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The silver lining of ADHD: A thematic analysis of adults' positive experiences with living with ADHD

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The silver lining of ADHD: A thematic analysis of adults'

positive experiences with living with ADHD

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Abstract

Objective: To identify and explore positive aspects of having ADHD as reported by adults with the diagnosis.

Method: The study included 50 adults with ADHD seeking psychological treatment. The participants took part in trial of a self-guided Internet-delivered intervention. As part of the intervention, the participants were asked to describe positive aspects of having ADHD. The participants' responses were analyzed using thematic analysis.

Results: The participants described a variety of positive aspects related to having ADHD. The participants' experiences were conceptualized and thematically organized into four main

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3 themes: i) the dual impact of ADHD characteristics; ii) the unconventional mind; iii) the
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7 pursuit of new experiences; and iv) resilience and growth.
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10 **Conclusion:** Having ADHD could be experienced as both challenging and beneficial,
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13 depending upon the context and one's socio-cultural environment. The findings give
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16 arguments for putting a stronger emphasis on positive aspects of ADHD, alongside the
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19 challenges, in treatment settings.
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27 **Word count:** 5631
28
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30 **Keywords:** ADHD₁, Adulthood₂, Strengths₃, Positive psychology₄, Thematic analysis₅
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57 **Strengths and limitations** 58 59 60

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- The current study is one of few studies that focus on positive aspects of ADHD.
 - With the current study design and analysis, we can only explore the participants' experiences with positive aspects of ADHD, but studies with different study designs are needed to examine the frequency of these positive aspects and their generalizability.
 - The sample is restricted to only include participants who responded to a question regarding positive traits, which was about half of the participants in the clinical trial.
 - The sample included more females than males, which makes the findings less transferable to males.

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Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder with a high prevalence rate in childhood [1]. The persistence of impairing symptoms into adulthood is common and reported by up to 90% of childhood cases [2]. Common symptoms of ADHD in adulthood include inattention, restlessness, and impulsivity, but deficits related to emotion regulation and executive functioning are also frequently reported [3-5]. These symptoms are known to interfere with many activities of daily living, and tend to affect functions within occupational, educational, interpersonal and financial domains [3]. Medication is the primary treatment for adults with ADHD, but many ask for additional psychological treatment [6, 7].

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4 Research on ADHD tend to focus on the impairments and negative outcomes
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7 associated with the diagnosis. While individuals with ADHD have more challenges than
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10 individuals without ADHD, the burden of living with ADHD may increase by portraying a
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13 primarily deficit-oriented view of having the diagnosis. For instance, it is well-known that
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16 individuals with ADHD are prone to experience public stigma, prejudice and criticism on the
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19 basis of their diagnosis, which can negatively impact self-esteem, self-efficacy and well-
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22 being [8, 9]. Moreover, a deficit-oriented view of ADHD may neglect the strengths
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25 associated with the diagnosis. Another approach would be to foster a more ability-oriented
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28 view of ADHD, where one seeks to emphasize the person's resources, abilities and coping
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31 skills [10].
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37 The majority of the available treatment interventions for adults with ADHD still tend
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40 to have a more deficit-oriented focus, where most studies define successful treatment as
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43 reduction in ADHD symptoms [11]. Among the 23 studies on Cognitive behavioral therapy
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46 (CBT) for adults with ADHD presented in a recent systematic review, we were only able to
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49 identify one study that included an intervention with an explicit focus on strengths related to
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52 ADHD [12, 13]. The aforementioned intervention was found to improve knowledge about
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55 ADHD and life satisfaction among the participants and their significant others [12]. As such,
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4 this study supports that incorporation of a strength-based focus in psychological treatment for
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7 adults with ADHD may have beneficial effects. Other studies show that adults with ADHD
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10 experience public health care as too deficit- and symptom-centered [14]. As such, some
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13 adults with ADHD seek alternative treatments that are perceived as more strength-based,
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16 even if they are not reimbursed by healthcare insurances [14]. Given that people are willing
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19 to pay out-of-pocket for these treatments, it may indicate that the current treatment options do
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22 not entirely meet the needs of adults with ADHD [14].
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27 The scientific literature on the strengths associated with ADHD is still scarce [15].
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30 There are a few qualitative studies that have found that adults with ADHD attribute several
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33 positive aspects to the diagnosis, such as energy, drive, creativity, hyperfocus, agreeableness,
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36 empathy, courage, curiosity, and resilience [16-18]. A review of the link between creativity
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39 and ADHD have also shown that creative abilities and achievements were high among
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42 individuals with both clinical and subclinical symptoms of ADHD [15]. In line with this,
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45 some studies have also found ADHD to be associated with entrepreneurial intentions and
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48 initiation of entrepreneurial actions [19, 20]. As such, these studies highlight that despite the
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51 well-known challenges associated with ADHD, there are also several strengths that may be
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54 linked to having the diagnosis.
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4 The aim of the current study was to identify and explore positive aspects of having
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7 ADHD as reported by adults with ADHD seeking psychological treatment. We also seek to
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10 shed light upon how these aspects of the diagnosis can be utilized in future treatment
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13 interventions for adults with ADHD. There is a lack of previous studies examining the
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16 positive aspects of ADHD, and thus the findings from the current study may contribute to fill
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19 a gap in the literature. A more dual focus on both the strengths and challenges related to
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22 ADHD may further have a countereffect on the public stigmatization associated with the
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25 diagnosis and help to empower individuals with the diagnosis.
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34 Method

37 Study design

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40 The current study is a qualitative investigation including written responses from adults with
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43 ADHD to an open-ended question about self-perceived positive aspects of having ADHD.
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47 The empirical material was analyzed using thematic analysis with hermeneutic
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50 phenomenological framework [21, 22].
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54 Study context

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4 The data used in the current study originate from a larger clinical trial of a self-guided
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6
7 Internet-delivered intervention for adults with ADHD ([23]. The clinical trial was a multiple
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10 randomized controlled trial including 109 adults with ADHD aiming to examine whether
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13 reminders would improve adherence to the intervention. The intervention was accessed
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16 online and included seven modules targeting common themes and challenges related to
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19 ADHD. The first module was an introduction module, whereas the second to sixth module
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22 focused on inattention, inhibitory control, emotion dysregulation, planning and organization,
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25 and self-acceptance, and included instructions to various coping strategies. The seventh and
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28 last module was a summary module of the entire program (see [24] for a more detailed
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31 description of the intervention). Most of the participants who answered the post-intervention
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34 assessment reported that they were satisfied with the intervention. The participants received a
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37 gift card of 400 NOK (38 EUR) for their participation in the clinical trial, regardless of
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40 whether they answered the question assessing positive aspects of ADHD.
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47 The original study protocol planned to use both qualitative and quantitative methods
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50 for data analysis, but it was not planned to examine positive aspects of ADHD. However,
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53 when reviewing the data, we were struck by its richness and the number of answers given to
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4 this open and non-obligatory question on positive aspects of ADHD, which inspired us to
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7 conduct a more in-depth examination of the empirical material.
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10 **Recruitment and inclusion criteria**

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13 Participants who were eligible to participate in the clinical trial were adults with ADHD
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16 living in Norway. The participants were recruited through the Norwegian ADHD patient
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19 association, via the associations' Facebook page and email listings. Their members received a
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22 link to our project website, where they could read about the study and complete a pre-
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25 screening survey to confirm their eligibility. The participants who were eligible were invited
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28 to a telephone screening interview performed by a clinical psychologist or a psychiatric
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31 nurse. In the telephone screening, the participants had to confirm a diagnosis of ADHD, give
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34 information about the name of the diagnosing physician, the diagnosing institution, and the
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37 date of diagnostic decision. They were also asked about current ADHD symptoms, everyday
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40 functioning, and treatment. Comorbid psychiatric disorders, including depression, suicidality,
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43 psychosis, bipolar disorder, and substance abuse, were assessed through the diagnostic
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46 interview MINI [25] as part of the telephone screening. This was done to ensure that
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49 participants in need of other treatment interventions were not included in the trial. Moreover,
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57 all participants had to give their national identity number, which was used to confirm their
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4 identity and secure safe login to the online intervention portal. Following inclusion, the
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7 participants gave their informed consent to participate and completed the pre-intervention
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10 assessment, including the Adult ADHD Self-Report Scale (ASRS), used to assess core
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13 ADHD symptoms.

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17 The inclusion criteria for the clinical trial were: (a) age 18 years or older; (b) a
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20 diagnosis of ADHD; (c) access to a computer or smartphone with Internet access, (d) the
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23 ability to read and write the Norwegian language. The exclusion criteria were: (a) severe
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26 mental illness, such as major depression, suicidality, bipolar disorder, psychosis, or substance
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29 abuse disorder; (b) currently participating in another psychological treatment. All participants
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32 who responded to the question assessing positive aspects of ADHD were included in the
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35 current study.
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40 **Data collection**

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43 The data was collected between June and October 2020. As a part of the sixth module of the
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46 intervention, the participants were asked to respond to the following question: “What do you
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49 experience as positive aspects of having ADHD?”. The participants were further given the
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52 following guiding questions that could help them write their response: a) is there any positive
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55 aspects related to having ADHD? b) has ADHD given you any useful knowledge or
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4 experiences? c) has ADHD helped you get in contact with someone you appreciate? The
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7 module page also gave some examples of positive characteristics that adults with ADHD may
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10 experience, such as being creative, accepting, fun, active, explorative, spontaneous, and open-
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13 minded. Considering that the question and their answers were text-based without the
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16 opportunity to ask follow-up questions, we found it necessary to include those examples to
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19 make sure that the participants understood the task. The participant could give their response
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22 in an open-text field on the module page. The mean number of words in the participants
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25 responses was 72.5 words, ranging from 1 to 261 words. There were no instructions on
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28 number of words or formatting and the question was not obligatory to answer to continue
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31 with the module or the intervention. The module which included the question on positive
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34 aspects, was named “acceptance” and it had an overall focus on self-acceptance and self-
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37 compassion, i.e., accepting what you cannot change and being kind to yourself. The module
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40 included psychoeducation, videos, tasks, as well as text and audio instructions to acceptance-
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43 and self-compassion strategies.
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50 **Data analysis**

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54 The data were analyzed using thematic analysis, employing a hermeneutic
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57 phenomenological framework. Thematic analysis is a well-known qualitative method for
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4 identifying and analyzing themes or patterns across the data [21]. Unlike some other methods
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7 for qualitative data analysis, thematic analysis does not have a pre-existing theoretical
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10 framework and it can therefore be applied within different frameworks. In line with the
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13 framework we have chosen, we acknowledge that the analytic work is an interpretative and
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16 inherently subjective activity. We have therefore strived to be reflexive by having a
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19 continuous awareness of our pre-understanding and presumptions throughout the research
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22 process. To ensure credibility, we have carefully followed the guidelines prescribed for
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25 thematic analysis. The thematic analysis followed the six phases described by Braun and
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28 Clarke (2006): 1. familiarization with data; 2. generation of codes; 3. search for themes; 4.
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31 reviewing themes; 5. finalize and naming of themes, and 6. producing the report.
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37 Following these steps, the first author began the analytic work by reading through the
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40 data material and taking notes. This included transferring the data material from the online
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43 intervention platform to the research server and reading carefully through each of participants
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46 responses while taking notes on preliminary thoughts and ideas. As a next step, the first
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49 author generated codes in line with the analytic focus of the study: “what do adults with
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52 ADHD experience as positive aspects with the diagnosis”. To safeguard interpretive
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55 credibility, the coding was conducted in a “low-inference” manner, where the codes was
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4 phrased closely to the participants original accounts. The data material was coded using
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7 NVivo software [26]. Following the coding, the first author created a visual map where the
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10 codes that shared similarities were grouped together (See Figure 1). The creation of the visual
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13 map was intended to provide an overview of the codes and to obtain preliminary ideas
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16 regarding categories and themes.
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20 All authors were then given an overview of the codes. The first author also presented the
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23 codes with illustrative examples of excerpts from the data to the second author to discuss how
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26 the quotes were interpreted. The first and second author continued with the third step in the
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29 analysis, namely searching for themes. The initial search for themes resulted in a thematic
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32 structure of ten themes. All authors were given an overview of these ten initial themes to
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35 provide their input and feedback. As a fourth step, the thematic structure was reviewed in
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38 more detail by the first and second author. In this analysis, it became clear that certain themes
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41 shared some commonalities, for instance the initial themes “high energy” and “hyperfocus”
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44 shared overlapping features, and where thus merged into one theme. A new thematic
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47 structure was identified, resulting in four core themes (shown in Table 1). These four themes
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50 were then finalized and named by the first and second author (step 5) and the final report was
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54 produced by all authors (step 6).
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(Insert Figure 1)

Ethics

The intervention study was approved by the Regional Committees for Medical and Health Research. All participants gave their informed consent to participate in the study.

Patient and Public Involvement

The user-involvement in the larger project (INTROMAT) that the data from the current study originate from, has been extensive. Throughout the 5-year project period, there has been held several user-meetings with adults with ADHD to examine their needs and preferences to psychological interventions for ADHD. Adults with ADHD have also been involved in the development of content and videos to the intervention, as well as evaluating the intervention. In these user-meetings, we did not address the research question or research design for the current study, however, the focus of the current study was informed by previous qualitative studies involving adults with ADHD who have expressed a wish for both research and treatment interventions for ADHD to have a stronger focus on positive aspects related ADHD. The results from the current study will be published on the project website where study participants can be informed. We will also present the findings at meetings for the

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4 ADHD patient association, which contributed to the recruitment of participants to the current
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7 study.
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10 Results

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13 Among the 109 participants of the intervention study, 61 accessed the module with the
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16 question on positive aspects to ADHD, and 50 gave their response to this question. The
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19 current sample included 6 men and 44 females with a mean age of 34.5 years, ranging from
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22 23 to 62 years. A total of 37 (72.5%) participants were full-time employed or students and 30
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25 (58.8%) participants had higher education. All but one were diagnosed with ADHD in
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28 adulthood, with 4.8 years being the mean time since receiving the diagnosis. A total of 38
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31 participants (76%) took ADHD medication daily, whereas 4 participants (8%) took ADHD
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34 medication occasionally and 8 participants (16%) did not currently use ADHD medication.
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37 Ritalin ($n = 20$) was the most common prescribed medication followed by Elvanse ($n = 8$),
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40 Aduvanz ($n = 7$), Concerta ($n = 2$) and Attentin ($n = 2$), whereas four participants took a
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43 combination of different medications.
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50 The participants reported that they experienced a variety of benefits and advantages
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53 related to ADHD. In the thematic analysis the participants' positive experiences associated
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57 with having ADHD were arranged within four core themes: 1) the dual impact of ADHD
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characteristics; 2) the unconventional mind; 3) the pursuit of new experiences; and 4)

resilience and growth (see Table 1).

Table 1. Core themes

Theme	Example of participant quotations
The dual impact of ADHD characteristics	<i>“I have understood that my energy can be used for a lot of good, and that if I use it wrong, it can make things challenging.”</i>
The unconventional mind	<i>“Creativity, and being able to think outside the norm, is something I really appreciate.”</i>
The pursuit of new experiences	<i>“I enjoy trying new things and changes. This is the reason why I have the job that I have”.</i>
Resilience and growth	<i>“The road to my final ADHD diagnosis has been so long and cruel, but I would not have been without all the pain and unbearable years, and all that experience made me know myself in a completely unique way.”</i>

Theme 1: The dual impact of ADHD characteristics

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3 Many of the participants stated that even core characteristics of ADHD, such as hyperactivity
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6 and impulsivity, could be experienced as positive features. Although these core
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10 characteristics could be troublesome, they could also be advantageous and beneficial.
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14 High levels of energy and drive was reported to be useful in many contexts, such as
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16 during physical labor, sports, social events, or home renovation. One participant stated: "*I am*
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18 *active. I am often able to do a lot in a short amount of time, and then I get to experience*
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20 *more*". However, although there were positive aspects to having high energy levels, there
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22
23 could also be downsides: "*I have understood that my energy can be used for a lot of good,*
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25
26 *and that if I use it wrong, it can make things challenging*". The participants also reported that
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28
29 they did not tire as easily as others: "*If it is something I really like, I have better endurance*
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32 *than others. I can work on something I enjoy forever without stopping*".
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41 The participants also reported spontaneity and risk-taking, which may be categorized
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43 as impulsive traits, as positive aspects associated with ADHD: "*I am spontaneous/impulsive.*
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46 *I can easily just 'jump into it' and that has given me a lot of great experiences*". It was also
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49 mentioned that spontaneity contributed to memorable experiences and learning. However,
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52 some emphasized that spontaneity could be challenging as well: "*I am not really that fond of*
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4 *that spontaneous side of myself because I experience losing control, but at the same time it*
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7 *has given me unique friendships, relations and possibilities’.*
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Hyperfocusing, the ability to have an intense focus on an activity for a longer period of time, was commonly mentioned as an advantage of having ADHD. The participants stated that if they were really interested in a topic, they could maintain focus for a long time without being distracted. Hyperfocus was mentioned to be a contributing factor for completing demanding educational courses, school exams and job assignments. One participant stated that hyperfocusing served as a compensatory strategy: *“I think my ADHD has helped me throughout the exam periods. If it had not been for a kind of hyperfocus, it would not have worked. But then again, I might not have postponed the reading for so long if I did not have ADHD’.* Another participant emphasized that the hyperfocus on useful tasks, such as school or work, for it to be considered as a positive aspect of ADHD. The majority of the participants did not report inattention be positive, however, one participant explicitly mentioned inattention to also have upsides: *“Inattention can be nice when I actually need to change focus, if something happens while I am driving etc. It is also nice because I have observed some amusing conversations and such when I am actually supposed to be doing something else’.*

Theme 2: The unconventional mind

Many participants reported that they experienced unconventional thinking and behavior as positive aspects of having ADHD. This included characteristics such as being creative, having novel ideas, seeing things from a different perspective than others, and being good at finding solutions. At the same time, it was also emphasized that the social context and expectations present in one's socio-cultural environment could sometimes be an obstacle for utilizing these strengths.

Creativity was emphasized to be a positive aspect of ADHD by many participants:

“Creativity and being able to think outside the norm is something I really appreciate”.

Creativity was reported to help one to start new projects and find good solutions at work, as well as make everyday life more exciting. Creativity was also mentioned to be a good quality when it came to parenting as it facilitated playfulness with one's children. Although creativity was viewed as a positive trait by many participants, some emphasized a complexity: *“From my experience in a work-related context, thinking outside the box is not as accepted in all contexts, despite good results”.* With this, the participant underscores that whether a quality is deemed as “good” or “bad” is also dependent on one's environment.

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4 There were also participants who described that they could be socially unconventional
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7 and go outside the norm. Some reported that they could be quite straightforward, unafraid,
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10 and uninhibited in social situations: *“I am pretty forward, and I am not afraid to take up space*
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13 *when I need a bit of attention. I know a lot of people and that is probably because I am not*
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15
16 *scared to say hi to new people”*.

20 **Theme 3: The pursuit of new experiences**

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23 There were several participants who reported that they experienced adventurousness
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25
26 and novelty-seeking as positive aspects of ADHD. Being explorative also appeared to be
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29 connected to being both curious and courageous, with some participants describing that they
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31
32 were curious of the unknown and not afraid to embark on new ventures.
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37 Many emphasized that they were curious and enjoyed trying new things and seeking
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39
40 new experiences. The participants also reported that they enjoyed learning new things: *“I*
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43 *seek new environments where I can learn new things”*. Because they enjoyed learning, they
44
45
46 also acquired knowledge about various topics. In line with this, one participant also
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48
49 underlined that they would not give up easily when attempting to learn something new: *“I*
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51
52 *enjoy trying new things, and if I do not get it right the first time, I will examine the possibility*
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55 *of trying a simpler method.”* To enjoy novelty was also reported to be of significance to
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4 one's choice of occupation: "*I enjoy trying new things and changes. This is the reason why I*
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7 *have the job that I have*".

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10 There were also reports about being courageous and unafraid, which could push one
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12
13 to seek new experiences: "*I have experienced things that only would have happened by*
14
15
16 *taking a risk*". Moreover, being impulsive could make one more daring: "*I dare more than*
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19 *when I sit down and think about it*".

20 21 22 23 **Theme 4: Resilience and growth**

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26 The final theme centers around the participants' experiences of growth and insight
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29 after facing adversity. The participants underscored that although ADHD indeed could be
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32 challenging, especially the process towards being diagnosed with ADHD, coping with these
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35 challenges could also foster resilience and growth.
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40 Some of the participants reported to have a better understanding and acceptance for
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43 themselves because of ADHD: "*Being diagnosed with ADHD made me learn a lot about*
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45
46 *myself. Things I perhaps have been annoyed about, I can now accept and think that it is not*
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48
49 *'my fault' in a way*". Although the process of getting diagnosed could be tough, it could also
50
51
52 give valuable insight: "*The road to my final ADHD diagnosis has been so long and cruel, but*
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55 *I would not have been without all the pain and unbearable years, and all that experience made*
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4 *me know myself in a completely unique way, and I have gotten a very valued quality when it*
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7 *comes to being able to reflect over situations both I and others are in”.*
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11 The participants also expressed resilience after coping with previous challenges: “*I*
12
13 *am better at handling resistance or challenges now, because I have learned to handle such*
14
15 *challenges, it is part of life to have ups and downs”.* Likewise, coping with challenges could
16
17 also make one more persistent: “*I have learned to not give up in the face of resistance. Maybe*
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19 *I must take some detours, do things differently than others, find out what works for me and*
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21 *trust myself, but the point is, I can make it if I want to”.*
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31 The experience of receiving the diagnosis appeared to be especially important: “*To*
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33 *get the diagnosis was a relief because it gave me an explanation for why I did things I did not*
34
35 *understand earlier, such as why I was not able to shut up, but talk without thinking, and why*
36
37 *my emotions fluctuate so much, and often without me understanding why. It has given me*
38
39 *more understanding and acceptance for myself”.* When the participants’ learned about the
40
41 diagnosis, it allowed them to be more kind towards themselves: “*I discovered that I have*
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43 *ADHD in adulthood, so I lived most of my life in the belief that I am like everyone else. I*
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45 *have had high expectations to myself, compared myself to others, and achieved a lot (...)* So
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4 *when I found out about my challenges, it all became like a piece of cake. I could with good*
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7 *reasons lower the expectations to myself and finally rest with a clear conscience”.*
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10 The participants also reported that they were non-judgmental and accepting of other
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13 people: “*Since I am such a “fool” I don’t judge others for being it*”. The participants also
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16 reported to be more empathic and understanding of others’ point of view. Several participants
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19 had jobs that involved working with people with disabilities, where having ADHD
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21
22 themselves could help them get a deeper connection with their students or patients: “*I*
23
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25 *understand a part of the youth on a different level than my colleagues, and I therefore*
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28 *experience that I am able to get a better connection with the students others find it difficult to*
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31 *get close to*”. Another participant also shared similar experiences: “*I notice that I can meet*
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34 *children with ADHD with more understanding, so they feel safe with me quickly, and I know*
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37 *I can help them in challenging situations, or prepare them a bit extra, so that they are able to*
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41 *get through their school day*”.
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47 Discussion

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50 The current study aimed to identify and explore positive aspects of having ADHD
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53 from the perspective of help-seeking adults with the diagnosis. Through the discussion, we
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57 further seek to highlight how positive experiences with the diagnosis can be utilized in
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3 treatment interventions. The participants' accounts of positive experiences of having ADHD
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7 could be arranged within the following four themes: 1) the dual impact of ADHD
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10 characteristics; 2) the unconventional mind; 3) the pursuit of new experiences; and 4)
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13 resilience and growth.
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17 It seemed that the characteristics of ADHD could be experienced as a double-edged
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20 sword, where the traits could be seen as both challenging and beneficial. The direction of this
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23 relationship further seemed to be dependent upon context and the norms in one's socio-
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26 cultural environment, where certain qualities could be deemed as beneficial in some
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29 situations, but undesirable in other situations. Although one's environment appeared to be
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32 central in the participants' experience of duality related to ADHD characteristics, individual
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35 factors are still important to take into consideration – where one person might find certain
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38 characteristic as beneficial, while another might not have the same perspective. As such,
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41 whether a characteristic is seen as positive or negative is likely depended on a variety of
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44 factors, including individual factors, environmental factors, and the interaction between the
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47 two.
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54 From the perspective of the participants, it appeared that even core diagnostic
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57 characteristics of ADHD could be experienced as advantageous. For instance, the high energy
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3 associated with hyperactivity could be considered as an advantage in certain social settings
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7 and within sports, whereas hyperfocus could be beneficial during school exams or at work.
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10 These findings are in line with results previously reported in other qualitative studies [16, 17].
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13 As such, the analytic findings support the notion that some of the characteristics associated
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16 with ADHD can be reframed in a more positive manner. Given the high persistence of
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19 ADHD symptoms into adulthood, helping adults to explore potential advantages of their
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22 symptoms in a treatment-setting could perhaps have favorable outcomes for treatment and
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24
25 improve life satisfaction [12]
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30 On the other hand, the present findings resonate with results from previous studies
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33 showing that ADHD characteristics are associated with problems that affect daily-life
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36 functioning [27-29]. Based on the current reports, it appeared that the participants had to
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39 figure out the ways to make ADHD work for them, with certain traits, such as hyperfocus and
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42 high energy, only being considered beneficial under the right circumstances. This reasoning
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44
45 can imply that a key step in psychological interventions for ADHD would be to not only
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47
48 identify the participants' strengths, but also to examine in what contexts these strengths are
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51 useful and potential pitfalls or obstacles for utilizing them.
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4 Interestingly, only one of the participants reported inattention to be beneficial. In
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7 relation to this, a study on ADHD and identity among youth with ADHD found that while
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10 several participants experienced positive sides to hyperactivity and impulsivity and integrated
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13 these as part of their identity, inattentive symptoms were not associated with such positive
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16 experiences [30]. The experience of living with inattentive versus hyperactive/impulsive
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19 traits should be an interesting topic for future studies.
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24 The findings further show that creativity may be experienced as a positive aspect of
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27 having ADHD. These findings are in line with results from previous studies, which have
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30 associated ADHD symptoms with certain qualities of creativity [31, 32]. Distractibility has
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33 for example been associated with creative achievements [33]. As such, it may be that
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36 distractibility makes one notice more so-called “irrelevant” information in one’s
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39 environment, which later may be helpful in generating more original ideas [33]. Given that
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42 creativity may be a strength of ADHD, it should be possible to take advantage of this quality
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45 in treatment-settings, for example by including more creative tasks in psychosocial
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48 interventions to facilitate engagement and adherence.
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54 The current accounts further show that traits such as adventurousness, exploration,
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57 and courage may be seen as strengths of ADHD. Such strengths have also been reported by
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3 adults with ADHD in previous studies [17, 34, 35]. In their study, Newark et al. (2016) found
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7 courage to be a resource among adults with ADHD and they further linked this trait to self-
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10 efficacy and self-esteem. The authors further emphasized that courage could be a valuable
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13 skill in therapy, a situation where clients indeed are faced with both challenges and novel
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17 experiences [36].
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21 Lastly, it appeared like coping with the challenges associated with ADHD could lead
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23
24 to resilience and growth for some participants. There were reports about understanding
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27 oneself and others in a more nuanced manner, and successful coping was seen as making
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30 them more fit to cope with future challenges. This is in line with findings from a previous
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33 study including women with ADHD, where the participants identified positive learning from
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36 the challenges they had faced [34]. When people are faced with adversity, they often
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39 underestimate their abilities to cope with the emotional distress and overestimate the intensity
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41
42 and impact of the particular event [36]. In line with this, some participants seemed to cope
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46 with the challenges related to ADHD in a resilient manner and perhaps even experience
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49 growth when they were going through difficult times. It has further been suggested that
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53 resilience is linked to impulsivity, where impulsive traits may help adults to faster move on
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57 from their problems, which may be useful in therapy-settings [37].
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Implications

The clinical implications of the findings may be to incorporate a stronger focus on strengths and resources in both the assessment and treatment of ADHD in adulthood. There is a consensus within psychotherapy that treatment should not only focus on the absence of symptoms, but also on recovery, coping, well-being, and growth [38]. However, adults with ADHD still report current treatment options to be too deficit-oriented [14]. By putting an emphasis on the full range of experiences related to ADHD, both good and bad, one might be able to offer treatment interventions more in line with the needs of adults with ADHD, which may be favorable for treatment engagement and clinical outcomes. These speculations should indeed provide interesting topics for further studies.

Strengths and limitations

The current study is one of few studies that focus on positive aspects of ADHD. However, several limitations should be noted. With the current study design and analysis, we can only explore the participants' experiences with positive aspects of ADHD and give a thematic structure of these experiences. However, future studies with different study designs are needed to examine the frequency of these positive aspects and their generalizability. The sample was also restricted to only include participants who responded to a question regarding

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4 positive traits, which only was about half of the participants in the clinical trial. The lower
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7 response rate is likely due to the question being asked at the end of the intervention and
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10 several participants had been lost to drop-out and thus never accessed the question on positive
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13 aspects of ADHD. The impact of being participants in a psychological intervention should
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16 also be commented on. For example, it is possible that taking part in the intervention
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19 increased the participants' positive beliefs about themselves and ADHD. The participants did
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21
22 also receive some examples of positive aspects with ADHD in the intervention which may
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25 have influenced their answers. Still, we found this necessary to include these examples since
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27
28 the data collection was conducted online without the guidance of researcher. We did also find
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31 it reassuring that the participants' answers went beyond the examples given in the
32
33
34 intervention. The sample did also include more females than males, which makes the findings
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37 less transferable to males since the clinical expression of ADHD is known to vary with
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40 gender [39]. It may also be seen as a limitation that the ADHD diagnosis was based on self-
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43 report. However, all participants were asked to report the date, venue and diagnosing
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46 healthcare professional for the diagnosis, as well as their national identity number. We
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50 therefore have trust in the participants reports. In addition, because participants with ongoing
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4 severe mental illness were excluded from the study, the participants are most likely
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7 individuals within the less severe end of the ADHD symptom spectrum.
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10 **Future directions**

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13 The findings from this study needs to be validated by future studies. These studies should not
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16 only investigate characteristics of strengths related to ADHD, but also in what contexts these
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19 strengths are useful and beneficial. Moreover, future studies should investigate the impact of
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22 strength-based treatments on both treatment engagement and clinical outcomes. Future
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25 research should aim for the development of a valid procedure to assess strengths and positive
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28 qualities of adults with ADHD. Moreover, it would also be interesting for future studies to
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31 include other observers' impressions of positive aspects related to ADHD, for instance family
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34 members or clinicians.
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40 **Conclusion**

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43 The aim of the current study was to identify and explore positive aspects of having ADHD
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46 from the perspective of help-seeking adults with the diagnosis. From the perspective of the
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49 participants, the characteristics of ADHD could be both beneficial and challenging,
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52 depending upon the individuals' contextual environment. For clinicians, it may be important
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55 to examine the individual's positive experiences of ADHD, as this should be capitalized upon
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4 in treatment. A stronger focus on positive aspects of ADHD in treatment interventions,
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7 alongside the challenges, may also help to contribute to support a more ability-oriented view
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10 of ADHD.
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12

13 14 **Declarations**

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18
19
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21
22
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24
25
26
27 intervention.
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30 31 **Conflict of interest**

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33
34 The authors declare that they have no conflict of interests
35
36

37 38 **Author contributions**

39
40 ESN contributed to the recruitment of participants for the clinical trial, was responsible for
41
42
43 the thematic analysis, interpretation of the results, and drafting of the manuscript. FG
44
45
46 contributed substantially to the thematic analysis and interpretation of the results, and with
47
48
49 comments and input to different versions of the manuscript. TN was responsible for the
50
51
52 clinical trial (PI) and contributed with comments and input to the manuscript. AJL was
53
54
55 responsible for the idea of the current study and contributed substantially with comments and
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4 input on different drafts of the manuscript. All authors have read and accepted the final draft
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7 of the manuscript.
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10 **Data statement**

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13 The data is available from the corresponding author upon reasonable request.
14
15

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32
33 The study was received ethical approval from the Regional Committees for Medical and
34
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36
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38
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40 informed consent to participate. All methods were carried out in accordance with relevant
41
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43 regulations and guidelines for research on human subjects and data.
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POSITIVE ASPECTS OF ADHD

ENERGY

- Has a lot of energy
- Gets easily engaged

ENDURANCE

- High drive
- Does not give up easily
- Is efficient at tasks

CREATIVE

- High creativity
- Good fantasy
- Lots of ideas

PROBLEM SOLVING

- Solution oriented
- Sees patterns
- Acts fast when needed
- Ability to switch focus
- Intelligent
- Has become good at planning

POISITVE EMOTIONS

- Experiences joy and excitement
- Positive outlook on life
- Spreads joy to others
- Playful
- Sensitive
- Affectionate
- Funny / humor

No positive things with ADHD (-)

HYPERFOCUS

- Ability to hyperfocus
- Good at interests
- Has knowledge of many things

AUTHENTIC

- Authentic
- Honest
- Does not care what other thinks

NON-JUDGEMENTAL

- Accepting towards others
- Not judging others
- Tolerant of other people
- Open to other views

SOCIAL SKILLS

- Attentive to people
- Enjoys being social
- Makes new friends easily
- Interesting to talk to
- Strong bond with family members who have ADHD
- Good at handling interpersonal conflicts

Not good for relations (-)

EMPATHIC

- Empathic
- Is able put themselves in others' shoes
- Loyal to others
- Sees the best in people
- More understanding for other struggling

CURIOS

- Not afraid to ask questions
- High curiosity
- Tries new things
- Explores new environments
- Explorative
- Spontaneous

COURAGE

- High on courage
- Fearless
- Is willing to take risks
- Enjoys taking on a challenge

A DIFFERENT PERSPECTIVE

- New insight because of diagnosis
- Painful experience that gives you new insight
- See more sides to things
- A different perspective on things
- Critical to doxa

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The silver lining of ADHD: A thematic analysis of adults' positive experiences with living with ADHD

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The silver lining of ADHD: A thematic analysis of adults'

positive experiences with living with ADHD

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Abstract

Objectives: To identify and explore positive aspects of ADHD as reported by adults with the diagnosis.

Design: The current study used a qualitative survey design including the written responses to an open-ended question on positive aspects of ADHD. The participants' responses were analyzed using thematic analysis.

Setting: The participants took part in trial of a self-guided Internet-delivered intervention in Norway. As part of the intervention, the participants were asked to describe positive aspects of having ADHD.

Participants: The study included 50 help-seeking adults with an ADHD diagnosis.

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4 **Results:** The participants described a variety of positive aspects related to having ADHD. The
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6
7 participants' experiences were conceptualized and thematically organized into four main
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10 themes: i) the dual impact of ADHD characteristics; ii) the unconventional mind; iii) the
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13 pursuit of new experiences; and iv) resilience and growth.
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17 **Conclusions:** Having ADHD was experienced as both challenging and beneficial, depending
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20 upon the context and one's socio-cultural environment. The findings provide arguments for
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23 putting a stronger emphasis on positive aspects of ADHD, alongside the challenges, in
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27 treatment settings.
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33 **Word count:** 6710
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37 **Keywords:** ADHD₁, Adulthood₂, Strengths₃, Positive psychology₄, Thematic analysis₅
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54 **Strengths and limitations**

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- 57 • The current study is one of few studies that focus on positive aspects of ADHD.
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- With the current study design, we could only explore the participants' experiences with positive aspects of ADHD. Future studies are needed to examine the generalizability of these positive aspects.
 - The large majority of the sample were females, which makes the findings less transferable to males.
 - The sample is restricted to including participants who responded to a question regarding positive traits.

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Introduction

Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder with prevalence estimates of approximately 5% of children and 2.6% of adults [1, 2]. Recently, the number of individuals being diagnosed with ADHD in adulthood has increased, with women being at particular risk for receiving a diagnosis later in life [3, 4]. The diagnosis of ADHD is characterized by three cardinal symptoms: inattention, hyperactivity, and impulsivity [5].

Adults with ADHD also tend to face additional challenges related to emotion dysregulation, poor working memory, planning and organization skills [6, 7]. These symptoms and challenges are known to interfere with many activities of daily living, with impact on occupational, educational, interpersonal and financial domains [5]. Pharmacological

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4 treatment is the primary treatment for adults with ADHD, but many seek additional
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7 psychological treatment [8, 9].
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10 Research on ADHD has traditionally focused on the impairments and negative
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13 outcomes associated with the diagnosis. When portraying a primarily deficit-oriented view on
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16 the diagnosis, it may add to the burden of living with ADHD. For instance, it is well-known
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18 that individuals with ADHD are prone to experience public stigma, prejudice and criticism
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20 based on their diagnosis, which can negatively impact self-esteem, self-efficacy and well-
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22 being [10, 11]. Moreover, a deficit-oriented view of ADHD may overlook strengths of
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24 persons with the diagnosis. An alternative approach would be to adopt a more ability-oriented
25
26 view of ADHD, emphasizing the individuals' resources, abilities and skills [12]. This
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28 perspective aligns with beliefs of the neurodiversity movement, which has gained
29
30 considerable recognition with the rise of social media platforms like TikTok and Instagram
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32 [13]. Unlike the biological-medical perspective of ADHD, the neurodiversity movement
33
34 advocates that ADHD and similar conditions should be denoted as neurological differences
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36 rather than being conceptualized as deficits [14, 15]. From this perspective, the neurological
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38 differences associated with ADHD are considered to be of societal benefit as they contribute
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40 to valuable diversity within the population [15].
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4 The majority of available studies on psychological treatment interventions for adults
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7 with ADHD also tend to have a deficit-oriented focus, with most studies defining successful
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10 treatment as reduction in core ADHD symptoms [16]. Among 23 studies on Cognitive
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12
13 behavioral therapy (CBT) for adults with ADHD included in a recent systematic review, only
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16 one study examined an intervention with an explicit focus on strengths associated with
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19 having ADHD [17, 18]. This particular intervention was found to improve the participants'
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21
22 knowledge about ADHD and life satisfaction, giving support for incorporation of a strength-
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24
25 based approach in psychological treatment for adults with ADHD [17]. Findings from
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27
28 qualitative research further indicate that public mental health care is perceived as too deficit-
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31 and symptom-centered by adults with ADHD, leading some to seek alternative treatments
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34 that are perceived as more strength-based, even if not reimbursed by healthcare insurances
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37 [19]. The willingness to pay out-of-pocket for these treatments could suggest that the current
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40 treatment options do not fully meet the needs of adults with ADHD [19].
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47 Taken together, the scientific literature on the strengths associated with ADHD is still
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50 scarce [20]. Moreover, most studies on ADHD have included clinical samples of children,
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53 and less research has focused on adults' experiences with the diagnosis. However, there are a
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56 few recent qualitative studies that have explored the positive experiences of adults with
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3 ADHD. A review on qualitative research examining the lived experience of adults with
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7 ADHD indicate that certain aspects of ADHD can be experienced as positive [21]. Within
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10 these studies, attributes like energy, creativity, determination, hyperfocus, adventurousness,
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13 curiosity, and resilience were emphasized [22-25]. However, these studies have largely
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16 included small samples of high-functioning adults with ADHD. One exception is the study by
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19 Schippers et al. (2022) which applied both qualitative and quantitative methods to examine
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22 perceived positive characteristics with ADHD in a large sample of 206 adults with ADHD
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25 [26]. Almost all of the participants in the study reported positive aspects related to ADHD,
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28 with core themes being creativity, being dynamic, flexibility, socio-affective skills, and
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31 higher order cognitive skills. There are also a few quantitative studies that have focused on
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34 positive aspects of ADHD, in particular creativity. A review of the link between creativity
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37 and ADHD have also shown that creative abilities and achievements were high among
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40 individuals with both clinical and subclinical symptoms of ADHD [20]. In line with this,
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43 some studies have found ADHD to be associated with entrepreneurial intentions and
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46 initiation of entrepreneurial actions [27, 28]. As such, these studies highlight that despite the
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49 well-known challenges associated with ADHD, there are also several strengths that may be
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57 linked to having the diagnosis.
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4 The current study employs a qualitative design to identify and explore positive aspects
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7 of having ADHD. By including a fairly large group of adults with ADHD seeking
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10 psychological help (n = 50), the study aims to shed light upon how these positive aspects of
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13 the diagnosis can be utilized as part of psychological interventions for this group of adults. In
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16 this regard, the current study follows up on findings from previous qualitative studies that
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18
19 explored positive experiences with having the diagnosis. It also resonates with studies
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22 indicating that adults with ADHD advocate for treatment options that are less deficit and
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25 symptom oriented. We thus believe that investigating into the positive experiences of help-
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28 seeking adults with ADHD would contribute to fill an important gap in the research field. A
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31 two-folded focus on both the strengths and challenges related to ADHD may further have a
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34 countereffect on the public stigmatization associated with the diagnosis and help to empower
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37 individuals with the diagnosis.
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51 **Method**

52 **Study design**

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54 The current study is a qualitative investigation including written responses from adults with
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57 ADHD to an open-ended question about self-perceived positive aspects of having ADHD.
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4 The empirical material was analyzed using thematic analysis with hermeneutic
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7 phenomenological framework [29, 30].
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10 **Study context**

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13 The data used in the current study originate from a larger clinical trial of a self-guided
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16 Internet-delivered intervention for adults with ADHD ([31]. The clinical trial was a multiple
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19 randomized controlled trial including 109 adults with ADHD aiming to examine whether
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22 SMS reminders would improve treatment adherence (ClinicalTrials.gov NCT04511169). The
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24
25 self-guided intervention was accessed online and included seven modules targeting common
26
27
28 themes and challenges related to ADHD. The first module was an introduction module,
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31 whereas the second to sixth module focused on inattention, inhibitory control, emotion
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34 dysregulation, planning and organization, and self-acceptance, and included instructions to
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37 various coping strategies. The seventh and last module was a summary module of the entire
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39
40 program (see [32] for a more detailed description of the intervention). The majority of the
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43 participants who responded to the post-assessment reported to be satisfied with the
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46 intervention. The participants received a gift card of 400 NOK (38 EUR) for their
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49 participation in the clinical trial, regardless of whether they answered the question assessing
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52 positive aspects of ADHD.
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4 The original study protocol planned to use both qualitative and quantitative methods
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7 for data analysis, but it was not planned to examine positive aspects of ADHD. However,
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10 when reviewing the data, we were struck by its richness and the number of answers given to
11
12
13 this open and non-obligatory question on positive aspects of ADHD, which inspired us to
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17 conduct a more in-depth examination of the empirical material.
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20 **Recruitment and inclusion criteria**

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23 Participants who were eligible to participate in the clinical trial were adults with ADHD
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25
26 living in Norway. The participants were recruited through the Norwegian ADHD patient
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29 association, via the associations' Facebook page and email listings. Their members received a
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32 link to our project website, where they could read about the study and complete a pre-
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35 screening survey to confirm their eligibility. The participants who were eligible were invited
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38 to a telephone screening interview performed by a clinical psychologist or a psychiatric
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41 nurse. In the telephone screening, the participants had to confirm a diagnosis of ADHD, give
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44 information about the name of the diagnosing physician, the diagnosing institution, and the
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47 date of diagnostic decision. They were also asked about current ADHD symptoms, everyday
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50 functioning, and treatment. Comorbid psychiatric disorders, including depression, suicidality,
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53 psychosis, bipolar disorder, and substance abuse, were assessed through the diagnostic
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3 interview MINI [33] as part of the telephone screening. This was done to ensure that
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7 participants in need of other treatment interventions were not included in the trial. Moreover,
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10 all participants had to give their national identity number, which was used to confirm their
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13 identity and secure safe login to the online intervention portal. Following inclusion, the
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16 participants gave their informed consent to participate and completed the pre-intervention
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19 assessment, including the Adult ADHD Self-Report Scale (ASRS), used to assess core
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23 ADHD symptoms.

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27 The inclusion criteria for the clinical trial were: (a) age 18 years or older; (b) a
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30 diagnosis of ADHD; (c) access to a computer or smartphone with Internet access, (d) the
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33 ability to read and write the Norwegian language. The exclusion criteria were: (a) severe
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36 mental illness, such as major depression, suicidality, bipolar disorder, psychosis, or substance
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39 abuse disorder; (b) currently participating in another psychological treatment. All participants
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42 who responded to the question assessing positive aspects of ADHD were included in the
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45 current study.
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50 **Data collection**

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53 The data was collected between June and October 2020. The data material consisted of the
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56 participants' written responses to the question: "What do you experience as positive aspects
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3 of having ADHD?”. Along with the question, the participants were given some additional
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7 guiding questions that could help them write their response: a) “is there any positive aspects
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10 related to having ADHD? b) has ADHD given you any useful knowledge or experiences? c)
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13 has ADHD helped you get in contact with someone you appreciate? These guiding questions
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17 were included as examples to help the participants remind themselves of experiences of
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19
20 positive aspects related to having ADHD. The module page also gave some examples of
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23 positive characteristics that adults with ADHD may experience, based on previous studies,
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26 including being creative, accepting of others, fun, active, explorative, spontaneous, and open-
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29 minded. Considering that the question was text-based and therefore without the opportunity
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32 to ask follow-up questions, we found it necessary to include those examples to provide a
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35 context for the participants when answering the question. The participant could write their
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38 response to the question in an open-text field on the module page. The mean number of
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41 words in the participants responses was 72.5 words, ranging from 1 to 261 words. There were
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47 no instructions on number of words or formatting and the question was not obligatory to
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50 answer to continue with the module or the intervention. The question was included in the
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53 sixth module of intervention, which was named “acceptance” and had an overall focus on
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57 self-acceptance and self-compassion, i.e., accepting what you cannot change and being kind
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3 to yourself. The module included psychoeducation, videos, tasks, as well as text and audio
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7 instructions to acceptance- and self-compassion strategies.
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10 **Data analysis**

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13 **Qualitative analysis.** The data were analyzed using thematic analysis, employing a
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16 hermeneutic phenomenological framework. Thematic analysis is a well-known qualitative
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18 method for identifying and analyzing themes or patterns across the data [29]. Unlike some
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20 other methods for qualitative data analysis, thematic analysis does not have a pre-existing
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22 theoretical framework and it can therefore be applied within different frameworks. In line
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24 with the framework we have chosen, we acknowledge that the analytic work is an
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26 interpretative and inherently subjective activity. To ensure credibility, we have carefully
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28 followed the guidelines prescribed for thematic analysis. The thematic analysis followed the
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30 six phases described by Braun and Clarke (2006): 1. familiarization with data; 2. generation
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32 of codes; 3. search for themes; 4. reviewing themes; 5. finalize and naming of themes, and 6.
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34 producing the report.
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50 Following these steps, the first author began the analytic work by reading through the
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52 data material and taking notes. This included transferring the data material from the online
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54 intervention platform to the research server and reading carefully through each of
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3 participants' responses while taking notes on preliminary thoughts and ideas. As a next step,
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7 the first author generated codes in line with the analytic focus of the study: "what do adults
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10 with ADHD experience as positive aspects with the diagnosis". To safeguard interpretive
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13 credibility, the coding was conducted in a "low-inference" manner, where the codes were
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16 phrased closely to the participants original accounts. The data material was coded using
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19 NVivo software [34]. See Figure 1. for an overview of all the codes and their frequency.
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23 Following the coding, the first author created a visual map where the codes that shared
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26 similarities were grouped together. The creation of the visual map was intended to provide an
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29 overview of the codes and to obtain preliminary ideas regarding categories and themes. All
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32 authors were then given an overview of the codes. The first author also presented the codes
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35 with illustrative examples of excerpts from the data to the second author to discuss how the
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38 quotes were interpreted. The first and second author continued with the third step in the
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41 analysis, namely searching for themes. The initial search for themes resulted in a thematic
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44 structure of ten themes. All authors were given an overview of these ten initial themes to
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47 provide their input and feedback. As a fourth step, the thematic structure was reviewed in
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50 more detail by the first and second author. In this analysis, it became clear that certain themes
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52
53 shared some commonalities, for instance the initial themes "energy" and "hyperfocus" shared
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3 overlapping features, and where thus merged into one theme. A new thematic structure was
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5
6 identified, resulting in four core themes (shown in Figure 1). These four themes were then
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10 finalized and named by the first and second author (step 5) and the final report was produced
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13
14 by all authors (step 6).
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16 17 **Figure 1. Overview of core themes, subthemes, and codes**

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19
20 (Insert Figure 1 here)
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22

23 **Note.** Core themes are shown within the upper boxes, whereas subthemes are shown the boxes
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25 beneath. Codes are shown as bullet points and code frequency is shown in parathesis.
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30 **Quantitative analysis.** In addition to the thematic analysis, differences in participant
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32 characteristics and ADHD severity scores were examined using independent t-tests and chi-
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34 square. SPSS was used for quantitative analyses.
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38 39 40 **Reflexivity**

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42
43 We have strived to maintain reflexivity throughout the research process by consistently
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45
46 examining our pre-existing understanding and assumptions. During both data analysis and
47
48
49 interpretation of results, the authors have actively engaged in self-reflection and peer
50
51
52 discussions to identify our own preconceptions. For instance, ESN being a clinical
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55 psychologist, has generally been taught that symptoms of ADHD and other psychiatric
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58 diagnoses are inherently negative attributes and have been less exposed to the potential
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3 positive aspects related to ADHD during her clinical training. To address potential biases, the
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6
7 authors revisited the raw data after creation of the themes to ensure that the participants'
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10 perspectives were accurately represented and to validate their own interpretations.
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12

13 **Ethics**

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16
17 The intervention study was approved by the Regional Committees for Medical and Health
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19
20 Research (REK-VEST, 90483). All participants gave their informed consent to participate in
21
22
23 the study.
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25

26 **Patient and Public Involvement**

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30 The user-involvement in the larger project (INTROMAT), from which the data are derived,
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32
33 has been extensive. Throughout the 5-year project period, there have been arranged several
34
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36 user-meetings with adults with ADHD to examine their needs and preferences to
37
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39 psychological interventions for ADHD. Adults with ADHD have also been involved in the
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41
42 development of content and videos to the intervention, as well as evaluating the intervention.
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47 In these user-meetings, we did not address the research question or research design for the
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49
50 current study, however, the focus of the current study was informed by previous qualitative
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53 studies involving adults with ADHD who have expressed a wish for both research and
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56 treatment interventions for ADHD to have a stronger focus on positive aspects related
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4 ADHD. The results from the current study will be published on the project website where
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7 study participants can be informed. We will also present the findings at meetings for the
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10 ADHD patient association, which contributed to the recruitment of participants to the current
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13 study.
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16 17 **Results**

18 19 20 **Participants**

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23 Among the 109 participants of the intervention study, 62 participants accessed the module
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25
26 which included the question on positive aspects of ADHD, and 50 gave their response. The
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28
29 remaining 47 participants did not access the module, and consequently, did not have the
30
31
32 opportunity to view and respond to the question. None of these 47 participants accessed the
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34
35 following module either and were thereby considered to be dropouts. When comparing the
36
37
38 responders ($N = 50$) to the non-responders ($N = 59$), there were no significant differences in
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41 age, medication status, age when diagnosed, gender, education, employment status or ADHD
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43
44 severity scores.
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49
50 The final sample included 50 participants, with a large majority being female. All but
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53 one were diagnosed with ADHD in adulthood, with 4.8 years being the mean time since
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56 being diagnosed. A total of 37 (72.5%) participants were full-time employed or students and
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30 (58.8%) participants had higher education. When comparing males and females in the final sample, the males were significantly older than the females (See Table 1).

Table 1. Participant characteristics, gender differences and ADHD severity scores

	Total sample	Female	Male
N (%)	50	44 (88.0%)	6 (12.0%)
Age, M (SD)	34 (9.5)	33.3 (8.8)	42.2 (12.2)*
Age when diagnosed, M (SD)	29.5 (8.5)	28.9 (8.5)	33.7 (7.9)
ADHD medication, n (%)			
<i>Daily</i>	38 (76.0%)	34 (77.3%)	4 (66.7%)
<i>Occasionally</i>	4 (8.0%)	4 (9.1%)	-
<i>Not taking medication</i>	8 (16.0%)	6 (13.6%)	2 (33.3%)
ADHD symptoms			
<i>ASRS full scale, M (SD)</i>	49.2 (10.4)	49.6 (10.1)	46.3 (12.1)
<i>Inattention, M (SD)</i>	26.2 (5.4)	26.3 (5.5)	25.5 (5.5)
<i>Hyperactivity, M (SD)</i>	22.9 (6.3)	23.2 (7.8)	20.8 (6.1)

Note. n = number of participants, ASRS = Adult ADHD Self-Report Scale. * $p < .05$.

Thematic analysis

The participants reported that they experienced a variety of benefits and advantages related to having ADHD, where all but two participants reported that they experienced ADHD to have positive aspects. With regards to ADHD medication, there were two participants who specifically reported that medications contributed to their positive experiences with ADHD, with one participant reporting that the positive aspects of ADHD were only experienced when taking medication. In the thematic analysis the participants' positive experiences associated with having ADHD were arranged within four core themes: 1) the dual impact of ADHD characteristics; 2) the unconventional mind; 3) the pursuit of new experiences; and 4) resilience and growth (See Table 2).

Table 2. Overview of core themes

Core theme	Example of participant quotations
1 - The dual impact of ADHD characteristics	<i>"I have understood that my energy can be used for a lot of good, and that if I use it wrong, it can make things challenging."</i>
2 - The unconventional mind	<i>"Creativity, and being able to think outside the norm, is something I really appreciate."</i>

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4 3 - The pursuit of new experiences
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“I enjoy trying new things and changes. This is the reason why I have the job that I have”.

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11 4 - Resilience and growth
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“The road to my final ADHD diagnosis has been so long and cruel, but I would not have been without all the pain and unbearable years, and all that experience made me know myself in a completely unique way.”

30 **Theme 1: The dual impact of ADHD characteristics**

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34 Many of the participants stated that even core characteristics of ADHD, such as hyperactivity
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37 and impulsivity, could be experienced as positive features. Although these core
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40 characteristics could be troublesome, they could also be advantageous and beneficial in some
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43 situations.
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47 High levels of energy and drive were reported to be useful in many contexts, such as
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50 during physical labor, sports, social events, or home renovation. One participant stated: *“I am*
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53 *active. I am often able to do a lot in a short amount of time, and then I get to experience*
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56 *more”* (Female, 30 years). However, although there were positive aspects to having high
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3 energy levels, there could also be downsides: *“I have understood that my energy can be used*
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7 *for a lot of good, and that if I use it wrong, it can make things challenging”* (Female, 26
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9
10 years). The participants also reported that they did not tire as easily as others: *“If it is*
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12
13 *something I really like, I have better endurance than others. I can work on something I enjoy*
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15
16 *forever without stopping”* (Female, 26 years)

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21 Several participants also reported spontaneity and risk-taking, which may be
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24 categorized as impulsive traits, as positive aspects associated with ADHD: *“I am*
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26
27 *spontaneous/impulsive. I can easily just ‘jump into it’ and that has given me a lot of great*
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29
30 *experiences’* (Female, 30 years). It was also mentioned that spontaneity contributed to
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32
33 memorable experiences and learning. However, some emphasized that spontaneity could be
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36 challenging as well: *“I am not really that fond of that spontaneous side of myself because I*
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39 *experience losing control, but at the same time it has given me unique friendships, relations*
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41
42 *and possibilities”* (Female, 28 years).

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47 Hyperfocusing, the ability to have an intense focus on an activity for a longer period
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49
50 of time, was commonly mentioned as an advantage of having ADHD. The participants stated
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53 that if they were really interested in a topic, they could maintain focus for a long time without
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56 being distracted. Hyperfocus was mentioned to be a contributing factor for completing
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4 demanding educational courses, school exams and job assignments. One participant stated
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6
7 that hyperfocusing served as a compensatory strategy: *“I think my ADHD has helped me*
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10 *throughout the exam periods. If it had not been for a kind of hyperfocus, it would not have*
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12
13 *worked. But then again, I might not have postponed the reading for so long if I did not have*
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15
16 *ADHD”* (Female, 23 years). Another participant emphasized that the hyperfocus on useful
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19 task for it to be considered as a positive aspect of ADHD: *“The only positive is hyperfocus*
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21
22 *on tasks that are really exciting, but for ADHD to be considered positive in this setting, the*
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25 *task has to be something useful, such as school or work”* (Male, 31 years). Most of the
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28 participants did not report inattention be positive, however, one participant explicitly
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31 mentioned inattention to also have upsides: *“Inattention can be nice when I actually need to*
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34 *change focus, if something happens while I am driving etc. It is also nice because I have*
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36
37 *observed some amusing conversations and such when I am actually supposed to be doing*
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39
40 *something else”* (Female, 26 years).
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47 **Theme 2: The unconventional mind**

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50 Many participants reported that they experienced unconventional thinking and
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53 behavior as positive aspects of having ADHD. This included characteristics such as being
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56 creative, having novel ideas, seeing things from a different perspective than others, and being
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4 good at finding solutions. At the same time, it was also emphasized that the social context
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6
7 and expectations present in one's socio-cultural environment could sometimes be an obstacle
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10 for utilizing these strengths.
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14 Creativity was emphasized to be a positive aspect of ADHD by many participants:

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16
17 *“Creativity and being able to think outside the norm is something I really appreciate”*
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19
20 (Female, 26 years)
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24 Creativity was reported to help one to start new projects and find good solutions at
25
26 work, as well as make everyday life more exciting: *“I am creative and solution-oriented and*
27
28 *very passionate about the things that I am interested in”* (Male, 32 years). Creativity was also
29
30 mentioned to be a good quality when it came to parenting as it facilitated playfulness with
31
32 one's children. Although creativity was viewed as a positive trait by many participants, some
33
34 emphasized a complexity: *“From my experience in a work-related context, thinking outside*
35
36 *the box is not as accepted in all contexts, despite good results”* (Female, 27 years). With this,
37
38 the participant underscores that whether a quality is deemed as “good” or “bad” is also
39
40 dependent on one's social context.
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54 There were also participants who described that they could be socially unconventional
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56 and go outside the norm: *“I do not care that much about what other think”* (Female, 41 years).
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3 Some reported that they could be quite straightforward, unafraid, and uninhibited in social
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7 situations: *“I am pretty forward, and I am not afraid to take up space when I need a bit of*
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9
10 *attention. I know a lot of people and that is probably because I am not scared to say hi to new*
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12
13 *people”* (Female, 23 years).

17 **Theme 3: The pursuit of new experiences**

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20 There were several participants who reported that they experienced adventurousness
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22
23 and novelty-seeking as positive aspects of ADHD. Being explorative also appeared to be
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25
26 connected to being both curious and courageous, with some participants describing that they
27
28
29 were curious of the unknown and not afraid to embark on new ventures.
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34 Many emphasized that they were curious and enjoyed trying new things and seeking
35
36
37 new experiences. The participants also reported that they enjoyed learning new things: *“I*
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39
40 *seek new environments where I can learn new things”* (Female, 29 years). Because they
41
42
43 enjoyed learning, they also acquired knowledge about various topics. In line with this, one
44
45
46 participant also underlined that they would not give up easily when attempting to learn
47
48
49 something new: *“I enjoy trying new things, and if I do not get it right the first time, I will*
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51
52 *examine the possibility of trying a simpler method.”* (Female, 30 years). To enjoy novelty
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4 was also reported to be of significance to one's choice of occupation: "*I enjoy trying new*
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7 *things and changes. This is the reason why I have the job that I have*" (Female, 42 years).
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10
11 There were also reports about being courageous and unafraid, which could push one
12
13 to seek new experiences: "*I have experienced things that only would have happened by*
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15
16 *taking a risk*" (Male, 62 years). Moreover, being impulsive could make one more daring: "*I*
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18 *dare more than when I sit down and think about it*" (Female, 29 years).
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23 24 **Theme 4: Resilience and growth**

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27 The final theme centers around the participants' experiences of growth and insight
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29 after facing adversity. The participants underscored that although ADHD indeed could be
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31 challenging, especially the process towards being diagnosed with ADHD, coping with these
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33 challenges could also foster resilience and growth.
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41 Some of the participants reported to have a better understanding and acceptance for
42
43 themselves because of ADHD: "*Being diagnosed with ADHD made me learn a lot about*
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46 *myself. Things I perhaps have been annoyed about, I can now accept and think that it is not*
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48
49 *'my fault' in a way*" (Female, 30 years). Although the process of getting diagnosed could be
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52
53 tough, it could also give valuable insight: "*The road to my final ADHD diagnosis has been so*
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55
56
57 *long and cruel, but I would not have been without all the pain and unbearable years, and all*
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4 *that experience made me know myself in a completely unique way, and I have gotten a very*
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7 *valued quality when it comes to being able to reflect over situations both I and others are in”*
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10 (Female, 25 years).
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14 The participants also expressed resilience after coping with previous challenges: “*I*
15
16 *am better at handling resistance or challenges now, because I have learned to handle such*
17
18 *challenges, it is part of life to have ups and downs”* (Female, 51 years) Likewise, coping with
19
20 challenges could also make one more persistent: “*I have learned to not give up in the face of*
21
22 *resistance. Maybe I must take some detours, do things differently than others, find out what*
23
24 *works for me and trust myself, but the point is, I can make it if I want to”* (Female, 28 years).
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34 The experience of receiving the diagnosis appeared to be especially important: “*To*
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36 *get the diagnosis was a relief because it gave me an explanation for why I did things I did not*
37
38 *understand earlier, such as why I was not able to shut up, but talk without thinking, and why*
39
40 *my emotions fluctuate so much, and often without me understanding why. It has given me*
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42 *more understanding and acceptance for myself”* (Female, 57 years). When the participants
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learned about the diagnosis, it allowed them to be more kind towards themselves: “*I*
discovered that I have ADHD in adulthood, so I lived most of my life in the belief that I am
like everyone else. I have had high expectations to myself, compared myself to others, and

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4 *achieved a lot (...) So when I found out about my challenges, it all became like a piece of*
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7 *cake. I could with good reasons lower the expectations to myself and finally rest with a clear*
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10 *conscience” (Female, 37 years).*
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14 The participants also reported that they were non-judgmental and accepting of other
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17 people: *“Since I am such a “fool” I don’t judge others for being it”* (Female, 24 years). The
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20 participants also reported to be more empathic and understanding of others’ point of view.
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24 Several participants had jobs that involved working with people with disabilities, where
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27 having ADHD themselves could help them to connect with their students or patients: *“As a*
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30 *teacher, ADHD helps me to understand students that have a learning disability”* (Male, 31
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33 years). Another participant stated: *«I understand a part of the youth on a different level than*
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36 *my colleagues, and I therefore experience that I am able to get a better connection with the*
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39 *students others find it difficult to get close to”* (Female, 44 years). Another participant also
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43 shared similar experiences: *“I notice that I can meet children with ADHD with more*
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45
46 *understanding, so they feel safe with me quickly, and I know I can help them in challenging*
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49 *situations, or prepare them a bit extra, so that they are able to get through their school day”*
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54 (Female, 30 years).
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57 Discussion

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4 The current study aimed to identify and explore positive aspects of having ADHD from the
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7 perspective of help-seeking adults with the diagnosis. The participants' accounts of positive
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10 experiences of having ADHD could be arranged within the following four themes: 1) the dual
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13 impact of ADHD characteristics; 2) the unconventional mind; 3) the pursuit of new
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16 experiences; and 4) resilience and growth. Through the discussion, we further seek to
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19 highlight how positive experiences with the diagnosis can be utilized in treatment
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22 interventions.
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27 The characteristics of ADHD could be experienced as a double-edged sword, where
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30 the traits could be seen as both challenging and beneficial. This is in accordance with findings
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33 in several studies included in the review by Ginapp et al. (2022) and Schippers et al. (2022).
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36 The direction of this relationship further seemed to be dependent upon context and the norms
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39 in one's socio-cultural environment, where certain qualities could be deemed as beneficial in
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42 some situations, but undesirable in other situations. Although one's environment appeared to
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45 be central in the participants' experience of duality related to ADHD characteristics,
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48 individual factors are still important to take into consideration; one person might find a
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51 certain characteristic as beneficial, while another might not share the same perspective. As
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54 such, whether a characteristic is seen as positive or negative is likely dependent on a variety
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3 of factors, including individual factors, environmental factors, and the interaction between the
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7 two.

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10 From the perspective of the participants, it appeared that even core diagnostic
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13 characteristics of ADHD could be experienced as advantageous. For instance, the high energy
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16 associated with hyperactivity could be considered as an advantage in certain social settings
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19 and within sports, whereas hyperfocus could be beneficial during school exams or at work.
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22 These findings are in line with results reported in previous qualitative studies [22, 23]. As
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25 such, the analytic findings support the notion that some of the characteristics associated with
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28 ADHD can be reframed in a more positive manner. Given the high persistence of ADHD
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31 symptoms into adulthood, helping adults to explore potential advantages of their symptoms in
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34 a treatment-setting could perhaps have favorable outcomes for treatment and improve life
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37 satisfaction [17]
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44 On the other hand, the present findings resonate with results from several other
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47 previous studies showing that ADHD characteristics are associated with problems that affect
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50 daily-life functioning [35-37]. Based on the current reports, it appeared that the participants
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53 had to figure out the ways to make ADHD work for them, with certain traits, such as
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56 hyperfocus and high energy, only being considered beneficial under the right circumstances.
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4 This reasoning can imply that a key step in psychological interventions for ADHD would be
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7 to not only identify the participants' strengths, but also to examine in what contexts these
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10 strengths are useful and potential pitfalls or obstacles for utilizing them.
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14 Interestingly, only one of the participants reported inattention to be beneficial. In
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17 relation to this, a study on ADHD and identity among youth with ADHD found that while
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20 several participants experienced positive sides to hyperactivity and impulsivity and integrated
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23 these as part of their identity, inattentive symptoms were not associated with such positive
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26 experiences [38]. The experience of living with inattentive versus hyperactive/impulsive
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29 traits should be an interesting topic for future studies.
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34 The findings further show that creativity seems to be experienced as a core positive
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37 aspect of having ADHD. These findings are in line with results from previous studies, which
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40 have associated ADHD symptoms with certain qualities of creativity [39, 40]. Distractibility
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43 has for example been associated with creative achievements [41]. As such, it may be that
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46 distractibility makes one notice more so-called "irrelevant" information in one's
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49 environment, which later may be helpful in generating more original ideas [41]. Given that
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52 creativity may be a strength of ADHD, it should be possible to take advantage of this quality
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4 in treatment-settings, for example by including more creative tasks in psychosocial
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7 interventions to facilitate engagement and adherence.
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10 The current accounts further show that traits such as adventurousness, exploration,
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13 and courage may be seen as strengths of ADHD. Such strengths have also been reported by
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16 adults with ADHD in previous studies [23, 25, 42]. In their study, Newark et al. (2016) found
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19 courage to be a resource among adults with ADHD and they further linked this trait to self-
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22 efficacy and self-esteem. The authors further emphasized that courage could be a valuable
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25 skill in therapy, a situation where clients indeed are faced with both challenges and novel
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28 experiences [36].
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33 Lastly, it appeared like coping with the challenges associated with ADHD could lead
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36 to resilience and growth for some participants. There were reports about understanding
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39 oneself and others in a more nuanced manner, and successful coping was seen as making
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41
42 them more fit to cope with future challenges. This is in line with findings from a previous
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45 study including women with ADHD, where the participants identified positive learning from
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48 the challenges they had faced [25]. When people are faced with adversity, they often
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51 underestimate their abilities to cope with the emotional distress and overestimate the intensity
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54 and impact of the particular event [43]. In line with this, some participants seemed to cope
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4 with the challenges related to ADHD in a resilient manner and perhaps even experience
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7 growth during times of adversity. These findings may be understood within Dombrowski's
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10 theory of positive disintegration, which posits that emotional difficulty and turmoil are
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13 necessary for human growth and development [44]. It has further been suggested that
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16 resilience is linked to impulsivity, where impulsive traits may help adults to faster move on
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19 from their problems, which may be useful in therapy-settings [45].
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23 **Implications**

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27 The clinical implications of the findings may be to incorporate a stronger focus on strengths
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30 and resources in both the assessment and treatment of ADHD in adulthood. There is a
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33 consensus within psychotherapy that treatment should not only focus on the absence of
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36 symptoms, but also on recovery, coping, well-being, and growth [46]. However, adults with
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39 ADHD still report current treatment options to be too deficit-oriented [19]. By putting an
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41
42 emphasis on the full range of experiences related to ADHD, both good and bad, one might be
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44
45 able to offer treatment interventions more in line with the needs of adults with ADHD, which
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47
48 may be favorable for treatment engagement and clinical outcomes. For instance, therapist
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51 could help adults with ADHD to identify strengths, which may be beneficial for self-esteem
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54 and self-efficacy. Within cognitive-behavioral therapy, one could also use positive
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3 experiences with ADHD to reframe negative automatic thoughts or maladaptive cognitions.

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7 These speculations should indeed provide interesting topics for further studies. A focus on

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10 positive sides to ADHD within research may also have societal implications by changing

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13 social perception around ADHD and by this reducing stigma related to the diagnosis.

14 15 16 17 **Strengths and limitations**

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20 The current study is one of few studies that focus on positive aspects of ADHD, and one of

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23 few with a fairly large sample size. Moreover, this study is the only study investigating

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26 positive aspects in a sample of help-seeking adults with ADHD. Still, several limitations

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29 should be noted. With the current study design and analysis, we can only explore the

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32 participants' experiences with positive aspects of ADHD and give a thematic structure of

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35 these experiences. However, future studies combining qualitative and quantitative analyses

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38 are needed to further evaluate the generalizability of the positive aspects of ADHD reported

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41 in this and previous studies. The sample of the present study was restricted to only include

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44 participants who responded to a question regarding positive traits, which only was about half

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47 of the participants in the clinical trial. The lower response rate is likely due to the question

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50 being asked at the end of the intervention and several participants had been lost to drop-out

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53 and thus never accessed the question on positive aspects of ADHD. The impact of being

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4 participants in a psychological intervention should also be commented on. For example, it is
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6
7 possible that taking part in the intervention increased the participants' positive beliefs about
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10 themselves and ADHD. The participants did also receive some examples of positive aspects
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13 with ADHD in the intervention which may have influenced their answers. We found it
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15
16 necessary to include these examples since the data collection was conducted online without
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19 the guidance of a researcher. As such, when conducting the data analysis and creating the
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22 themes, we were careful to examine depth and richness in the participants answers and not
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24
25 only frequency. The examples were reported 47 times in the data material, with creativity
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28 being the trait most frequently referred to in the data material (27 references). However,
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31 creativity was also the most frequently mentioned positive aspect of ADHD in Schippers et al
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34 (2022) study. Moreover, we found it reassuring that the participants' answers went beyond
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36
37 the examples given. The participants of the study mainly consisted of high-functioning
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40 females in their 20s and 30s who were diagnosed with ADHD as adults and were seeking
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43 psychological help for ADHD. The sample did therefore include more females than males,
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46 which makes the findings less transferable to males since the clinical expression of ADHD is
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49 known to vary with gender [47]. It may also be seen as a limitation that the ADHD diagnosis
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52 was based on self-report. To ensure validity of the diagnosis, it could have been beneficial to
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4 conduct a clinical re-examination to confirm that the participants met the diagnostic criteria.
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7 However, all participants were asked to report the date, venue and diagnosing healthcare
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10 professional for the diagnosis, as well as their national identity number. We therefore have
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13 trust in the participants' reports. In addition, because participants with ongoing severe mental
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16 illness were excluded from the study, the participants are most likely individuals within the
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19 less severe end of the ADHD symptom spectrum.
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23 **Future directions**

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27 The findings from this study need to be validated by future studies. These studies should not
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30 only investigate characteristics of strengths related to ADHD, but also in what contexts these
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33 strengths are useful and beneficial. Moreover, future studies should investigate the impact of
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36 strength-based treatments on both treatment engagement and clinical outcomes. Future
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39 research should aim for the development of a valid procedure to assess strengths and positive
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42 qualities of adults with ADHD. Moreover, it would also be interesting for future studies to
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45 include other observers' impressions of positive aspects related to ADHD, for instance family
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48 members and clinicians.
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52 **Conclusion**

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4 The aim of the current study was to identify and explore positive aspects of having
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7 ADHD from the perspective of help-seeking adults with the diagnosis. From the perspective
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10 of the participants, the characteristics of ADHD could be both beneficial and challenging,
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13 depending upon the individuals' contextual environment. For clinicians, it may be important
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16 to examine the individual's positive experiences of ADHD, as this should be capitalized upon
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19 in treatment. A stronger focus on positive aspects of ADHD in treatment interventions,
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22 alongside the challenges, may also help to contribute to support a more ability-oriented view
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27 of ADHD.
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33 **Declarations**

34 **Acknowledgements**

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36
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39
40 like to thank the adults with ADHD who took part in the developmental process of the
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47 intervention.
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50 **Conflict of interest**

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53 The authors declare that they have no conflict of interests.
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56 **Author contributions**

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4 ESN contributed to the recruitment of participants for the clinical trial, was responsible for
5
6
7 the thematic analysis, interpretation of the results, and drafting of the manuscript. FG
8
9
10 contributed substantially to the thematic analysis and interpretation of the results, and with
11
12
13 comments and input to different versions of the manuscript. TN was responsible for the
14
15
16 clinical trial (PI) and contributed with comments and input to the manuscript. AJL was
17
18
19 responsible for the idea of the current study and contributed substantially with comments and
20
21
22 input on different drafts of the manuscript. All authors have read and accepted the final draft
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27 of the manuscript.
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30 **Data statement**

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33 The data is available from the corresponding author upon reasonable request.
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35

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44
45
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49

50 **Ethics approval and consent to participate**

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53 The study was received ethical approval from the Regional Committees for Medical and
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56 Health Research, Region West (REK-vest, 90483) in Norway. All participants gave their
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informed consent to participate. All methods were carried out in accordance with relevant regulations and guidelines for research on human subjects and data.

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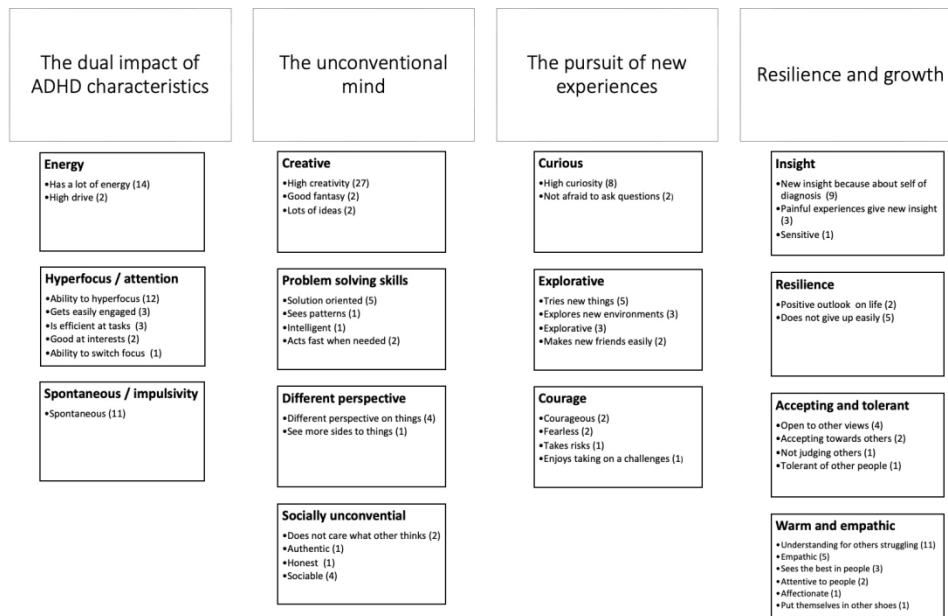


Figure 1. Overview of core themes, subthemes, and codes

297x189mm (144 x 144 DPI)

Standards for Reporting Qualitative Research (SRQR)

O'Brien B.C., Harris, I.B., Beckman, T.J., Reed, D.A., & Cook, D.A. (2014). Standards for reporting qualitative research: a synthesis of recommendations. *Academic Medicine*, 89(9), 1245-1251.

No.	Topic	Item	Included (YES / NO)	Page Number
	Title and abstract			
S1	Title	Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	YES	1
S2	Abstract	Summary of key elements of the study using the abstract format of the intended publication; typically includes objective, methods, results, and conclusions	YES	2
	Introduction			
S3	Problem formulation	Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	YES	5 - 6
S4	Purpose or research question	Purpose of the study and specific objectives or questions	YES	6
	Methods			
S5	Qualitative approach and research paradigm	Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., positivist, constructivist/interpretivist) is also recommended	YES	7
S6	Researcher characteristics and reflexivity	Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, or transferability	YES	11
S7	Context	Setting/site and salient contextual factors; rationale ^a	YES	7
S8	Sampling strategy	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale ^a	YES	8
S9	Ethical issues pertaining to human subjects	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	YES	12
S10	Data collection	Types of data collected; details of data collection	YES	9

1 2 3 4	methods	procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale ^a		
5 6 7 8	S11 Data collection instruments and technologies	Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	YES	9
9 10 11	S12 Units of study	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	YES	11 - 13
12 13 14 15	S13 Data processing	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/deidentification of excerpts	YES	9
16 17 18 19	S14 Data analysis	Process by which inferences, themes, etc., were identified and developed, including researchers involved in data analysis; usually references a specific paradigm or approach; rationale ^a	YES	9
20 21 22 23	S15 Techniques to enhance trustworthiness	Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale ^a	YES	9
24 25 26	Results/Findings			
27 28 29	S16 Synthesis and interpretation	Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	YES	14
30 31 32	S17 Links to empirical data	Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	YES	15 - 19
33 34	Discussion			
35 36 37 38 39 40	S18 Integration with prior work, implications, transferability, and contribution(s) to the field	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field	YES	20
41 42	S19 Limitations	Trustworthiness and limitations of findings	YES	23
43 44 45	Other			
46 47	S20 Conflicts of interest	Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	YES	26
48 49 50	S21 Funding	Sources of funding and other support; role of funders in data collection, interpretation, and reporting	YES	26

^aThe rationale should briefly discuss the justification for choosing that theory, approach, method, or technique rather than other options available, the assumptions and limitations implicit in those choices, and how those choices influence study conclusions and transferability. As appropriate, the rationale for several items might be discussed together.