivations for camouflaging were to fit in with others, to be liked, to avoid adverse experiences, and to survive and succeed in a 'neurotypical society'. Camouflaging strategies included hiding and pretending, suppression, and compensation. Camouflaging occurred in professional settings, close relationships, large groups, public spaces and with new people. Finally, consequences of camouflaging included the facilitation of social interactions and outcomes, controlling perceptions, identity disturbance, exhaustion, mental health problems, reduced closeness and connection with others, interference with important cognitive functions, and the perpetuation of unrealistic expectations and ADHD stigma. Our findings indicate that social camouflaging is a complex phenomenon that functions to fulfill a social need but

leads to a host of both positive and negative consequences. Quantitative analyses were conducted to test whether the frequency of social camouflaging ADHD was related to internalizing mental health problems. It was found that a higher frequency of social camouflaging was related to greater social anxiety, but not generalized anxiety or depression. Qualitative findings elucidated the potential pathways involved in the relationship between camouflaging and social anxiety. Overall, this study adds considerable value to the concept of camouflaging by exploring this phenomenon in a different neurodivergent population.

References

- Adler, L. A., Spencer, T., Faraone, S. V., Kessler, R. C., Howes, M. J., Biederman, J., & Secnik, K. (2006). Validity of pilot Adult ADHD Self-Report Scale (ASRS) to rate adult ADHD symptoms. *Annals of Clinical Psychiatry, 18*(3), 145-148.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. California: SAGE Publications.
- American Psychiatric Association (2013). *Diagnostic and statistical manual (5th Ed.)*. Arlington, VA.
- Anastopoulos, A. D., Smith, T. F., Garrett, M. E., Morrissey-Kane, E., Schatz, N. K., Sommer, J. L., ... & Ashley-Koch, A. (2011). Self-regulation of emotion, functional impairment, and comorbidity among children with AD/HD. *Journal of Attention Disorders, 15*(7), 583-592.
- Antony, E. M. A., Pihlajamäki, M., Speyer, L. G., & Murray, A. L. (2022). Does emotion dysregulation mediate the association between ADHD symptoms and internalizing problems? A longitudinal within-person analysis in a large population-representative study. *Journal of Child Psychology and Psychiatry, 63*(12), 1583-1590.
- Antshel, K. M., & Russo, N. (2019). Autism spectrum disorders and ADHD: Overlapping phenomenology, diagnostic issues, and treatment considerations. *Current Psychiatry Reports, 21*(5), 1-11.
- Arsandaux, J., Orri, M., Tournier, M., Gbessemehlan, A., Coté, S., Salamon, R., ... & Galéra, C. (2021). Pathways from ADHD symptoms to suicidal ideation during college years: a longitudinal study on the i-share cohort. *Journal of Attention Disorders, 25*(11), 1534-1543.
- Asherson, P. (2005). Clinical assessment and treatment of attention deficit hyperactivity disorder in adults. *Expert Review of Neurotherapeutics, 5*(4), 525-539.
- Asherson, P., Akehurst, R., Kooij, J. S., Huss, M., Beusterien, K., Sasané, R., ... & Hodgkins, P. (2012). Under diagnosis of adult ADHD: cultural influences and societal burden. *Journal of Attention Disorders, 16*(5), 20S-38S.
- Bargiela, S., Steward, R., & Mandy, W. (2016). The experiences of late-diagnosed women with autism spectrum conditions: An investigation of the female autism phenotype. *Journal of Autism and Developmental Disorders, 46*(10), 3281-3294.
- Barkley, R. A. (2018). *Attention-deficit hyperactivity disorder: A handbook for diagnosis and treatment* (4th edition). New York: Guilford Press.
- Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J., & Clubley, E. (2001). The autism-spectrum quotient (AQ): Evidence from asperger syndrome/high-functioning autism, males and females, scientists and mathematicians. *Journal of Autism and Developmental Disorders, 31*(1), 5-17.

- Beaton, D. M., Sirois, F., & Milne, E. (2020). Self-compassion and perceived criticism in adults with attention deficit hyperactivity disorder (ADHD). *Mindfulness*, 11, 2506-2518.
- Beck, J. S., Lundwall, R. A., Gabrielsen, T., Cox, J. C., & South, M. (2020). Looking good but feeling bad: "Camouflaging" behaviors and mental health in women with autistic traits. *Autism*, 24(4), 809-821.
- Bhattacharya, K. (2017). *Fundamentals of qualitative research: A practical guide*. Routledge.
- Biederman, J., Mick, E., Faraone, S. V., Braaten, E., Doyle, A., Spencer, T., ... & Johnson, M. A. (2002). Influence of gender on attention deficit hyperactivity disorder in children referred to a psychiatric clinic. *American Journal of Psychiatry*, 159(1), 36-42.
- Botha, M., & Frost, D. M. (2020). Extending the minority stress model to understand mental health problems experienced by the autistic population. *Society and Mental Health*, 10(1), 20-34.
- Boyd, J. E., Otilingam, P. G., & DeForge, B. R. (2014). Brief version of the Internalized Stigma of Mental Illness (ISMI) scale: Psychometric properties and relationship to depression, self esteem, recovery orientation, empowerment, and perceived devaluation and discrimination. *Psychiatric Rehabilitation Journal*, 37(1), 17-23.
- Bradshaw, J. L., & Sheppard, D. M. (2000). The neurodevelopmental frontostriatal disorders: Evolutionary adaptiveness and anomalous lateralization. *Brain and Language*, 73, 297-320.
- Brady, G. (2014). Children and ADHD: seeking control within the constraints of diagnosis. *Children & Society*, 28(3), 218-230.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597.
- Brevik, E. J., Lundervold, A. J., Haavik, J., & Posserud, M. B. (2020). Validity and accuracy of the Adult Attention-Deficit/Hyperactivity Disorder (ADHD) Self-Report Scale (ASRS) and the Wender Utah Rating Scale (WURS) symptom checklists in discriminating between adults with and without ADHD. *Brain and Behavior*, 10(6), 1-10.
- Bron, T. I., Bijlenga, D., Verduijn, J., Penninx, B. W., Beekman, A. T., & Kooij, J. S. (2016). Prevalence of ADHD symptoms across clinical stages of major depressive disorder. *Journal of Affective Disorders*, 197, 29-35.
- Brown, T. E. (2000). *Attention-deficit disorders and comorbidities in children adolescents, and adults*. Washington, DC: American Psychiatric Press.

- Brown, R. L. (2017). Functional limitation and depressive symptomatology: Considering perceived stigma and discrimination within a stress and coping framework. *Stigma and Health*, 2(2), 98-109.
- Bussing, R., Zima, B. T., & Perwien, A. R. (2000). Self-esteem in special education children with ADHD: Relationship to disorder characteristics and medication use. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(10), 1260-1269.
- Butler, E. A., Egloff, B., Wilhelm, F. H., Smith, N. C., Erickson, E. A., & Gross, J. J. (2003). The social consequences of expressive suppression. *Emotion*, 3(1), 48-67.
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56(3), 1391-1412.
- Cage, E., Di Monaco, J., & Newell, V. (2018). Experiences of autism acceptance and mental health in autistic adults. *Journal of Autism and Developmental Disorders*, 48(2), 473-484.
- Cage, E., & Troxell-Whitman, Z. (2019). Understanding the reasons, contexts and costs of camouflaging for autistic adults. *Journal of Autism and Developmental Disorders*, 49(5), 1899-1911.
- Canela, C., Buadze, A., Dube, A., Eich, D., & Liebreinz, M. (2017). Skills and compensation strategies in adult ADHD—A qualitative study. *PLOS One*, 12(9): e0184964.
- Carlson, C. L., & Mann, M. (2002). Sluggish cognitive tempo predicts a different pattern of impairment in the attention deficit/ hyperactivity disorder, predominantly inattentive type. *Journal of Clinical Child and Adolescent Psychology*, 31(1), 123-129.
- Castagna, P. J., Roye, S., & Calamia, M. (2019). The compensatory ADHD behaviors scale (CABS): Development and initial validation. *Assessment*, 26(5), 783-798.
- Cath, D. C., Ran, N., Smit, J. H., Van Balkom, A. J., & Comijs, H. C. (2008). Symptom overlap between autism spectrum disorder, generalized social anxiety disorder and obsessive-compulsive disorder in adults: a preliminary case-controlled study. *Psychopathology*, 41(2), 101-110.
- Clark, D. M. & Wells, A. (1995). A cognitive model of social phobia. In R.G. Heimberg, M.R. Liebowitz, D. A. Hope and F. R. Schneier (Eds.), *Social Phobia: Diagnosis, Assessment and Treatment*, (pp. 69-93). New York: Guilford Press.
- Cohen, J. I. (2000). Stress and mental health: a biobehavioral perspective. *Issues in Mental Health Nursing*, 21(2), 185-202.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences*, (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *The University of Chicago Legal Forum*, 140, 139–167.
- Dean, M., Harwood, R., & Kasari, C. (2017). The art of camouflage: Gender differences in the social behaviors of girls and boys with autism spectrum disorder. *Autism*, 21(6), 678-689.
- de Boer, A., & Pijl, S. J. (2016). The acceptance and rejection of peers with ADHD and ASD in general secondary education. *The Journal of Educational Research*, 109(3), 325-332.
- Ekman, P., & Friesen, W. (1969). The repertoire of nonverbal behavior: Categories, origins, usage, and coding. *Semiotica*, 1, 49-98.
- Ekman, P., Friesen, W. V., & Ellsworth, P. (1972). *Emotion in the human face: Guidelines for research and an integration of findings*. NY: Pergamon Press.
- Eysenck, H. J. (1992). *Anxiety: The cognitive perspective*. Hove: Erlbaum.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.
- Fedele, D. A., Lefler, E. K., Hartung, C. M., & Canu, W. H. (2012). Sex differences in the manifestation of ADHD in emerging adults. *Journal of Attention Disorders*, 16(2), 109-117.
- Finlay, L. (2014). Engaging phenomenological analysis. *Qualitative Research in Psychology*, 11(2), 121-141.
- Fischer, A. G., Bau, C. H., Grevet, E. H., Salgado, C. A., Victor, M. M., Kalil, K. L., ... & Belmonte-de-Abreu, P. (2007). The role of comorbid major depressive disorder in the clinical presentation of adult ADHD. *Journal of Psychiatric Research*, 41(12), 991-996.
- Giorgi, A. (2009). *The descriptive phenomenological method in psychology: A modified Husserlian approach*. Duquesne University Press.
- Ghosh, M., Fisher, C., Preen, D. B., & Holman, C. A. J. (2016). "It has to be fixed": a qualitative inquiry into perceived ADHD behaviour among affected individuals and parents in Western Australia. *BMC Health Services Research*, 16(1), 1-12.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Doubleday, Anchor Books.
- Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. New York: Simon & Schuster.
- Government of Canada. (2019, July 10). *Requirements for Informed Consent Documents*. <https://www.canada.ca/en/health-canada/services/science->

[research/science-advice-decision-making/research-ethics-board/requirements-informed-consent-documents.html](https://www.research-science.org/research-ethics-board/requirements-informed-consent-documents.html)

- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.
- Griffin, E., & Pollak, D. (2009). Student experiences of neurodiversity in higher education: insights from the BRAINHE project. *Dyslexia*, 15(1), 23-41.
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348-362.
- Gross, J. J., & Muñoz, R. F. (1995). Emotion regulation and mental health. *Clinical Psychology: Science and Practice*, 2(2), 151-164.
- Haegele, J. A., & Hodge, S. (2016). Disability discourse: Overview and critiques of the medical and social models. *Quest*, 68(2), 193-206.
- Hagerty, B. M., & Williams, A. (1999). The effects of sense of belonging, social support, conflict, and loneliness on depression. *Nursing Research*, 48(4), 215-219.
- Hallberg, U., Klingberg, G., Setsaa, W., & Möller, A. (2010). Hiding parts of one's self from others—a grounded theory study on teenagers diagnosed with ADHD. *Scandinavian Journal of Disability Research*, 12(3), 211-220.
- Hartanto, T. A., Krafft, C. E., Iosif, A. M., & Schweitzer, J. B. (2016). A trial-by-trial analysis reveals more intense physical activity is associated with better cognitive control performance in attention-deficit/hyperactivity disorder. *Child Neuropsychology*, 22, 618–626.
- Hinshaw, S. P. (2007). *The mark of shame: Stigma of mental illness and an agenda for change*. New York: Oxford University Press.
- Honkasilta, J., Vehmas, S., & Vehkakoski, T. (2016). Self-pathologizing, self-condemning, self-liberating: Youths' accounts of their ADHD-related behavior. *Social Science & Medicine*, 150, 248-255.
- Hull, L., Lai, M. C., Baron-Cohen, S., Allison, C., Smith, P., Petrides, K. V., & Mandy, W. (2020). Gender differences in self-reported camouflaging in autistic and non-autistic adults. *Autism*, 24(2), 352-363.
- Hull, L., Levy, L., Lai, M. C., Petrides, K. V., Baron-Cohen, S., Allison, C., ... & Mandy, W. (2021). Is social camouflaging associated with anxiety and depression in autistic adults?. *Molecular Autism*, 12(1), 1-13.
- Hull, L., Mandy, W., Lai, M. C., Baron-Cohen, S., Allison, C., Smith, P., & Petrides, K. V. (2019). Development and validation of the camouflaging autistic traits questionnaire (CAT-Q). *Journal of Autism and Developmental Disorders*, 49(3), 819-833.

- Hull, L., Petrides, K. V., Allison, C., Smith, P., Baron-Cohen, S., Lai, M. C., & Mandy, W. (2017). "Putting on my best normal": Social camouflaging in adults with autism spectrum conditions. *Journal of Autism and Developmental Disorders*, 47(8), 2519-2534.
- Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology: An introduction to phenomenological philosophy*. Northwestern University Press.
- Jorgenson, C., Lewis, T., Rose, C., & Kanne, S. (2020). Social camouflaging in autistic and neurotypical adolescents: A pilot study of differences by sex and diagnosis. *Journal of Autism and Developmental Disorders*, 50(12), 4344-4355.
- Kanuha, V. K. (1999). The Social process of "passing" to manage stigma: Acts of internalized oppression of acts of resistance. *The Journal of Sociology & Social Welfare*, 26(4), 27-46.
- Kapp, S. K., Steward, R., Crane, L., Elliott, D., Elphick, C., Pellicano, E., & Russell, G. (2019). 'People should be allowed to do what they like': Autistic adults' views and experiences of stimming. *Autism*, 23(7), 1782-1792.
- Katzman, M. A., Bilkey, T. S., Chokka, P. R., Fallu, A., & Klassen, L. J. (2017). Adult ADHD and comorbid disorders: clinical implications of a dimensional approach. *BMC psychiatry*, 17(1), 1-15.
- Kazdin, A. E. (2016). *Research design in clinical psychology (5th ed.)*. Boston: Pearson.
- Kessler, R. C., Adler, L. A., Ames, M., Demler, O., Faraone, S., Hiripi, E., ... Walters, E. E. (2005). The World Health Organization Adult ADHD Self-Report Scale (ASRS): A short screening scale for use in the general population. *Psychological Medicine*, 35, 245-256.
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education*, 6(5), 26-41.
- Knouse, L. E., Zvorsky, I., & Safren, S. A. (2013). Depression in adults with attention-deficit/hyperactivity disorder (ADHD): The mediating role of cognitive-behavioral factors. *Cognitive Therapy and Research*, 37(6), 1220-1232.
- Kooij, J. J. S., Bijlenga, D., Salerno, L., Jaeschke, R., Bitter, I., Balazs, J., ... & Asherson, P. (2019). Updated European Consensus Statement on diagnosis and treatment of adult ADHD. *European Psychiatry*, 56(1), 14-34.
- Koyuncu, A., Alkın, T., & Tükel, R. (2018). Development of social anxiety disorder secondary to attention deficit/hyperactivity disorder (the developmental hypothesis). *Early Intervention in Psychiatry*, 12(2), 269-272.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606-613.

- Kysow, K., Park, J., & Johnston, C. (2017). The use of compensatory strategies in adults with ADHD symptoms. *ADHD Attention Deficit and Hyperactivity Disorders*, 9(2), 73-88.
- Lai, M. C., Lombardo, M. V., Chakrabarti, B., Ruigrok, A. N., Bullmore, E. T., Suckling, J., ... & Baron-Cohen, S. (2019). Neural self-representation in autistic women and association with 'compensatory camouflaging'. *Autism*, 23(5), 1210-1223.
- Lai, M. C., Lombardo, M. V., Pasco, G., Ruigrok, A. N., Wheelwright, S. J., Sadek, S. A., & Baron-Cohen, S. (2011). A behavioral comparison of male and female adults with high functioning autism spectrum conditions. *PloS One*, 6(6), e20835.
- Larsen, J. K., Vermulst, A. A., Eisinga, R., English, T., Gross, J. J., Hofman, E., ... & Engels, R. C. (2012). Social coping by masking? Parental support and peer victimization as mediators of the relationship between depressive symptoms and expressive suppression in adolescents. *Journal of Youth and Adolescence*, 41(12), 1628-1642.
- Lebowitz, M. S. (2016). Stigmatization of ADHD: A developmental review. *Journal of Attention Disorders*, 20(3), 199-205.
- Lewis, R. J., Milletich, R. J., Mason, T. B., & Derlega, V. J. (2014). Pathways connecting sexual minority stressors and psychological distress among lesbian women. *Journal of Gay & Lesbian Social Services*, 26(2), 147-167.
- Livingston, L. A., Shah, P., & Happé, F. (2019). Compensatory strategies below the behavioural surface in autism: A qualitative study. *The Lancet Psychiatry*, 6(9), 766-777.
- Loe, M., & Cuttino, L. (2008). Grappling with the medicated self: The case of ADHD college students. *Symbolic Interaction*, 31(3), 303-323.
- Lysaker, P. H., Roe, D., & Yanos, P. T. (2007). Toward understanding the insight paradox: Internalized stigma moderates the association between insight and social functioning, hope, and self-esteem among people with schizophrenia spectrum disorders. *Schizophrenia Bulletin*, 33, 192-199.
- Masuch, T. V., Bea, M., Alm, B., Deibler, P., & Sobanski, E. (2019). Internalized stigma, anticipated discrimination and perceived public stigma in adults with ADHD. *ADHD Attention Deficit and Hyperactivity Disorders*, 11(2), 211-220.
- Matza, L. S., Van Brunt, D. L., Cates, C., & Murray, L. T. (2011). Test-retest reliability of two patient-report measures for use in adults with ADHD. *Journal of Attention Disorders*, 15(7), 557-563.
- Mayoh, J., & Onwuegbuzie, A. J. (2015). Toward a conceptualization of mixed methods phenomenological research. *Journal of Mixed Methods Research*, 9(1), 91-107.
- McKeague, L., Hennessy, E., O'Driscoll, C., & Heary, C. (2015). Retrospective accounts of self-stigma experienced by young people with attention-deficit/hyperactivity

- disorder (ADHD) or depression. *Psychiatric Rehabilitation Journal*, 38(2), 158-163.
- Merriam, S. B. & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation (4th ed.)*. John Wiley & Sons.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697. doi:10.1037/0033-2909.129.5 .674
- Mikami, A. Y., Miller, M., & Lerner, M. D. (2019). Social functioning in youth with attention-deficit/hyperactivity disorder and autism spectrum disorder: transdiagnostic commonalities and differences. *Clinical Psychology Review*, 68, 54-70.
- Moustakas, C. (1994). *Phenomenological Research Methods*. Sage Publications, London.
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology*, 52(2), 250-260.
- Mowrer, O. H. (1939). A stimulus-response analysis of anxiety and its role as a reinforcing agent. *Psychological Review*, 46(6), 553-565.
- Mueller, A. K., Fuermaier, A. B., Koerts, J., & Tucha, L. (2012). Stigma in attention deficit hyperactivity disorder. *ADHD Attention Deficit and Hyperactivity Disorders*, 4(3), 101-114.
- Nehlin, C., Nyberg, F., & Öster, C. (2015). The patient's perspective on the link between ADHD and substance use: A qualitative interview study. *Journal of Attention Disorders*, 19(4), 343-350.
- Nixon, E. (2001). The social competence of children with attention deficit hyperactivity disorder: A review of the literature. *Child Psychology and Psychiatry Review*, 6(4), 172-180.
- Nussbaum, N. L. (2012). ADHD and female specific concerns: a review of the literature and clinical implications. *Journal of Attention Disorders*, 16(2), 87-100.
- Pachankis, J. E. (2007). The psychological implications of concealing a stigma: A cognitive-affective-behavioral model. *Psychological Bulletin*, 133(2), 328-345.
- Pachankis, J. E., Mahon, C. P., Jackson, S. D., Fetzner, B. K., & Bränström, R. (2020). Sexual orientation concealment and mental health: A conceptual and meta-analytic review. *Psychological Bulletin*, 146(10), 831.
- Paulson, J. F., Buermeyer, C., & Nelson-Gray, R. O. (2005). Social rejection and ADHD in young adults: An analogue experiment. *Journal of Attention Disorders*, 8(3), 127-135.

- Pehlivanidis, A., Papanikolaou, K., Spyropoulou, A. C., & Papadimitriou, G. N. (2014). Comorbid attention-deficit/hyperactivity disorder in adult psychiatric outpatients with depressive or anxiety disorders. *International Journal of Psychiatry in Clinical Practice*, 18(4), 265-271.
- Peters, L., Sunderland, M., Andrews, G., Rapee, R. M., & Mattick, R. P. (2012). Development of a short form Social Interaction Anxiety (SIAS) and Social Phobia Scale (SPS) using nonparametric item response theory: The SIAS-6 and the SPS-6. *Psychological Assessment*, 24(1), 66-76.
- Perry, E., Mandy, W., Hull, L., & Cage, E. (2022). Understanding camouflaging as a response to autism-related stigma: A social identity theory approach. *Journal of Autism and Developmental Disorders*, 52(2), 800-810.
- Psychogiou, L., Daley, D. M., Thompson, M. J., & Sonuga-Barke, E. J. (2007). Mothers' expressed emotion toward their school-aged sons. *European Child & Adolescent Psychiatry*, 16(7), 458-464.
- Rachman, S. J. (2020). *Anxiety (4th ed.)*. New York: Routledge.
- Ramtekkar, U. P., Reiersen, A. M., Todorov, A. A., & Todd, R. D. (2010). Sex and age differences in attention-deficit/hyperactivity disorder symptoms and diagnoses: implications for DSM-V and ICD-11. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(3), 217-228.
- Ritsher (Boyd), J. B., & Phelan, J. (2004). Internalized stigma predicts erosion of morale among psychiatric outpatients. *Psychiatry Research*, 129, 257–265.
- Robinson, E., Hull, L., & Petrides, K. V. (2020). Big Five model and trait emotional intelligence in camouflaging behaviours in autism. *Personality and Individual Differences*, 152, 1-7.
- Ronald, Simonoff, E., Kuntsi, J., Asherson, P., & Plomin, R. (2008). Evidence for overlapping genetic influences on autistic and ADHD behaviours in a community twin sample. *Journal of Child Psychology and Psychiatry*, 49(5), 535–542. <https://doi.org/10.1111/j.1469-7610.2007.01857.x>
- Rong, Y., Yang, C. J., Jin, Y., & Wang, Y. (2021). Prevalence of attention-deficit/hyperactivity disorder in individuals with autism spectrum disorder: A meta-analysis. *Research in Autism Spectrum Disorders*, 83, 101759.
- Roth, R. M, Wishart, H. A., Flashman, L. A., Riordan, H. J., Huey, L., & Saykin, A. J. (2004). Contribution of organizational strategy to verbal learning and memory in adults with attention-deficit/ hyperactivity disorder. *Neuropsychology*, 18(1), 78-85.
- Roy, A., Hartman, C. A., Veenstra, R., & Oldehinkel, A. J. (2015). Peer dislike and victimisation in pathways from ADHD symptoms to depression. *European Child & Adolescent Psychiatry*, 24(8), 887-895.

- Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry, 20*(8), 529-539.
- Scheerer, N. E., Aime, H., Boucher, T., & Iarocci, G. (2020). The association between self-reported camouflaging of autistic traits and social competence in nonautistic young adults. *Autism in Adulthood, 2*(4), 298-306.
- Schrevel, S. J., Dedding, C., van Aken, J. A., & Broerse, J. E. (2016). 'Do I need to become someone else?' A qualitative exploratory study into the experiences and needs of adults with ADHD. *Health Expectations, 19*(1), 39-48.
- Shaw-Zirt, B., Popali-Lehane, L., Chaplin, W., & Bergman, A. (2005). Adjustment, social skills, and self-esteem in college students with symptoms of ADHD. *Journal of Attention Disorders, 8*(3), 109-120.
- Simon, V., Czobor, P., Bálint, S., Mészáros, A., & Bitter, I. (2009). Prevalence and correlates of adult attention-deficit hyperactivity disorder: Meta-analysis. *The British Journal of Psychiatry, 194*(3), 204-211.
- Singh, I. (2007). Clinical implications of ethical concepts: moral self-understandings in children taking methylphenidate for ADHD. *Clinical Child Psychology and Psychiatry, 12*(2), 167-182.
- Singh, I. (2013). Not robots: children's perspectives on authenticity, moral agency and stimulant drug treatments. *Journal of Medical Ethics, 39*(6), 359-366.
- Skirrow, C., McLoughlin, G., Kuntsi, J., & Asherson, P. (2009). Behavioral, neurocognitive and treatment overlap between attention-deficit/hyperactivity disorder and mood instability. *Expert Review of Neurotherapeutics, 9*(4), 489-503.
- Smit, S., Mikami, A. Y., & Normand, S. (2020). Correlates of loneliness in children with attention-deficit/hyperactivity disorder: Comorbidities and peer problems. *Child Psychiatry & Human Development, 51*(3), 478-489.
- Sobanski, E., Brüggemann, D., Alm, B., Kern, S., Deschner, M., Schubert, T., ... & Rietschel, M. (2007). Psychiatric comorbidity and functional impairment in a clinically referred sample of adults with attention-deficit/hyperactivity disorder (ADHD). *European Archives of Psychiatry and Clinical Neuroscience, 257*(7), 371-377.
- Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. *JAMA, 282*(18), 1737-1744.
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine, 166*(10), 1092-1097.

- Stevenson, J. L., & Hart, K. R. (2017). Psychometric properties of the autism-spectrum quotient for assessing low and high levels of autistic traits in college students. *Journal of Autism and Developmental Disorders*, 47(6), 1838-1853.
- Tierney, S., Burns, J., & Kilbey, E. (2016). Looking behind the mask: Social coping strategies of girls on the autistic spectrum. *Research in Autism Spectrum Disorders*, 23, 73-83.
- Turner, L. A., Faulk, R. D., & Garner, T. (2020). Helicopter parenting, authenticity, and depressive symptoms: A mediation model. *The Journal of Genetic Psychology*, 181(6), 500-505.
- Wenzel, A. J., & Lucas-Thompson, R. G. (2012). Authenticity in college-aged males and females, how close others are perceived, and mental health outcomes. *Sex Roles*, 67(5), 334-350.
- Wilens, T. E., Biederman, J., Faraone, S. V., Martelon, M., Westerberg, D., & Spencer, T. J. (2009). Presenting ADHD symptoms, subtypes, and comorbid disorders in clinically referred adults with ADHD. *The Journal of Clinical Psychiatry*, 70(11), 1557-1562.

Appendix A. Social Camouflaging ADHD Qualitative Questions (age 16+)

Adapted from Hull et al. (2017): *“Putting on My Best Normal”: Social Camouflaging in Adults with Autism Spectrum Conditions*

1. Have you ever had the experience of 'camouflaging', 'masking', or hiding your ADHD from others? In this survey, we use the term 'camouflaging' to refer to coping skills, strategies, and techniques that function to "mask" features of ADHD during social situations.

'Camouflaging' could be any behaviours, strategies, activities or other things you use or do to hide your ADHD and/or ADHD traits from others. We realize that face-to-face social situations may be limited due to the current covid-19 pandemic, so we ask that you please think about your social interactions (virtual and face-to-face) both **now** and **before** the pandemic.

- Yes, I have had the experience of camouflaging, masking or hiding my ADHD.
- No, I have **not** had the experience of camouflaging, masking or hiding my ADHD.

Reminder: In this survey we use the term 'camouflaging' to refer to 'coping skills, strategies, and techniques that function to 'mask' features of ADHD during social situations.

2. In **what situations** do you camouflage (for example, when meeting new people, in large groups, job interviews, with friends etc.)?
3. In social situations, **how do you camouflage/what do you do when you camouflage?** Please provide details and examples, for instance the behaviours and thoughts you experience.

Note: we would like you to share your own personal experiences about what you do, without presuming what these might be, so we have not listed any examples here.

4. **Why** do you camouflage during social situations? *Please provide details.*
5. Do you find it **useful** to camouflage your ADHD traits in social situations? *Please provide details.*
- yes* *no*
- [textbox to explain]*
6. How do you think camouflaging impacts your **social relationships**? *Please provide details.*
7. Are there any **disadvantages** to camouflaging? *Please provide details.*

Appendix B. Frequency of Social Camouflaging ADHD Measure

Adapted from Cage & Troxell-Whitman (2019) *Understanding the Reasons, Contexts and Costs of Camouflaging for Autistic Adults*

8a. **How frequently** do you camouflage your ADHD in social situations? [Likert scale from 1 to 5]

Recall: We are asking about camouflaging in social situations (both in-person or virtual) now and before the covid-19 pandemic.

5 = Always (camouflage in almost all social situations)

4 = Often (camouflage in most social situations)

3 = Sometimes (occasionally camouflage in social situations)

2 = Very rarely (camouflage very rarely in social situations)

1 = Never (do not camouflage in social situations)

b. When you are **in public (for e.g., at school or work)**, how often do you camouflage your ADHD?

5 = Always

4 = Often

3 = Sometimes

2 = Very rarely

1 = Never

c. When you **talk to someone you don't know very well**, how often do you camouflage your ADHD?

5 = Always

4 = Often

3 = Sometimes

2 = Very rarely

1 = Never

d. When you are **with friends**, how often do you camouflage your ADHD?

5 = Always

4 = Often

3 = Sometimes

2 = Very rarely

1 = Never

e. When you are **with family**, how often do you camouflage your ADHD?

5 = Always

4 = Often

3 = Sometimes

2 = Very rarely

1 = Never

d. When you are **online**, how often do you camouflage your ADHD?

5 = Always

4 = Often

3 = Sometimes

2 = Very rarely

1 = Never

Appendix C. Table of Identified Superordinate Themes, Subthemes, and Superordinate Theme Descriptions for Motivations, Strategies, Situations, and Consequences of Camouflaging ADHD

| Category | Superordinate Themes | Subthemes | Description of Superordinate Themes |
|-------------------------------------|--|--|--|
| Motivations for Camouflaging | <i>"To seem 'normal'"</i> | To fit in with others To meet societal expectations | Participants reported camouflaging in order to 'fit in' with others, follow social norms, and be perceived as 'normal'. |
| | <i>To be liked</i> | To make and maintain relationships To improve the experience for others Driven by internalized stigma of ADHD | Participants reported camouflaging to make and maintain relationships and positions. Some participants camouflaged because they held negative views about their ADHD. |
| | <i>To avoid adverse experiences</i> | To avoid negative experiences To avoid judgement, criticism and rejection To alleviate anxiety | Participants described camouflaging in order to avoid a number of negative experiences, such as rejection, criticism, and punishment, and associated emotions, such as feeling embarrassed, fearful, anxious, judged, dismissed, and left out. Some participants described negative past experiences they suffered, such as childhood bullying. Some viewed camouflaging as a necessary behaviour to alleviate their "anxiety of being othered or judged". |
| | <i>It's necessary: "Camouflaging is a survival tactic"</i> | To protect against discrimination and emotional pain Necessary for survival in a "neurotypical society" | Participants reported camouflaging to protect themselves from discrimination and viewed camouflaging as a practical necessity to survive in a society that awards and values neurotypical traits with social and career opportunities. |
| Camouflaging Strategies | <i>Hiding & pretending</i> | Hiding ADHD traits & avoiding social situations Performing (e.g., pretending to pay attention, be social, organized etc.) Intense monitoring Providing alternative explanations | Participants reported a number of strategies of hiding their ADHD traits from others (e.g., fidgeting in their pockets), and/or pretending to be a certain way and have certain traits (e.g., pretending to pay attention or be friendly and social). This often required intense monitoring of oneself, others and the environment to achieve. Some participants camouflaged their ADHD traits by providing alternative |

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| | | | explanations, unrelated to ADHD, for their behaviour after the fact. |
| | <i>Suppression</i> | Suppressing verbal impulses (e.g., talking, thoughts, ideas) Suppressing behavioural impulses (e.g., fidgeting, movements) | Suppression involves inhibiting the expression of an urge. Many participants described suppressing their urge to fidget or speak. |
| | <i>Compensation</i> | Attention & engagement strategies (e.g., asking questions, socializing via physical activities) Planning ahead (e.g., using tools, overpreparing) Substance use (i.e., prescription medication & illicit drugs) | Another form of camouflaging involved strategies aimed to compensate for ADHD-related difficulties through planning and/or engagement in other behaviours. |
| Situations | <i>Professional settings</i> | n/a | Many participants described camouflaging in professional settings, including the workplace, job interviews and other formal or professional settings, like doctor's offices or funerals. |
| | <i>New people</i> | n/a | Many participants reported camouflaging in situations with new people they were not yet comfortable with, including strangers, new friends, or potential romantic partners. |
| | <i>Close relationships</i> | n/a | Some participants described camouflaging in close relationships, including situations with friends, family, roommates, and partners. |
| | <i>Large groups</i> | n/a | Many participants reported camouflaging in large groups of people, including family or friend gatherings, parties, weddings, or crowded places. |
| | <i>Public spaces</i> | n/a | Some participants described camouflaging in public spaces, such as at the grocery store, at restaurants, on public transit, on social media, at school, and at church. |
| Consequences of Camouflaging | <i>Facilitates social interactions & outcomes</i> | n/a | Participants reported that camouflaging facilitated the development and maintenance of social relationships through more positive and successful social interactions. |
| | <i>"I'm in control of perception"</i> | n/a | Many participants described how camouflaging led others to perceive them more positively and in a way |

| | | | |
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| | | | they desired (e.g., capable, successful). |
| <i>Identity disturbance: "I am hiding my true self"</i> | "I am hiding my true self" "I feel like a fraud" Identity confusion: "I don't know who I am" | | Many participants felt that camouflaging caused them to hide their true self and personality and was an inauthentic and untruthful way of living. Some participants described how camouflaging caused them to question their identity and who their "true self" really was. |
| <i>"It's exhausting"</i> | Mentally, physically and emotionally taxing Requires considerable effort and resources to sustain | | Camouflaging was described to be mentally, physically and emotionally exhausting, and required considerable efforts and resources to sustain which left many participants feeling burnt out and drained after a session of camouflaging. |
| <i>Effects on mental health</i> | Stress Anxiety Depression | | Camouflaging was also described to lead to psychological distress in the form of stress, anxiety, and depression. |
| <i>Reduced closeness & connection</i> | Reduced connection with others Reduced ability & desire to engage socially | | Although camouflaging was thought to aid in the initial development of social relationships, it was also thought to limit the development of close relationships based on genuine connection and understanding. The stress and exhaustion of camouflaging also limited the amount of socializing participants were capable of tolerating as well as the amount they desired. |
| <i>Interferes with important cognitive functions</i> | n/a | | Many participants reported that camouflaging interfered with important cognitive functions in a number of areas, including attention, concentration, and memory, which exacerbated problems often associated with ADHD. |
| <i>Perpetuates unrealistic expectations & ADHD stigma</i> | Creates unrealistic expectations Difficulties receiving help and support Perpetuates ADHD stigma | | Camouflaging was thought to create high expectations and restrict the degree of understanding and support participants received from others, including family, friends, teachers and mental health professionals. A number of participants believed that camouflaging perpetuates stigma associated with ADHD because, by hiding ADHD traits, others are less likely to learn about and begin to understand ADHD and the current stigma is not challenged. |

Appendix D. Number of Participants Who Referenced Each Theme

| Category | Theme | Number of Participants | | | |
|--------------|--|------------------------|-----------------|--|--------------------|
| | | Woman (n = 143) | Man (n = 33) | Gender Diverse ¹ (n = 26) | Total (N = 202) |
| Motivations | <i>"To seem 'normal'"</i> | 52 | 7 | 9 | 68 |
| | <i>To be liked</i> | 81 | 12 | 14 | 107 |
| | <i>To avoid adverse experiences</i> | 73 | 15 | 15 | 103 |
| | <i>It's necessary: "Camouflaging is a survival tactic"</i> | 38 | 7 | 14 | 59 |
| Strategies | <i>Hiding and pretending</i> | 104 | 17 | 20 | 141 |
| | <i>Suppression</i> | 84 | 14 | 20 | 118 |
| | <i>Compensation</i> | 68 | 17 | 9 | 91 |
| Situations | <i>Professional settings</i> | 71 | 19 | 18 | 108 |
| | <i>New people</i> | 70 | 16 | 18 | 104 |
| | <i>Close relationships</i> | 33 | 4 | 10 | 47 |
| | <i>Large groups</i> | 30 | 4 | 7 | 41 |
| | <i>Public spaces</i> | 35 | 7 | 8 | 50 |
| Consequences | <i>Facilitates social interactions and outcomes</i> | 55 | 10 | 6 | 71 |
| | <i>"I'm in control of perception"</i> | 27 | 3 | 7 | 37 |
| | <i>Identity disturbance: "I am hiding my true self"</i> | 60 | 11 | 11 | 82 |
| | <i>"It's exhausting"</i> | 61 | 14 | 16 | 91 |
| | <i>Effects on mental health</i> | 72 | 12 | 12 | 96 |
| | <i>Reduced closeness and connection</i> | 96 | 17 | 18 | 131 |

| | | | | |
|---|----|---|----|----|
| <i>Interferes with important cognitive functions</i> | 27 | 8 | 11 | 46 |
| <i>Perpetuates unrealistic expectations and ADHD stigma</i> | 24 | 3 | 4 | 31 |

¹Gender Diverse' also includes participants who selected "Prefer not say" for their gender identity