

University of
Chester

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD

J70641

PS6001 Research Dissertation

2021/2022

University of Chester

Word count: 6366

Declaration

This work is original and has not been submitted in relation to any other degree of qualification.

SIGNED: J70641

DATE: 14/04/22

Acknowledgements

I would like to thank my dissertation leader, Dr. Michelle Tytherleigh, for all of her support, encouragement and help throughout writing my dissertation



School of Psychology

Research Module Meeting Log 2021/2022

NAME: J70641

SUPERVISOR: Michelle Tytherleigh

Date	Discussion Topics	Actions Agreed
7/10/21	Planning for the procedure and method	Look at Questionnaires for study
21/10/21	Planning Ethics form	Complete ethics form for Wednesday 27 th October
16/11/21	Discussed Ethic form feedback Discussed what I needed to put in the presentation	Work on ethic form amendments Prepare for presentation
14/11/21	Feedback from the presentation	Work on feedback
1/02/22	Recruitment options Discussion about the interview	Push recruitment through Axia, Instagram and Facebook groups
16/02/22	Discussed exporting data Layout of dissertation	Contact Kevin for some help with Jamovi Look at level 5 work sheets for exporting data
24/02/22	Discussed writing up results	Run ANOVA and correlations
3/03/22	Discussed the results	Start writing up the results and dissertation
24/03/22	Discussed the draft feedback	Work on the feedback, find more supportive research

M Tytherleigh

SUPERVISOR SIGNATURE:

STUDENT SIGNATURE: J70641

Contents

DECLARATION.....	2
ACKNOWLEDGEMENTS	3
RESEARCH MODULE MEETING LOG 2021/2022	4
LIST OF TABLES	6
ABSTRACT	7
INTRODUCTION	ERROR! BOOKMARK NOT DEFINED.
<i>ADHD</i>	8
<i>Strength Use and Strength Knowledge</i>	9
<i>Wellbeing</i>	11
<i>Self-efficacy</i>	13
<i>Current Study</i>	14
METHODS.....	15
<i>Participants</i>	15
<i>Measures</i>	16
<i>Strength Knowledge</i>	16
<i>Strength Use</i>	16
<i>Psychological Wellbeing</i>	17
<i>General Self-Efficacy</i>	17
<i>Procedures</i>	17
<i>Ethical Considerations</i>	18
<i>Design and Analysis</i>	19
RESULTS.....	20
<i>Differences by ADHD Status</i>	20
<i>Relationships between Strengths Use, Strengths Knowledge and Psychological Wellbeing</i>	25
DISCUSSION	27
<i>Strength Use and Strength Knowledge</i>	27
<i>Wellbeing</i>	28
<i>Self-efficacy</i>	29
<i>Limitations</i>	29
CONCLUSION	31
REFERENCE	32
APPENDICES	42

List of Tables

Table 1: Descriptive Statistics showing the Means and SDs for the scales used to measure Strength Use and Strength Knowledge by ADHD status.	20
Table 2: One-Way ANOVA between Strength use, Strength Knowledge and ADHD	21
Table 3: The Means and SDs for Environmental Mastery, General Self Efficacy and Psychological Wellbeing by ADHD status.	22
Table 4: One-Way ANOVA between Psychological Wellbeing, including subscales, Self-efficacy and ADHD	24
Table 5: Pearson Correlation between Strength Use, Knowledge and Psychological Wellbeing	25
Table 6: Pearson Correlation between Strength Use, Knowledge and Self-Efficacy	26

Abstract

This study's aim was to see if ADHD had an impact on strength use, strength knowledge, wellbeing and self-efficacy. The study also wanted to see if strength use and knowledge was correlated with wellbeing and self-efficacy. Previous research suggested that strength use and knowledge did have a significant effect on wellbeing and self-efficacy (Hausler et al 2017; Minhas., 2010 and Xie et al., 2020). Other research stated that strengths can differ between neurodiverse individuals and non-neurodiverse individuals (Ramsay et al., 2016 and White and Shah., 2011). Research also showed that people with ADHD had lower levels of wellbeing and are more prone to mental health issues (Kessler et al., 2006 and Seymour et al., 2012). There was evidence from the NHS, 2021, stated symptoms such as poor organisational skills and an inability to focus on tasks. These types of symptoms might hinder individual's self-efficacy levels. This study wanted to expand on the limited research in this area. It did this by gaining 161 participants through opportunity sampling. Measures used by this study were Strength Use scale and Strength Knowledge Scale (Govindji and Linley (2007), Psychological Wellbeing Scale (Ryff et al., 1995) and General Self-Efficacy Scale (Chen et al., 2001). This study found a significant correlation between strength use and strength knowledge with both self-efficacy and wellbeing. This study also found that individuals with ADHD had lower levels of self-efficacy in comparison to the non-ADHD group. However, this study found no significant difference with overall wellbeing between the groups. Although there was a significant difference between neurodiverse (other) group and non-ADHD group regarding environmental mastery. This study highlighted the importance of strength use and strength knowledge and helped provide more evidence in a under research area.

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD

Research surrounding adults with ADHD is limited, especially in the area of positive psychology. Within the current research, emphasis is placed on using prescription medication to ease the symptoms that ADHD can cause (Surman et al in 2013). However, some evidence suggests that a strength-based approach - such as CBT therapy or strength coaching - could also provide support for those struggling with ADHD (Kooij et al., 2010). Scholars such as, Murphy, (2005) and Weiss et al., (2012) have also suggested that combining both types of treatments can offer the most help with severe ADHD symptoms. Research also suggests that ADHD does impact both on wellbeing (NICE., 2013) and self-efficacy (Adamou et al., 2013) immensely as symptoms such as emotional dysregulation, difficulties with organisation and concentration cause daily struggles for individuals with ADHD. As stated by previous scholars', psychosocial interventions such as strength-based coaching are severely understudied and lack scientific backing (Moriyama, Polanczyk, Terzi, Faria, & Rohde, 2013). Therefore, this study will hopefully fill this gap in research surrounding adults with ADHD and how positive psychological techniques can be used to help individuals address their more serious symptoms.

ADHD

Attention Deficit Hyperactivity Disorder is a neurological condition that impacts a person's behaviours and emotions. This diagnosis can indicate that the individual might be impulsive and have trouble concentrating on certain activities. A growing body of literature addresses these symptoms and states that ADHD has an impact on daily life. Examples of this include unemployment, academic underachievement (Biederman et al., 2008), low self-esteem and problems with intimate relationships (Eakin et al., 2004). This study will look at wellbeing and self-efficacy via the New General Self-Efficacy Scale (Chen et al., 2001) and the Psychological Wellbeing Scale (Ryff et al 1995) because this scale looks closely at all of these aspects of wellbeing.

Research findings, shown on the NHS website (2018), primarily focus on children and adolescents with ADHD, presumably due to more children being diagnosed (3-5%) compared to adults (2%) (ADHD Project Subgroup

CAHMS Advisory Group., 2018). Some researchers suggest that adults with ADHD are more subsyndromal, meaning that they do not have enough symptoms to diagnose (Faraone et al., 2006). Due to this there is a lack of research into adults with ADHD. However, a number of population studies (Moffit et al., 2015, Caye et al., 2016., Agnew et al 2016) suggest a substantial number of symptoms relating to ADHD persist into adulthood. Agnew et al (2021) reiterates this by stating that an ADHD diagnosis is not static, so an individual's symptoms might worsen or improve over a number of years. This diminishes the ideology that ADHD only impacts children and provides cause for more research to be done to look into the symptoms and diagnoses of adults with ADHD.

It could be argued that due to the previously mentioned advances in recognising adults with ADHD, more adults with ADHD are being diagnosed and treated (American Psychiatric Association [APA], 2000; Fredriksen et al., 2013). Treatments for ADHD usually are centred around two methods: prescribed medication such as methylphenidate (Ritalin) and psychoeducation using therapies such as CBT (Kooij et al., 2010). Mészáros et al., in 2009 found that pharmacological treatment is very effective in reducing the severity of ADHD symptoms. Emilsson et al., (2011) and Kooij et al., (2010) state that this treatment is more effective when combined with psychosocial intervention, for example strength-based coaching. However, this area is still understudied and more needs to be done to support or refute these claims. This study will look at if strengths use and knowledge has a positive impact on wellbeing and self-efficacy, thereby investigating the theory that it is beneficial to use therapies to help with ADHD's more severe symptoms. By doing more research in this area, it will help give individuals an alternative to medication and improve the care that is given to them.

Strength Use and Strength Knowledge

Positive psychology brought forward how important strengths are for the positive impact not only on ourselves but also for their potential effects in the wider community (Niemi 2018). Strengths can improve our performance in adverse situations and also help us when opportunities arise (Brown et al. 2017). By knowing our strengths, we can find areas, such as work, that will support the growth of our strengths. Peterson and Seligman

(2004) also state that these strengths are universal and are valued in many cultures, displaying the importance in understanding what our strengths are and how we can use them in our day-to-day life.

In order to measure these strengths Peterson and Seligman created the Values in Action (VIA) Classification in 2004. This consists of 24-character strengths (creativity, bravery, kindness, teamwork, forgiveness, and gratitude) which are split up into six principal virtues (wisdom and knowledge, courage, humanity, justice, temperance, and transcendence). There have been some studies looking into the strengths associated with individuals with ADHD: Ramsay et al (2016) (As cited by APSARD in 2016) found that people with non-ADHD have higher levels of self-control strengths - such as perseverance, prudence, and self-regulation - than individuals with ADHD. This is shown through the symptoms as stated by the NHS (2021), as people with ADHD have difficulties with self-regulation which causes them to have extreme mood swings, are displayed as risk takers and rarely make prudent decisions. They did not however find any evidence that people with ADHD are more prone to having creative strengths (creativity, curiosity and kindness), despite White and Shah (2011) suggesting that ADHD individuals have higher creative thinking compared to non-ADHD individuals. Kichner et al., 2016 looked at individuals with autism (ASD) and what their character strengths are in comparison to non-neurodiverse individuals. This evidence showed that individuals with autism valued intellectual strengths (open-mindedness, creativity, love of learning) compared with neurotypicals who were shown to value emotional (humour, love) and interpersonal strengths (kindness, fairness). Even though the ASD group did not rate the emotion and interpersonal strengths, these strengths were shown to still have a significant positive impact on satisfaction with life (SWL). With this evidence it could be argued that understanding and using strengths does have a positive impact on the neurodiverse community in regard to wellbeing. Therefore, it would be beneficial to look at other neurodiversities, such as ADHD, to see if strengths have an impact on similar areas. Although this study is not looking at SWL it will be using The Psychological Wellbeing Scale (Ryff et al 1995) which looks at all aspects of wellbeing (e.g. Autonomy, Environmental Mastery and Self-Acceptance).

Strengths such as happiness, health, vitality, and achievement have been linked to many positive elements in life, for example by improving mood and wellbeing (Hausler et al 2017; Park et al, 2004). This suggests that embracing our strengths can help improve our mood, making it easier to work through everyday struggles. By

understanding one's strengths they can help improve them so further opportunities to use them in the future arise. For example, if we use the strength of curiosity in a social situation, we can experience a positive social integration which might open the floor for more social intimacy (Kashdan et al. 2011) and will make us want to use this strength more. The VIA strengths have also been found to positively impact self-efficacy: Hone et al, (2015) states that workers who use their strengths are 18 times more likely to flourish. Therefore, we can infer that by understanding and using your strengths you gain a more positive view on your ability to succeed and thus to make this a reality. This study will look at the impact that both strengths use and strength knowledge has on wellbeing and self-efficacy due to there being evidence suggesting there are significant relationships between these variables.

There has been evidence to show that underuse of strengths can have an impact on mental health conditions such as obsessive compulsive disorder (OCD) (Littman-Ovadia and Freidlin 2020). This concept of overuse and underuse was brought forward by Niemiec in 2019 suggesting that how we use strengths has a huge impact on us as individuals. Some research has found that using your strengths can impact positively on physical health (Proyer, Gander, Wellenzohn, & Ruch, 2013) and help improve coping mechanisms for stress (Harzer & Ruch, 2015). Due to this evidence, we could argue that people with ADHD possibly underuse their strengths which causes them to have issues with work productivity (Harzer & Ruch, 2014) and relationships (Lavy, Littman-Ovadia, & Bareli, 2014). It will be interesting to see if people with ADHD have lower levels of strengths use and knowledge as it could help expand on the therapeutic technique used in therapies with individuals with ADHD.

Wellbeing

A positive wellbeing can be associated with many health, family and economical related benefits (Pressman & Cohen, 2005; Ostir et al., 2001; Diener & Biswass-Diener., 2011). Evidence by Diener & Biswass-Diener (2011) showed that people with higher wellbeing tend to earn more money and are overall happier with their job and home life this is an important part of life, therefore understanding how to get higher wellbeing is a massive benefit. Wellbeing also can impact physical health as Ostir et al., (2001) found that positive wellbeing can help

protect against strokes as the individuals gets older. This is obviously very serious and by understanding how important wellbeing is will help us improve on strategies that supposedly benefit wellbeing.

Previous research has found that individuals with ADHD have low wellbeing in comparison to those without ADHD. For example, National Comorbidity Survey Replication study shows that adults with ADHD are 18.6% more likely to experience major depressive disorder compared to non-ADHD individuals (7.8) This suggests that ADHD has a negative impact on individual's wellbeing (Kessler et al., 2006). In fact, researchers have found links between emotional dysregulation and major depressive disorders, suggesting that this symptom of ADHD can in fact lead to extreme depressive symptoms (Seymour et al., 2012). Additionally, emotional dysregulation causes a person to be unable to regulate their emotions, causing the individual to find it difficult to accomplish goals (Shaw et al., 2014). It could be argued that this symptom of ADHD would decrease wellbeing due to the individual being unable to control their emotions fully. Therefore, this study will be examining the impact that ADHD has on wellbeing due to the evidence shown.

Individuals with ADHD need effective strategies to manage some of the more severe symptoms of their condition which may cause them to have poor wellbeing an example of this is emotional dysregulation. These strategies could be strengths-based interventions which consists of both strength knowledge and strength use (Niemic et al., 2013), in an Aware-Explore-Apply model. This implies that a person has to be aware of their strengths before they can benefit from using them. Research by Minhas 2010; Govindji and Linley 2007 found that both understanding and using your strengths can significantly increase wellbeing with Shankland and Rosset (2017) suggesting that understanding your strengths is the 'launching point' for strength-based activities to begin. Therefore, it could be argued that strength knowledge plays an important part in positively impacting individuals. The current study will look at both strength use and strength knowledge to identify if individuals with ADHD have significant issues with both types of strengths. If this is the case, then it might be beneficial for them to have these types of strengths interventions which seem to be more desired by people with ADHD Schrevel et al., (2016).

Self-efficacy

Similar to strength use, strength knowledge and wellbeing, strengths have been linked to benefit self-efficacy as well. Research by Xie et al., (2020) showed that strengths use had a significant impact on nurses' self-efficacy levels. This suggests that strengths do have an impact on self-efficacy and is supported by evidence showing that strengths are correlated to flourishing and hope (Proctor et al., 2011), these qualities can help improve on self-efficacy. Therefore, suggesting that by using one's strengths can help influence an individual's belief in their capacity to perform tasks. Despite this study only looking at nurses, we can still benefit from the findings and possibly relate it neurodiverse groups. For example, Weber et al., (2013) found that strengths such as social intelligence and humour helps improve levels of self-efficacy. As stated before neurodiverse individuals have been found to have lower levels in these strengths. Therefore, we could argue that neurodiverse individuals will have lower levels of self-efficacy due to them not having the strengths which were shown to improve an individual's self-efficacy.

As stated previously emotional dysregulation causes a person to be unable to regulate their emotions which causes the individual to find it difficult to accomplish goals (Shaw et al.,2014). This will then impact the individual's self-efficacy as Bandura (1977) states that self-efficacy is the belief in your capacity to succeed and general self-efficacy is your belief in how well you can handle daily tasks. We should therefore look closely at self-efficacy in regard to individuals with ADHD, as many symptoms relate to being unable to accomplish goals, because individuals with ADHD usually have poor organisational skills, an inability to focus or prioritise (NHS, 2021). These symptoms impact the ability of the individual with ADHD to do tasks, therefore the individual could have a negative view of their self-efficacy. This would suggest that individuals with ADHD will have low levels of self-efficacy in comparison to non-ADHD individuals and this is why the study will be looking at the relationship between ADHD status and self-efficacy.

Research done by Weiner et al., (2012) further discusses how self-esteem can also impact self-efficacy: individuals with ADHD experience stigmatisation from peers, teachers and parents due to their ADHD related

behaviours. Verbal persuasion and vicarious performances can have major influences when developing self-efficacies (Bandura, 1997), so if individuals with ADHD feel they are being stigmatised and they cannot relate to their peers then one could argue that they will find it challenging to develop a strong self-efficacy. On the other hand, some suggest that individuals with ADHD can be very resilient (Wilmshurst et al., 2011), as despite their symptoms they can still succeed in academic areas. This suggests that self-efficacy in regard to individuals with ADHD is very dependent on the persons personality type and other external factors.

Current Study

This study will be looking at all variables stated and how they interact with ADHD. The hypotheses therefore are based on the evidence stated in this review, which are:

There will be differences in strength use by ADHD status.

There will be differences in strength knowledge by ADHD status.

There will be differences in wellbeing, including subscales, by ADHD status.

There will be differences in self efficacy by ADHD status.

Higher levels of strength use, and strengths knowledge will be related to higher levels of wellbeing.

Higher levels of strengths use, and strengths knowledge will be related to higher levels of self-efficacy.

These hypotheses are based on the previous research stating that strengths can have a great positive effect on both wellbeing and self-efficacy (Xie et al., 2020; Shankland and Rosset 2017), combined with the research stating that individuals with ADHD have lower wellbeing and self-efficacies compared to non-ADHD individuals (Biederman et al., 2008; Eakin et al., 2004).

Methods

Participants

This study consisted of 161 participants who were 18 or older. Participants with ADHD were in the majority (ADHD = 43%, Neurodiverse = 36% and non-ADHD = 20%). The neurodiverse (other) category was made to incorporate 'self-diagnosed', 'currently on the pathway' and 'more than one diagnoses'. Age data was collected through an optional question; the mean age of participants was 27.44 and ranged between 18 to 65. The participants education status consisted mostly of current or former university students (current university student = 47%, former university student 38%). The rest of the sample either did not state their education status or were not students. The participants were recruited via opportunistic sampling through three different methods. The main way of recruitment was advertising through the researcher's social media (Instagram and Facebook). These participants were not given a reward to participate. Some participants were recruited through the University of Chester Research Participant System (RPS). This allows undergraduate students from the University of Chester, to gain credits to help them with their course. Finally, some participants were recruited through Axia ASD Ltd. website and their private Facebook group page which consists of individual who have been diagnosed via the company or are on their waiting list. Axia is a private company which helps diagnose neurodiversity's such as ADHD, Autism and Dyspraxia. Due to this study looking at ADHD and non-ADHD adults there were some eligibility requirements, these were being 18 or older and that the participant had to have some form of ADHD diagnosis or were non-ADHD. This was done to ensure that the participants population had a beneficial mix between these two groups. Ethical considerations were maintained by following the British Psychology Society ethical framework (BPS, 2014, 2018), The participants were given a consent form so that online informed consent was obtained before the participated in the study. This study also received ethical approval from the University of Chester Department of Psychology Ethics Committee before participants data was collected.

Measures

A questionnaire consisting of 48 questions was used to gather data regarding ADHD, strength use, strength knowledge, psychological wellbeing, and self-efficacy. It started with four demographic questions these were used to gain information on the participants age, gender, education status, current student, previous student or 'other' (e.g. retired, working and applying to undergraduate course) and the participants ADHD diagnosis status (ADHD, self-diagnosed, on the pathway, other diagnoses and non-ADHD).

Strength Knowledge

Strength Knowledge was assessed by the Strengths Knowledge Scale by Govindji and Linley (2007) this self-report measure contained 18 items, with 1 reverse item (e.g., "I know what I do best" and "I have to think hard about what my strengths are") This scale used a 7-point Likert scale with an added prefer not to say column (1= Strongly agree, 2 = Somewhat agree, 3 = Agree a little, 4 = Neither agree nor disagree, 5 = Disagree a little, 6 = Somewhat disagree and 7 = Strongly disagree). The Strength Knowledge Cronbach (alpha) for this study was (.90) this was slightly different to the alpha (.89) that Govindji and Linley (2007), however, these alphas indicate that this study has greater internal consistency, which exceeds expectations.

Strength Use

The Strength Use Scale was also made by Govindji and Linley (2007) and focuses on how strengths are used. This self-report measure has 14 items (e.g., "I always play to my strengths" and "I use my strengths everyday"). This scale has a 7-point Likert scale with an added prefer not to say column (1= Strongly agree, 2 = Somewhat agree, 3 = Agree a little, 4 = Neither agree nor disagree, 5 = Disagree a little, 6 = Somewhat disagree and 7 = Strongly disagree). The strength use Cronbach (alpha) coefficient of this study was (.95) this is similar to previous research which also demonstrated the alpha coefficient .95 for the strength use scale (Govindji and Linley, 2007).

Psychological Wellbeing

Psychological wellbeing was assessed by the Psychological Wellbeing (Ryff et al, 1995). This scale had a total of 18 items of which 10 were reversed and evenly split in to 6 subscales. The subscales measured: Autonomy (“I tend to be influenced by people with strong opinions.”), Environmental Mastery (“the demands of everyday life often get me down.”), Personal Growth (“For me, life has been a continuous process of learning, changing and growth.”), Positive Relations (“Maintaining close relationships has been difficult and frustrating for me.”), Purpose in Life (“Some people wander aimlessly through life, but I am not one of them.”) and Self-Acceptance (“I like most parts of my personality.”). Participants were asked to indicate how well they related to each statement using a 7-point with a additional prefer not to say column Likert scale (1= Strongly agree, 2 = Somewhat agree, 3 = Agree a little, 4 = Neither agree or disagree, 5 = Disagree a little, 6 = Somewhat disagree, 7 = Strongly disagree) with higher scores indicating positive psychological wellbeing. The Cronbach alpha for the overall scale was .81 suggesting that it has good internal validity and reliability.

General Self-Efficacy

Finally, the New General Self-Efficacy scale (Chen et al 2001) was a self-report measure with 8 items (e.g., “I will be able to achieve most of the goals that I set for myself and “compared to other people I can do most tasks very well.”) Individuals were told what self-efficacy was and to select an option that applied to them on a 5-point Likert scale with an extra column for Prefer not to say (1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree 5 = Strongly agree). With higher scores representing positive self-efficacy, the Cronbach's (Alpha) coefficient for this study was (.89), again suggesting it has a good internal validity and reliability.

Procedures

The online questionnaire was made using Jisc Online Surveys (Online Surveys, 2020) and was advertised via Chester research participation system, Axia's social medias and website and via the researcher's social medias (Facebook and Instagram). An invitation to participate (see Appendix III and Appendix IV) gave a brief explanation of the study was used on both platforms. If an individual was interested in taking part, they were redirected to the Jisc Online Survey by a URL link. Before starting the study, the participant was asked to read

through a participant information sheet (See Appendix VI), detailing how their data would be used, anonymity and their right to withdraw. This included a statement about Axia ASD Ltd. publishing the findings. Participants' informed consent was gained through an electronic consent form. Once consent was gained, participants completed demographic questions and four self-report scales in the following order: Demographic Questions, Strength Knowledge Scale (Govindji & Linley, 2007), Strength Use Scale (Govindji & Linley, 2007), Psychological Wellbeing Scale (Ryff et al., 1995) and New General Self Efficacy Scale (Chen et al 2001). This questionnaire took approximately 25 minutes to complete, and participants were thanked and were provided with a debrief form (See Appendix IX). If the individual's participation came from RPS then they were rewarded 2 RPS points.

Ethical Considerations

Some aspects of this study might have caused distress for some participants, as referring to one's diagnoses can cause psychological distress due to some being self-diagnosed. This is due to individuals with ADHD experiencing rejection sensitivity disorder (Dodson., 2022), self-diagnosed individuals might have been rejected before by some ADHD communities so therefore become distressed by not having a self-diagnose option. This was prevented by asking what stage they were at with their diagnosis, or if they are self-diagnosed. Additionally, the participants were made aware that the time limit was a mere suggestion, and that the participant could take as long as they needed. This was done as people with ADHD might have found this to be a boring task would need to take a break. This is evidenced by Collins (n.d.) as they advised people with ADHD to take extra time with assignments and to take frequent breaks. So, by stating that there was no time limit would have hopefully made the participants comfortable with taking a much-needed break. Both the information sheet and the debrief sheet had helpful guidance and helpline that if needed the participants could use. The participants were also reminded that this questionnaire was not intended for self-diagnosis and was not used for diagnostic purpose in this study.

This study was conducted in line with the BPS regulations. Therefore, participants were advised that there is a prefer not to answer option for each question in the questionnaire and that they could withdraw at any time during the questionnaire by closing the browser or choosing not to press finish at the end of the questionnaire. However, the participants were reminded that once their data is submitted, they would not be able to withdraw in

the future due to the data being unidentifiable. This shows that the participants information was anonymous throughout the study.

Design and Analysis

All analysis was carried out by Jamovi version 2.3.1. Data preparation meant removing 4 participants who did not provide sufficient data or did not consent to take part (19,47,51 and 81), then reverse scoring items that was needed, this was followed by computing a sum score for each scale and then a Cronbach's Alpha was done for each scale to assess the internal reliability. To test relationships between variables, stated in hypothesis 1 and 2 a correlation was preformed to assess a possible relationship between two predicting variables (Strength Knowledge and Strength Use) and two outcome variables (Psychological Wellbeing and Self-efficacy). To test the final 2 hypothesis 2 one-way ANOVAs were used to explore the impact ADHD had on Strength Use, Strength Knowledge, Psychological Wellbeing and Self-efficacy.

Results

Differences by ADHD Status

Table 1: Descriptive Statistics showing the Means and SDs for the scales used to measure Strength Use and Strength Knowledge by ADHD status.

	ADHD Status	N	Mean	SD
Strength Use	Neurodiverse	56	56.71	19.66
	ADHD	69	49.46	18.08
	Non-ADHD	32	40.00	16.89
Strength Knowledge	Neurodiverse	58	27.24	9.14
	ADHD	70	27.16	10.19
	Non-ADHD	33	20.79	8.08

Table 1 shows that non-ADHD individuals tend to have higher levels of strength use and knowledge as they have significantly lower means than both neurodiverse and ADHD individuals. In regard to these scores in Table 1, a lower score in the for-Strength use and Strength Knowledge indicates a better understanding and use of one's strengths. The standard deviations of non-ADHD individuals in both the Strength use and Strength Knowledge scales are also smaller than the Neurodiverse and ADHD groups which suggests that the data of the non-ADHD participants are less disperse, therefore are closer to the mean.

The results of two one-way ANOVAs to explore differences in Strengths Use and Strengths Knowledge by ADHD status showed that there was a significant effect of the individuals ADHD status on the levels of strength use, [$F(2,83.98) = 8.76, p = <.001$]. This suggests that the individual's ADHD status does have an impact on strength use. A post hoc comparison using a Tukey's post-hoc test showed that those with non-ADHD status had higher levels of strengths use compared to both the neurodiverse ($p<.001$) and ADHD status groups ($p<.05$). There was, however, no significant difference in strengths use between those with neurodiverse status and the ADHD status ($p=.08$).

The results of a one-way ANOVA also showed that there was a significant effect of the individuals ADHD status on the levels of strength knowledge, [$F(2,90.21) = 7.53, p = <.001$]. This suggests that the individual's ADHD status does have an impact on strength knowledge. A post hoc using Turkey's post-hoc test showed that those with non-ADHD status had higher levels of strengths knowledge compared to both neurodiverse ($p = <.001$) and ADHD status groups ($p = .005$). However, there was no significant differences between those with neurodiverse status and the ADHD status group ($p = .999$).

Table 2: One-Way ANOVA between Strength use, Strength Knowledge and ADHD

	F	df1	df2	p
Strength Use	8.76	2	83.98	< .001
Strength Knowledge	7.53	2	90.21	< .001

Table 3: The Means and SDs for Environmental Mastery, General Self Efficacy and Psychological Wellbeing by ADHD status.

	ADHD Status_Recode	N	Mean	SD	SE
Environmental Mastery (Psychological wellbeing Sub-scale)	Neurodiverse	52	8.06	3.44	0.48
	ADHD	58	9.26	3.80	0.50
	Non-ADHD	26	11.15	3.39	0.66
General Self Efficacy	Neurodiverse	58	24.07	7.21	0.95
	ADHD	68	25.25	6.54	0.79
	Non-ADHD	29	29.03	6.86	1.27
Psychological Wellbeing	Neurodiverse	56	73.61	14.61	1.95
	ADHD	65	79.49	17.24	2.14
	Non-ADHD	29	80.28	15.67	2.91
Autonomy (Psychological wellbeing Sub-scale)	Neurodiverse	52	13.88	4.29	0.60
	ADHD	58	13.88	4.09	0.54
	Non-ADHD	26	14.62	4.28	0.84
Personal Growth (Psychological wellbeing Sub-scale)	Neurodiverse	52	15.71	3.86	0.54
	ADHD	58	16.84	3.01	0.40
	Non-ADHD	26	16.23	3.41	0.67
Positive Relations (Psychological wellbeing Sub-scale)	Neurodiverse	52	12.48	4.06	0.56
	ADHD	58	13.16	4.23	0.56
	Non-ADHD	26	11.85	3.77	0.74
Purpose in Life (Psychological wellbeing Sub-scale)	Neurodiverse	52	13.13	3.77	0.52
	ADHD	58	14.00	3.73	0.49
	Non-ADHD	26	14.50	3.15	0.62
Self-Acceptance (Psychological wellbeing Sub-scale)	Neurodiverse	52	11.33	4.78	0.66
	ADHD	58	12.47	4.74	0.62
	Non-ADHD	26	12.42	4.74	0.93

Table 3 shows that non-ADHD individuals tend to have higher levels of environmental mastery, which is a subscale of the psychological wellbeing scale. This subscale has been reported due to it being significantly higher in non-ADHD individuals than neurodiverse and ADHD individuals. This suggest that non-ADHD people have better psychological wellbeing in regard to environmental mastery and are more self-efficient than neurodiverse and ADHD individuals. Again, the non-ADHD standard deviation is lower than the other two groups suggesting that the data is less disperse meaning they are closer to the mean.

The result of three one-way ANOVA to explore differences in environmental Mastery, General Self-efficacy and psychological wellbeing by ADHD status showed that there was a significant effect of the individuals ADHD status on levels of Environmental Mastery [$F(2, 69.36) = 7.12, p = .002$]. This suggests that the individual's ADHD status does have some impact on psychological wellbeing but mostly in regards to a person's Environmental Mastery. A post-hoc comparison using a Tukey's post-hoc showed that those with non-ADHD status had higher levels of environmental mastery levels compared to the neurodiverse status ($p = .001$). However, there was no significant differences in environmental mastery between both ADHD status group and those with neurodiverse status ($p = .19$) and there were no significant differences in environmental mastery between both ADHD status group and those with non-ADHD status ($p = .069$).

The results of a one-way ANOVA also showed that ADHD status also impacts levels of self-efficacy [$F(2, 75.13) = 4.99, p = .009$]. This suggest that ADHD status does have a significant impact on self-efficacy. A post-hoc comparison using a Tukey's post-hoc showed that those with non-ADHD had a higher level of general self-efficacy than those with a neurodiverse status ($p = .005$) or an ADHD status ($p = .037$). However, there was significant difference in general self-efficacy between individuals with ADHD or neurodiverse status ($p = .601$)

The results of a one-way ANOVA showed that the ADHD status does not significantly impact the levels of psychological wellbeing [$F(2, 76.05) = 2.80, p = .067$]. This suggest that individual's ADHD status does not have an impact on their overall psychological wellbeing. These results also showed that ADHD status does not have a significant impact on the other 5 subscales; Autonomy [$F(2, 66.97) = .31, p = .736$], Personal Growth [$F(2, 65.92) = 1.48, p = .236$], Positive Relationships [$F(2, 70.01) = 1.03, p = .362$], Purpose of Life [$F(2, 70.90) = 1.52, p = .226$] and Self-Acceptance [$F(2, 67.69) = .89, p = .416$]. This again suggest that overall psychological wellbeing is not significantly impacted by ADHD status.

Table 4: One-Way ANOVA between Psychological Wellbeing, including subscales, Self-efficacy and ADHD

	F	df1	df2	p
Environmental Mastery (Psychological Wellbeing sub-scale)	7.12	2	69.36	0.002
General Self-Efficacy	4.99	2	75.13	0.009
Psychological Wellbeing	2.80	2	76.05	0.067
Autonomy (Psychological Wellbeing sub-scale)	0.31	2	66.97	0.736
Personal Growth (Psychological Wellbeing sub-scale)	1.48	2	65.92	0.236
Positive Relations (Psychological Wellbeing sub-scale)	1.03	2	70.01	0.362
Purpose in Life (Psychological Wellbeing sub-scale)	1.52	2	71.90	0.226
Self-Acceptance (Psychological Wellbeing sub-scale)	0.89	2	67.69	0.416

As predicted by Hypothesis 1 and 2, a difference in strength use and knowledge by ADHD status was found by a two one-way ANOVA. The ANOVA shows that there was significant effect of ADHD status with non-ADHD having higher levels of strength in comparison with the ADHD group and neurodiverse group. This suggests that an individual's ADHD status can impact how well an individual understands and uses their strengths daily, which in turn shows that people in neurodiverse and ADHD groups have difficulties with this, and as shown above this issue can impact self-efficacy and wellbeing. However, the overall psychological wellbeing ANOVA findings did not support Hypothesis 3 due to there being no significant difference between the non-ADHD group, ADHD and neurodiverse in regard to wellbeing, including its sub-scales. Although, there was a significant difference between the neurodiverse group and non-ADHD group when looking at the Environmental Mastery. This suggest that neurodiverse individuals have issues with being able to change their surrounding via physical and mental actions (Ryff, 1989). As predicted by Hypothesis 4 there was a significant difference in self-efficacy by ADHD status, with non-ADHD individuals having higher self-efficacy levels than both neurodiverse and ADHD groups.

Relationships between Strengths Use, Strengths Knowledge and Psychological Wellbeing.

Table 5: Pearson Correlation between Strength Use, Knowledge and Psychological Wellbeing

		Strength Use	Strength Knowledge
Psychological Wellbeing	Pearson's r	-.55 ***	-.57 ***
	p-value	< .001	< .001

A Pearson Correlation coefficient was done due to our data being normally distributed so a linear relationship between these two variables could be found. The correlation was computed to assess the linear relationship between strength use and psychological wellbeing. There was a significant negative correlation between these two variables $r(159) = -.55, p < .001$. This suggests that higher levels of strength use are related to higher levels of psychological wellbeing, with lower strength use scores meaning higher levels of strength use.

Another Pearson Correlation coefficient was computed to assess the linear relationship between strength knowledge and psychological wellbeing. There was a significant negative correlation between these two variables $r(159) = -.57, p < .001$. This suggests that higher levels of strength knowledge are related to higher levels of psychological wellbeing, with lower strength knowledge scores meaning higher levels of strength knowledge.

Table 6: Pearson Correlation between Strength Use, Knowledge and Self-Efficacy

		Strength Use	Strength Knowledge
Self-Efficacy	Pearson's r	-.51 ***	-.49 ***
	p-value	< .001	< .001

A Pearson Correlation coefficient was computed to assess the linear relationship between strength use and self-efficacy. There was a significant negative correlation between these two variables $r(159) = -.51$, $p = <.001$. This suggests that there is a strong correlation between these two variables as high levels of strength use related to high levels of self-efficacy, with low strength use scores meaning high levels of strength use.

A Pearson Correlation coefficient was computed to assess the linear relationship between strength knowledge and self-efficacy. There was a significant negative correlation between these two variables $r(159) = -.49$, $p = <.001$. This suggests that there is a strong correlation between these two variables as high levels of strength knowledge related to high levels of self-efficacy, with low strength knowledge scores meaning high levels of strength knowledge.

As predicted by Hypotheses five and six, the correlations found that there is a relationship between strength use and strength knowledge, in regard to psychological wellbeing and self-efficacy. When looking closely at the correlations we see that there is a significant negative correlation between strength use, strength knowledge and psychological wellbeing. This means that when an individual understands their strengths and actively uses them in everyday life, helps the persons wellbeing and improves their moods. Again, we see from the correlations that strength use, strength knowledge and self-efficacy that there was a significant negative correlation. This means that when an individual uses and understands their strengths it leads to an improved belief of one self's ability to complete tasks successfully.

Discussion

This study provided a unique look at how ADHD interacts with strength use, strength knowledge, wellbeing and self-efficacy. Strength use and strength knowledge had a positive impact on both wellbeing and self-efficacy, suggesting that understanding and using your strengths efficiently can help improve your wellbeing and self-efficacy. Generally, there were significant differences between non-ADHD individuals and the two other groups (ADHD and neurodiverse) in regard to self-efficacy, strength use and knowledge. In contrast, there were no significant difference between these groups when looking at overall wellbeing. However, there was a significant difference between the non-ADHD group and the neurodiverse (other) group concerning the environmental mastery sub-scale. These findings shall be looked at in more depth and split up into sub-sections the reader's ease.

Strength Use and Strength Knowledge

The study's hypotheses, where stated at the start of the study. Hypothesis one and hypothesis two stated that strength use and strength knowledge will be different in ADHD status groups, the findings of this study supported this, as there was a strongly significant difference between these three variables, with ADHD individuals understanding and using their strengths less than those without ADHD. Similar results were found in Ramsay et al (2016) (as cited from APSARD, 2016) and White and Shah (2011) these studies concluded that there were differences in types of strength between non-ADHD and ADHD individuals, with non-ADHD individuals having a higher number of self-care strengths than those with ADHD. Even though this study did not look at the different types of character strengths it still is in accordance with this previous literature.

Hypothesis five was also supported by this study as strength use and strength knowledge did have a significant positive effect on wellbeing. As stated before, this suggests that understanding and using your strengths can help improve wellbeing; despite evidence by Duan et al (2019) stating that strength knowledge does not have a significant positive effect on wellbeing. The study's findings did support the evidence found by Hausler et al (2017) and Park et al, (2004), who stated that strengths can benefit immensely on the positive

aspects of our lives, suggesting they can help improve on an individual's mood which in turn will help with wellbeing.

Hypothesis six was also supported by this study due to strength use and strength knowledge both having a positive impact on self-efficacy, suggesting that acknowledging your strengths and using them daily positively impacts one's self-efficiency. Therefore, this study supported evidence found by Minhas 2010; Govindji and Linley 2007 who emphasised the importance of both understanding and knowing your strength with Shankland and Rosset (2017) suggesting that strength knowledge is the 'launching point' before any strength benefits can be used. This shows the importance of strength knowledge as we could argue that without understanding your strengths, we cannot fully take advantage of using them. As stated previously this study is one of the first of its kind so there was very limited research in this area. In spite of this, the results shows a promising start when looking at the benefits that strengths can have on self-efficacy and wellbeing.

Wellbeing

Despite lots of evidence suggesting that individuals with ADHD have lower overall wellbeing levels compared to their non-ADHD peers (Kessler et al., 2006; Seymour et al., 2012; Stringaris & Goodman, 2006 and Shaw et al., 2014); this study did not support hypothesis three due to the findings suggesting that overall wellbeing was similar across all groups. However, the results indicated that there is a difference between the neurodiverse (other) groups and non-ADHD individuals in regard to environmental mastery. This might be due to neurodiverse individuals having difficulties around experiencing change in their environment. Evidence from the National Autistic Society (n.d.) suggests that when an individual with autism gets over stimulated by the environment or cannot handle the change within it, they can have a 'meltdown'. This is where a person temporarily loses control of behavioural actions. This could explain why the neurodiverse (other) group had lower levels of Environmental Mastery. As they might find it harder to adapt to a new environment that they are in, resulting in them finding it harder to change it mentally or physically compare to non-neurodiverse individuals.

Self-efficacy

Finally, this study did support Hypothesis four, with results showing that individuals with ADHD had a lower level of self-efficacy than those without ADHD. This was shown in previous evidence, as some symptoms of ADHD (NHS, 2021) can be shown to hinder individuals' organisational skill, resulting in the individual possibly not believing they can do some tasks. This suggests that ADHD status does have an impact on self-efficacy, despite evidence from Wilmshurst et al in 2011 suggesting that it is purely down to a person's individuality. This study's findings suggests that ADHD plays a bigger role on an individual's view of their self-efficacy than previously anticipated. This study also supported hypothesis six, as results showed that strength use did have a significant impact on self-efficacy which was in line with what previous evidence has found. This similar result was shown in a study by Xie et al., (2020), as they stated that strength use does have an impact on self-efficacy levels.

Limitations

It would be beneficial to delve into this study's limitations regarding the methods used. All of the data for this study was produced by self-report methods via an anonymous online questionnaire. This method comes with its obvious limitations regarding individuals not answering questions honestly due to social desirability affect. However, the questionnaire did give an opportunity to not answer certain questions, which would have hopefully prevented inaccurate answers. Also, due to lack of research using the Psychological Wellbeing Scale (Ryff et al., 1995) and the New General Self-Efficacy scale (Chen et al., 2001) when looking at neurodiverse individual's they might not have been able to account for the different neurodiverse thinking patterns, which could be reductionist when explaining neurodiverse behaviours. Future research might benefit from producing data via qualitative methods so gain more of an understanding of neurodiverse individuals. Also, my own biases might have impact how the data was interpreted. This could include my own experiences of ADHD and the diagnosis process, as I spent time working in a specialised clinic (Axia ASD Ltd.). This could have affected my interpretation and reasoning behind the figures and results produced by a quantitative analysis.

Also, it is worth noting that there were no specific options for other neurodiversity's such as autism spectrum disorder (ASD) or dyspraxia. This was due to the ADHD status questions only having the option to choose different types of ADHD (ADHD, Self-diagnosed, currently on the pathway, more than 1 diagnosis or non-ADHD). This could have resulted in some neurodiverse individuals choosing the non-ADHD option. This might have impacted the overall results as the non-ADHD group, neurodiverse and ADHD group might not have had a big difference due to some unknowingly placing themselves in the incorrect group. Therefore, future studies should be advised to be more explicit when asking for the ADHD status of an individual. On the other hand, the psychological wellbeing scores might have been similar between the groups due to the ADHD and neurodiverse participants being recruited mostly via self-help ADHD pages on social media. Therefore, you could argue that these individuals are working on themselves and are trying to improve their wellbeing by using the helpful suggestions from these types of pages. In future research, it might be beneficial to factor in what coping mechanisms the individual uses when considering their psychological wellbeing.

In addition, this study had more female participants in comparison to males and other genders (female = 76%, male = 21% and other = 4%). This is interesting to note as males are generally more likely to be diagnosed with ADHD than females, with a male to female ratio of approximately 4:1 when looking at community sample (Ramtekkar, 2010). When comparing this to our sample we see that this is very different as this study has a female to male ratio of 57:10 within the ADHD status group and a female to male ratio 45:10 in the neurodiverse (other) group. This study however might not be a good representation of the ADHD community due to self-report methods gaining more female interest (Curtin et al 2000; Moore & Tarnai, 2002; Singer et al 2000). However, this is still a positive for female representation in ADHD and neurodiverse research and is a beneficial step forward for more research to be done in for females with ADHD or any neurodiverse diagnoses.

Conclusion

Overall, the ADHD status did have some impact on strength use, strength knowledge and self-efficacy as shown from the evidence of the Strength Use Scale (Govindji & Linley, 2007), the Strength Knowledge Scale (Govindji & Linley, 2007) and the General Self-Efficacy Scale (Chen et al., 2001). This supported the alternative hypothesis, showing that people with ADHD did not understand or use their strengths as much as people without ADHD. It also suggested that people with ADHD had lower levels of self-efficacy compared to non-ADHD individuals. However, evidence from the Psychological Wellbeing Scale (Ryff et al., 1995) did not support the alternative hypothesis around the impact ADHD has on wellbeing. There was only a significant effect between neurodiverse (other) individuals and non-ADHD individuals when looking at the environmental mastery sub-scale. This suggested that ADHD did not have as much of an impact on wellbeing as previously thought. On the other hand, these scales did show evidence to support the alternative hypotheses regarding the impact strength use and strength knowledge has on both, wellbeing and self-efficacy. Therefore, showing, that understanding and knowing your strength can benefit your overall wellbeing and self-efficacy levels.

To conclude, this study served to support the other research in this area as previously discussed. Earlier evidence suggested that ADHD does impact self-efficacy (NHS, 2021). However, this research did not support the previous evidence found in regard to wellbeing and an individual's ADHD status, where it was suggested that people with ADHD were more predisposed to issues regarding health and wellbeing (Kessler et al., 2006). In addition, research looking at strength use, strength knowledge and ADHD is very limited. This study will hopefully give some insight in how these variables interact with ADHD. This will aid in the understanding about what therapeutic routes work to help individuals with ADHD manage their symptoms. This will hopefully inspire others to delve deeper into this topic, benefiting and supporting the neurodiverse community and furthering our understanding of this very individualist diagnosis.

Reference

Adamou, M., Arif, M., Asherson, P., Aw, T. C., Bolea, B., Coghill, D., ... Young, S. (2013). Occupational issues of adults with ADHD. *BMC Psychiatry*, 13, Article 59. doi:10.1186/1471-244X-13-59

ADHD Project Subgroup CAMHS Advisory Group (2018). *Delivering Effective Services for Children and Young People with ADHD*. NHS in Greater Manchester. <https://www.england.nhs.uk/north-west/wp-content/uploads/sites/48/2019/03/GM-wide-ADHD-guidance.pdf>

Agnew-Blais, J. C., Belsky, D. W., Caspi, A., Danese, A., Moffitt, T. E., Polanczyk, G. V., ... & Arseneault, L. (2021). Polygenic risk and the course of attention-deficit/hyperactivity disorder from childhood to young adulthood: Findings from a nationally representative cohort. *Journal of the American Academy of Child & Adolescent Psychiatry*, 60(9), 1147-1156.

Agnew-Blais, J. C., Polanczyk, G. V., Danese, A., Wertz, J., Moffitt, T. E., & Arseneault, L. (2016). Evaluation of the persistence, remission, and emergence of attention-deficit/hyperactivity disorder in young adulthood. *JAMA psychiatry*, 73(7), 713-720.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders (4th ed., text rev.)*. Washington, DC: Author.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.

Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York, NY: W.H. Freeman.

Biederman, J., Petty, C. R., Fried, R., Kaiser, R., Dolan, C. R., Schoenfeld, S., ... Faraone, S. V. (2008).

Educational and occupational underattainment in adults with attention-deficit/hyperactivity disorder: A controlled study. *The Journal of Clinical Psychiatry*, 69, 1217-1222.

British Psychological Society (2014). *Code of Human Research Ethics*. Leicester: Author British

Psychological Society. (2018). *Code of Ethics and Conduct*. Retrieved from:

[https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-](https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-%20Files/BPS%20Code%20of%20Ethics%20and%20Conduct%20%28Updated%20July%202018%29.pdf)

[%20Files/BPS%20Code%20of%20Ethics%20and%20Conduct%20%28Updated%20](https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-%20Files/BPS%20Code%20of%20Ethics%20and%20Conduct%20%28Updated%20July%202018%29.pdf)

[July%202018%29.pdf](https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-%20Files/BPS%20Code%20of%20Ethics%20and%20Conduct%20%28Updated%20July%202018%29.pdf)

Brown, D. J., Arnold, R., Fletcher, D., & Standage, M. (2017). Human thriving a conceptual debate and literature review. *European Psychologist*, 22(3), 167–179. <https://doi.org/10.1027/1016-9040/a000294>.

Caye, A., Rocha, T. B. M., Anselmi, L., Murray, J., Menezes, A. M., Barros, F. C., ... & Rohde, L. A. (2016).

Attention-deficit/hyperactivity disorder trajectories from childhood to young adulthood: evidence from a birth cohort supporting a late-onset syndrome. *JAMA psychiatry*, 73(7), 705-712.

Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational research methods*, 4(1), 62-83.

Collins, K. (n.d). *Strategies/ Techniques for ADHD*. The Division of Disability resources and educational services; College of Applied Health Sciences at the University of Illinois at Urbana-Champaign.

<https://www.disability.illinois.edu/strategiestechniques-adhd>

Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. *Public Opinion Quarterly* 64: 413–428.

- Diener, E., & Biswas-Diener, R. (2011). *Happiness: Unlocking the mysteries of psychological wealth*. John Wiley & Sons.
- Dodson, W. (2022). How ADHD Ignites Rejection Sensitive Dysphoria. *ADDITUDE Inside the ADHD mind*, <https://www.additudemag.com/rejection-sensitive-dysphoria-and-adhd/>
- Duan, W., Bu, H., Zhao, J., & Guo, X. (2019). Examining the mediating roles of strengths knowledge and strengths use in a 1-year single-session character strength-based cognitive intervention. *Journal of Happiness Studies*, 20(6), 1673-1688.
- Eakin, L., Minde, K., Hechtman, L., Ochs, E., Krane, E., Bouffard, R., ... Looer, K. (2004). The marital and family functioning of adults with ADHD and their spouses. *Journal of Attention Disorders*, 8, 1-10. doi:10.1177/108705470400800101
- Emilsson, B., Gudjonsson, G., Sigurdsson, J. F., Baldursson, G., Einarsson, E., Olafsdottir, H., Young, S. (2011). Cognitive behaviour therapy in medication-treated adults with ADHD and persistent symptoms: A randomized controlled trial. *BMC Psychiatry*, 11(1), Article 116. doi:10.1186/1471-244X-11-116
- Faraone, S. V., Biederman, J., & Mick, E. (2006). The age-dependent decline of attention deficit hyperactivity disorder: a meta-analysis of follow-up studies. *Psychological medicine*, 36(2), 159-165.
- Fredriksen, M., Halmøy, A., Faraone, S. V., Haavik, J. (2013). Long-term efficacy and safety of treatment with stimulants and atomoxetine in adult ADHD: A review of controlled and naturalistic studies. *European Neuropsychopharmacology: The Journal of the European College of Neuropsychopharmacology*, 23, 508-527. doi:10.1016/j.euroneuro.2012.07.016
- Harzer, C., & Ruch, W. (2014). The role of character strengths for task performance, job dedication, interpersonal facilitation, and organizational support. *Human Performance*, 27, 183–205.

Harzer, C., & Ruch, W. (2015). The relationships of character strengths with coping, work-related stress, and job satisfaction. *Frontiers in Psychology*, 6. doi:10.3389/fpsyg.2015.00165

Hausler, M., Strecker, C., Huber, A., Brenner, M., Höge, T., & Höfer, S. (2017b). Associations between the application of signature character strengths, health and well-being of health professionals. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.01307>.

Hone, L. C., Jarden, A., Duncan, S., & Schofield, G. M. (2015). Flourishing in New Zealand workers: Associations with lifestyle behaviors, physical health, psychosocial, and work-related indicators. *Journal of Occupational and Environmental Medicine*, 57(9), 973–983.

Kashdan, T. B., McKnight, P. E., Fincham, F. D., & Rose, P. (2011). When curiosity breeds intimacy: Taking advantage of intimacy opportunities and transforming boring conversations. *Journal of Personality*, 79, 1369–1401. <https://doi.org/10.1111/j.1467-6494.2010.00697.x>.

Kessler, R. C., Adler, L., Barkley, R., Biederman, J., Conners, C. K., Demler, O., ... & Zaslavsky, A. M. (2006). The prevalence and correlates of adult ADHD in the 72 United States: results from the National Comorbidity Survey Replication. *The American Journal of Psychiatry*, 163(4), 716-723.

Kooij, S. J. J., Bejerot, S., Blackwell, A., Caci, H., Casas, B. (2010). European consensus statement on diagnosis and treatment of adult ADHD: The European Network Adult ADHD. *BMC Psychiatry*, 10(1), Article 67. doi:10.1186/1471-244X-10-67

Lavy, S., Littman-Ovadia, H., & Bareli, Y. (2014). My better half: Strengths endorsement and deployment in married couples. *Journal of Family Issues*, 37, 1730–1745.

- Littman-Ovadia, H., & Freidlin, P. (2020). Positive psychopathology and positive functioning: OCD, flourishing and satisfaction with life through the lens of character strength underuse, overuse and optimal use. *Applied Research in Quality of Life*, 15(2), 529-549.
- Lyubomirsky S, King L, Diener E. The benefits of frequent positive affect: does happiness lead to success? *Psychol Bull* 2005;131(6):803–855.
- Mészáros, A., Czobor, P., Bálint, S., Komlósi, S., Simon, V., Bitter, I. (2009). Pharmacotherapy of adult attention deficit hyperactivity disorder (ADHD): A meta-analysis. *The International Journal of Neuropsychopharmacology*, 12, 1137-1147.
- Minhas, G. (2010). Developing realised and unrealised strengths: Implications for engagement, self-esteem, life satisfaction and well-being. *Assessment and Development Matters*, 2, 12–16.
- Moffitt, T. E., Houts, R., Asherson, P., Belsky, D. W., Corcoran, D. L., Hammerle, M., ... & Caspi, A. (2015). Is adult ADHD a childhood-onset neurodevelopmental disorder? Evidence from a four-decade longitudinal cohort study. *American Journal of Psychiatry*, 172(10), 967-977.
- Moore, D. L., & Tarnai, J. (2002). Evaluating nonresponse error in mail surveys. In: Groves, R. M., Dillman, D. A., Eltinge, J. L., and Little, R. J. A. (eds.), *Survey Nonresponse*, John Wiley & Sons, New York, pp. 197–211.
- Moriyama, T. S., Polanczyk, G. V., Terzi, F. S., Faria, K. M., Rohde, L. A. (2013). Psychopharmacology and psychotherapy for the treatment of adults with ADHD—A systematic review of available meta-analyses. *CNS Spectrums*, 18, 296-306.
- Murphy, K. (2005). Psychosocial treatments for ADHD in teens and adults: A practice-friendly review. *Journal of Clinical Psychology*, 61, 607-619. doi:10.1002/jclp.20123

National Autistic Society (n.d.). What is Autism. Autism.org.uk. <https://www.autism.org.uk/advice-and-guidance/what-is-autism>

National Institute for Health and Care Excellence (2013) Attention Deficit Hyperactivity Disorder:NICE quality standard 39. Available at: www.nice.org.uk/guidance/qs39/resources/guidanceattention-deficit-hyperactivity-disorder-pdf [accessed 12 May 2015]

NHS (2021). Symptoms-Attention deficit hyperactivity disorder (ADHD). NHS.uk. <https://www.nhs.uk/conditions/attention-deficit-hyperactivity-disorder-adhd/symptoms/>

Niemiec, R. M. (2018). Character strengths interventions: A field-guide for practitioners. Boston, MA: Hogrefe.

Niemiec, R. M. (2019). Finding the golden mean: the overuse, underuse, and optimal use of character strengths. *Counselling Psychology Quarterly*, 32(3-4), 453-471.

Niemiec, R. M. (2020). Six functions of character strengths for thriving at times of adversity and opportunity: A theoretical perspective. *Applied Research in Quality of Life*, 15(2), 551-572.

Ostir, G. V., Markides, K. S., Black, S. A., & Goodwin, J. S. (2000). Emotional well-being predicts subsequent functional independence and survival. *Journal of the American Geriatrics Society*, 48(5), 473-478.

Ostir, G. V., Markides, K. S., Peek, M. K., & Goodwin, J. S. (2001). The association between emotional well-being and the incidence of stroke in older adults. *Psychosomatic medicine*, 63(2), 210-215.

Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, 23(5), 603–619.

Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University press, and Washington, DC: American Psychological Association.

Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health?. *Psychological bulletin*, 131(6), 925.

Proctor, C., Maltby, J., & Linley, P. A. (2011). Strengths use as a predictor of well-being and health-related quality of life. *Journal of Happiness Studies*, 12(1), 153-169.

Proyer, R. T., Gander, F., Wellenzohn, S., & Ruch, W. (2013). What good are character strengths beyond subjective well-being? The contribution of the good character on self-reported health-oriented behavior, physical fitness, and the subjective health status. *Journal of Positive Psychology*, 8(3), 222–232.

Ramsay, J. R., Giwerc, D., McGrath, R. E., & Niemiec, R. (2016, January 15). As sited in APSARD (2016, October 10) Are There Character Strengths Associated With Adult ADHD?: Comparison of ADHD Adults and Controls on the VIA Inventory of Strengths. <https://apsard.org/are-there-character-strengths-associated-with-adult-adhd-comparison-of-adhd-adults-and-controls-on-the-via-inventory-of-strengths/>

Ramtekkar, U. P., Reiersen, A. M., Todorov, A. A., & Todd, R. D. (2010). Sex and age differences in attention-deficit/hyperactivity disorder symptoms and diagnoses: implications for DSM-V and ICD-11. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(3), 217-228.

Reimer, B., D'Ambrosio, L., Gilbert, J., Coughlin, J., Biederman, J., Surman, C., Fried, R., Aleari, M., 2005. Behavior differences in drivers with attention deficit hyperactivity disorder: the driving behavior questionnaire. *Accident Analysis and Prevention* 3 (6), 996–1004.

- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Ryff, C. D. and Keys, CL (1995). The structure of psychological well-being revisited. *Journal Pers Social Psychology* 69 (4): 719, 727.
- Schrevel, S. J., Dedding, C., & Broerse, J. E. (2016). Why do adults with ADHD choose strength-based coaching over public mental health care? A qualitative case study from the Netherlands. *Sage Open*, 6(3), 2158244016662498.
- Schrevel, S. J., Dedding, C., & Broerse, J. E. (2016). Why do adults with ADHD choose strength-based coaching over public mental health care? A qualitative case study from the Netherlands. *Sage Open*, 6(3), 2158244016662498.
- Seymour, K. E., Chronis-Tuscano, A., Halldorsdottir, T., Stupica, B., Owens, K., & Sacks, T. (2012). Emotion regulation mediates the relationship between ADHD 79 and depressive symptoms in youth. *Journal of Abnormal Child Psychology*, 40(4), 595-606.
- Shankland, R., & Rosset, E. (2017). Review of brief school-based positive psychological interventions: A taster for teachers and educators. *Educational Psychology Review*, 29(2), 363–392.
<https://doi.org/10.1007/s10648-016-9357-3>.
- Shaw, P., Stringaris, A., Nigg, J., Leibenluft, E., 2014. Emotion dysregulation in attention deficit hyperactivity disorder. *American Journal of Psychiatry* 171, 276–293.
- Singer, E., van Hoewyk, J., & Maher, M. P. (2000). Experiments with incentives in telephone surveys. *Public Opinion Quarterly* 64: 171–188.

Stringaris, A., & Goodman, R. (2009). Mood lability and psychopathology in youth. *Psychological Medicine*, 39(08), 1237-1245.

Surman, C. B. H., Hammerness, P. G., Pion, K., Faraone, S. V. (2013). Do stimulants improve functioning in adults with ADHD? A review of the literature. *European Neuropsychopharmacology: The journal of the European College of Neuropsychopharmacology*, 23, 528-533.

doi:10.1016/j.euroneuro.2012.02.010

Weber, M., Ruch, W., Littman-Ovadia, H., Lavy, S., & Gai, O. (2013). Relationships among higher-order strengths factors, subjective well-being, and general self-efficacy—The case of Israeli adolescents. *Personality and Individual Differences*, 55(3), 322-327.

Weiss, M., Murray, C., Wasdell, M., Greenfield, B., Giles, L., Hechtman, L. (2012). A randomized controlled trial of CBT therapy for adults with ADHD with and without medication. *BMC Psychiatry*, 12(1), Article 30. doi:10.1186/1471-244X-12-30

White, H. A., & Shah, P. (2011). Creative style and achievement in adults with attention-deficit/hyperactivity disorder. *Personality and Individual Differences*, 50(5), 673-677.

Wiener, J., Malone, M., Varma, A., Markel, C., Biondic, D., Tannock, R., & Humphries, T. (2012). Children's perceptions of their ADHD symptoms: Positive illusions, attributions, and stigma. *Canadian Journal of School Psychology*, 27(3), 217-242.

Wilmshurst, L., Peele, M., & Wilmshurst, L. (2011). Resilience and Well-being in College Students With and Without a Diagnosis of ADHD. *Journal of Attention Disorders*, 15(1), 11–17.

<https://doi.org/10.1177/1087054709347261>

Xie, J., Liu, M., Zhong, Z., Zhang, Q., Zhou, J., Wang, L., ... & Cheng, A. S. (2020). Relationships among character strengths, self-efficacy, social support, depression, and psychological well-being of hospital nurses. *Asian Nursing Research*, 14(3), 150-157.

Appendices

APPENDIX I

Staff / Office Use Only

DOPEC NUMBER: *Click here to enter text.*

Umbrella project DOPEC number (staff) *Click here to enter text.*

APPLICANT SURNAME Chalker

APPLICANT: UG PGT PGR Staff

REVIEW PROCESS: Accelerated Full

APPLICATION STATUS: New application Major amendment
Resubmission

APPLICATION FOR: Dissertation Teaching Research & publication

ATTENDANCE AT HEALTH & SAFETY BRIEFING: Yes No N/A

INCLUSION OF RISK ASSESSMENT FORM: Yes No N/A

NOTES ON THE ROLE AND FUNCTION OF THE DEPARTMENT OF PSYCHOLOGY ETHICS COMMITTEE.

- *All decisions of the committee are based on the application form and reviewers comments ONLY. Forms should be as detailed and clear as possible. Verbal discussions are not considered as part of the application or review process.*
- *The review process strictly adheres to the University of Chester Research Governance Handbook and the BPS Code of Ethics.*
- *The decision of the committee is final. If you are a UG, PGT or PGR student you should discuss the decision of the committee with your supervisor. If you are a member of staff you may contact the chair of the committee for further clarification.*

Before completing the form researchers are expected to familiarise themselves with the regulatory codes and codes of conduct and ethics relevant to their areas of research, including those of relevant professional organisations and ensure that research which they propose is designed to comply with such codes.

School of Psychology Ethical Approval for Research: Procedural Guidelines.

University of Chester Research Governance Handbook

http://ganymede2.chester.ac.uk/view.php?title_id=522471

BPS Code of Ethics

[BPS Code of Human Research Ethics](#)
[BPS Guidelines for Internet-mediated Research](#)

Any queries email: psychology_ethics@chester.ac.uk

CHECK LIST.
Please complete the form below indicating attached materials. Prior to submission supervisors must confirm that they have reviewed the application by completing the supervisors column.

<i>Notes: Students to indicate where information is found, supervisor to confirm by ticking green column</i>	<u>Supervisor confirmation</u>	<u>Information sheet</u>	<u>Letter</u>	<u>Email</u>	<u>Email info. page</u>	<u>Consent Form</u>	<u>PowerPoint</u>	<u>N/A</u>
Brief details about the purpose of the study	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contact details for further information	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation of how and why participant has been chosen	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notification that materials/interviews are not diagnostic tools/therapy or used for staff review/development purposes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explanation participation is voluntary	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of any incentives or compensation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of how consent will be obtained	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If research is observational, consent to being observed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Details of procedure so participants are informed about what to expect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Details of time commitments expected	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details of any stimuli used	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Explanation of right to withdraw and right to withdraw procedure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Option for omitting questions participant does not wish to answer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Procedure regarding partially completed questionnaires or interviews	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With interviews, information regarding time limit for withdrawal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Details of any advantages and benefits of taking part	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Details of any disadvantages and risks of taking part	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information that data will be treated with full confidentiality and that, if published, those data will not be identifiable as theirs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debriefing details	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Further information (relevant literature; support networks etc)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Supervisor Signature: Michelle Tytherleigh

Date:28/10/2021



**University of
Chester**

**SCHOOL OF PSYCHOLOGY
APPLICATION TO
DEPARTMENTAL ETHICS
COMMITTEE**

WHEN COMPLETING THE FORM PLEASE REFER TO THE DOP ETHICS PROCEDURAL GUIDELINES HANDBOOK.

UG AND PGT STUDENTS CAN ACCESS A COPY ON THEIR RELEVANT MOODLE PAGE.

PGR AND STAFF SHOULD CONTACT psychology_ethics@chester.ac.uk

1. Working title of the study

Notes: The title should be a single sentence

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD)** and without ADHD

2. Applicant name and contact details

Notes: The primary applicant is the name of the person who has overall responsibility for the study. Include their appointment or position held and their qualifications. For studies where students and/or research assistants will undertake the research, the primary applicant is the student (UG, PGT, PGR) and supervisor is the co-applicant.

Madeleine Elena Chalker

Email – 1806246@chester.ac.uk

Phone Number - 07587052300

3. Co-applicants

Notes: List the names of all researchers involved in the study. Include their appointment or position held and their qualifications

Dr. Michelle Tytherleigh, Senior Lecture in Psychology and Senior University Teaching Fellow, FSS

4. Start and end dates of the study

Notes: If exact dates are unavailable, explain why and give approximate dates.

October 2021 to July 2022

5. Is this project subject to external funding?

Notes: Please provide details of the funding body, grant application and PI.

No

6. Briefly describe the purpose and rationale of the research

Notes: (Maximum 300 words). In writing the rationale make sure that the research proposed is grounded in relevant literature, and the hypotheses emerge from recent research and are logically structured.

If this application is for a PGR/Staff funded project please attach any detailed research proposals as appropriate.

Attention Deficit Hyperactivity Disorder (ADHD) is a neurological condition that impacts a person's behaviours and emotions. This indicates that the individual might be impulsive and have trouble concentrating on activities like academic tasks. This is shown in the study by Scholtens et al (2013) who concluded, ADHD does impact academic achievement and self-perception.

Research findings, shown on the NHS website (2018), predominantly focus on children and adolescent with ADHD, presumably due to more children being diagnosed (3-5%) than adults (2%) (ADHD Project Subgroup CAMHS Advisory Group 2018). Literature by NICE (2013, 2018) also suggests that individuals with this condition can have impairments regarding social interactions, self-esteem, and relationships with others. Therefore, this study will use the Psychological Wellbeing Scale (Ryff et al, 2010) as it looks at positive relationships with others and self-acceptance which individuals with ADHD can have problems with. Although there have been limited studies on adults with ADHD, the studies that have been done found similar results, as evidence found by Rabiner et al in 2008, suggests people with ADHD have more academic concerns and are more prone to depressive symptoms. Therefore, it is important to look more closely at adults with ADHD regarding their wellbeing and self-efficiency because there needs to be a better understanding of what can help improve these individuals lives. These studies have all used non-ADHD participants as a control group to look at the affects ADHD has on wellbeing and academic achievement therefore our study will be using similar participants. There has not been a lot of research when looking into the links between strength use, strength knowledge and ADHD which I believe would be beneficial and interesting to look at.

This study will look at ADHD and non-ADHD individuals and analyse the relationship between wellbeing, self-efficiency, strength use and knowledge.

Hypotheses are:

H1 – Higher levels of strength use and knowledge in both groups will impact positively on wellbeing

H2 – Higher levels of strength use and knowledge in both groups will impact positively on self-efficiency

H3 – There will be a difference in wellbeing and self-efficiency scores between the groups

H4 – There will be a difference in strength use and strength knowledge between the groups

7a. Describe the methods and procedures of the study

Notes: (Maximum 500 words) Attach any relevant material (questionnaires, supporting information etc.) as appendices and summarise them briefly here (e.g. Cognitive Failures Questionnaire: a standardised self-report measure on the frequency of everyday cognitive slips). Do not merely list the names of measures and/or their acronyms. Include information about any interventions, interview schedules, duration, order and frequency of assessments. It should be clear exactly what will happen to participants. If this is a media based study describe and list materials include links and sampling procedure.

Data will be collected via online questionnaires and participants will consist of those who respond to the RPS (see Appendix I), and the researcher's personal and School of Psychology social media (Facebook and Instagram), and Reddit invitations (See Appendix II). I have also contacted the outside company for recruitment approval (See Appendix III)– Axia ASD Ltd., who are private company that diagnose neurodiversity's such as ADHD and the company I had work experience with during my Work Base Learning module. This should result in me being allowed to use their platform to advertise and, hopefully, recruit participants for the study. After clicking the invitation link, the participants will be presented with a Participant Information Sheet (PIS) which will outline the details of the study (See Appendix IV). If they decide to participate after reading the PIS, they will click the next located at the bottom of the page which will take them with an online Consent Form (See Appendix V). If the participants give consent, they will then click 'next' and continue to the questionnaire (See Appendix VI), followed by the debrief.

The questionnaire will have 48 questions and it will be suggested that completion will take 20-25 minutes. Participants that are recruited by RPS will be awarded with two RPS credits on provision of their RPS ID Number. The questionnaire (See Appendix VII) will consist of five sections:

A) Four demographic questions (age, gender, education status [student or not] and ADHD diagnosis status [ADHD or not]);

B) Psychological wellbeing Scale (Ryff et al, 2010) - an 18 item Likert scale questionnaire comprising of six subscales measuring: (1) Autonomy (2) Environmental Mastery (3) Personal Growth (4) Positive Relations with Others (5) Purpose in Life (6) Self-Acceptance;

C) New General Self-Efficacy Scale (Chen et al 2001) - an 8 item Likert scale questionnaire

D) Strength Use Scale (SUS) (Govindji & Linley 2007) - a 14 item Likert scale questionnaire;

E) Strength Knowledge scale (Govindji & Linley 2007) - an 8 item Likert scale questionnaire.

All the scales have good reliability and validity.

Participants will be told they are allowed to withdraw from the study at any point during the questionnaire by simply exiting the browser and, by doing so, that their data will not be saved. There will also be a 'prefer not to answer' option for each question. Participants will be encouraged to take screenshots of the support lines which are stated on the PIS, if they do not end the questionnaire at the debrief. Responses from incomplete questionnaires where more than 10% of data is missing for a participant will not be analysed. Participants will need to click 'finish' before completing the questionnaire and will be reminded that once they have submitted, they will not be able to withdraw due to the data being unidentifiable.

Participants will receive a Debrief Sheet (See Appendix VIII) after they have clicked 'finished' and completed the online questionnaire. In the debrief the participants will be asked to send the invitation to others who they believe will be interested, such as their colleagues/friends. This will allow a snowballing approach recruitment to occur.

All questionnaire data will be analysed by using multiple linear regressions to look at the first two hypotheses and an ANOVA/ T-Test will be done to analyse the last two hypotheses.

7b. Provide details of your contingency plan

Notes: Please briefly describe your contingency plan. (100 words)

Due to the range of participant recruitment options, including the snowballing approach outlined in the debrief, this should gain enough participants. It also is not solely reliant on a student-based population so there should be sufficient number of participants. However, if I do not gain enough ADHD participants, I will contact the University of Chester Disability team and ask if they will advertise to the university students. If this doesn't provide enough

participants I will advertise in specific ADHD groups on social media such as Reddit, Instagram and Facebook.

8. Provide details of the previous experience of the procedures by the person conducting the study.

Notes: Say who will be undertaking the procedures involved and what training and/or experience they have. If supervision is necessary, indicate who will provide it.

Madeleine Chalker has completed the Research Methods modules in Level 4 and 5 and has completed lab reports for university assessments. They will undertake this research study with the support and guidance of Dr Michelle Tytherleigh (Supervisor)

9. Describe the ethical issues raised by this study and discuss the measures taken to address them.

Notes: Describe any discomfort or inconvenience that participants may experience. Include information about procedures that for some people could be physically stressful or might impact on the safety of participants, e.g. interviews, probing questions, noise levels, visual stimuli, equipment; or that for some people could be psychologically stressful, e.g. mood induction procedures, tasks with high failure rate, please include your distress protocol. Discuss any issues of anonymity and confidentiality as they relate to your study, refer to ethics handbook and guidance notes at the end of the form. If animal based include ethical issues relating to observation.

The study is not intended to cause distress, but it will be recognised that referring back to one's diagnoses can cause psychological distress due to some possibly being self-diagnosed. This will hopefully be prevented by asking what stage they are with their diagnosis, or if they are self-diagnosed. Furthermore, the participants will have been made aware in the PIS that this questionnaire is completely voluntary, and they can stop it at any time. The PIS will also confirm that the time limit is merely a suggestion, and the participant can take as long as they need, which they will be asked to keep so they can use it in the future. This will be done as some people with ADHD might need a break from the questionnaire as it might be a boring task for them. So, by stating they do not need to do it in a set time will hopefully make them feel more comfortable to take much needed breaks. Both the PIS and the Debrief sheet will have helpful guidance and helplines if they are required. The participants will also be reminded that this questionnaire should not be used as to self-diagnose and will not be used for diagnostic purposes in this study.

This study will be conducted in line with the BPS regulations. Therefore, participants will be advised that there is a prefer not to answer option for each question in the questionnaire and that they can withdraw at any time during the questionnaire via closing the browser or choosing not to press finish at the end of the questionnaire. However, the participants will be reminded that once their data is submitted, they will not be able to withdraw in the future due to the data being unidentifiable. This shows that the participants information will be anonymous throughout the study.

10. Describe the participants of the study.

Notes: Describe the groups of participants that will be recruited and the principal eligibility criteria and ineligibility criteria. Make clear how many participants you plan to recruit into the study in total.

The group of participants must be 18 or older and will consist of ADHD and non-ADHD individuals, both university students and non-university students. The participants will be recruited by University of Chester RPS, personal social media (Facebook, Instagram and Reddit), an outside company who diagnose neurodiversity's such as ADHD (Axia ASD Ltd.) The objective is to have a minimum of 80 participants, to accommodate Green's (1991) recommendation for a medium effect using regression.

11. Describe the participant recruitment procedures for the study.

Notes: Gives details of how potential participants will be identified or recruited, please list any social media platforms that you will use and the message. Include all other advertising materials (posters, emails, letters, verbal script etc.) as appendices and refer to them as appropriate. Describe any screening examinations. If it serves to explain the procedures better, include as an appendix a flow chart and refer to it.

Participants will be recruited through a variety of methods by using the invitations as shown in the Appendices:

- (1) Online through RPS (University of Chester Psychology students only) – Appendix I
- (2) Online through social media (researcher's personal Facebook, Instagram) and Reddit sites - Appendix II
- (3) Advertising on private company page (Axia ASD Ltd.) - Request email Appendix III
- (4) Snowballing, by asking participants to forward details of the study onto others they think might be interested.

Participant recruitment procedure will comply with Ethical Guidelines for recruiting via social media and guidance from University of Chester Health and Safety briefing.

12. Describe the procedures to obtain informed consent

*Notes: Describe when consent will be obtained. If consent is from **adult participants**, give details of who will take consent and how it will be done. If you plan to seek informed consent from **vulnerable groups** (e.g. people with learning difficulties, victims of crime), say how you will ensure that consent is voluntary and fully informed.*

*If you are recruiting **children or young adults** (aged under 18 years) specify the age-range of participants and describe the arrangements for seeking informed consent from a person with parental responsibility. If you intend to provide children under 16 with information about the study and seek agreement, outline how this process will vary according to their age and level of understanding.*

How long will you allow potential participants to decide whether or not to take part? What arrangements have been made for people who might not adequately understand verbal explanations or written information given in English, or who have special communication needs?

If you are not obtaining consent, explain why not.

The participant will be asked to read through the PIS (see Appendix IV) before deciding if they will or won't take part in the study. If they do decide to take part in the study the next page of the online questionnaire shall be the consent form. The consent form must be completed before beginning the questionnaire. The PIS will also clearly state that the participant can withdraw from the study at any time and without having to give any reason for doing so. It will also advise the participant not to take part if they believe that the study would cause them distress in any way. The participant will also be made aware that the participant will not be able to withdraw from the study after submitting their questionnaire due to their data being unidentifiable.

13. Will consent be written?

Yes No

*Notes: If **yes**, include a consent form as an appendix. If **no**, describe and justify an alternative procedure (verbal, electronic etc.) in the space below.*

Guidance on how to draft Participant Information sheet and Consent form can be found on PS6001 Moodle space and in the Handbook.

Consent Agreement – Appendix V – will appear online before the questionnaire

14. Describe the information given to participants. Indicate if and why any information on procedures or purpose of the study will be withheld.

Notes: Include an Information Sheet that sets out the purpose of the study and what will be required of the participant as appendices and refer to it as appropriate. If any information is to be withheld, justify this decision. More than one Information Sheet may be necessary.

Please refer to Participant information Sheet for the online questionnaire (See Appendix IV). The information surrounding the procedure and purpose of the study will not be withheld so there will be no deception involved. The PIS will give the participants an overview of the purpose of the study and why they have been selected. It will confirm that their participation is completely voluntary and will explain the procedure that they will be undertaking, whilst also stating the benefits and disadvantages of taking part. It will also state that their data will be anonymous and confidential and will give the details of the Student Researcher and Supervisor for further information and queries. The PIS will also include sources of support and advice if required, and it shall confirm the research study has obtained ethical approval and complies with all legislative requirements.

15. Indicate if any personally identifiable information is to be made available beyond the research team. (e.g.: a report to an organisation)

Notes: If so, indicate to whom and describe how confidentiality and anonymity will be maintained at all stages.

No personally identifiable information will be obtained from the participants during data collection.

16. Describe any payments, expenses or other benefits and inducements offered to participants.

Notes: Give details. If it is monetary say how much, how it will be paid and on what basis is the amount determined. Indicate RPS credits.

The University of Chester Psychology students will receive 2 RPS credits. There will be no incentives given to the other participants.

17. Describe the information about the investigation given to participants at the end of the study.

Notes: Give details of debriefings, ways of alleviating any distress that might be caused by the study and ways of dealing with any clinical problem that may arise relating to the focus of the study.

Please refer to Debrief sheet (See Appendix (VII)) which will be comprised of thanks to the participants, contact information for the student Researcher and Supervisor and support information resources if needed. It will also include a statement asking participants to share the link to invite any colleagues or friends that might be interested. The participants will be advised to keep the debrief sheet for future reference by either screenshotting it or printing it off before exiting the questionnaire.

18. Describe data security arrangements for during and after the study.

Notes: All data whether stored on a computer or hard copy, require compliance with the Data Protection Act; indicate if you have discussed this with your supervisor and describe any special circumstances that have been identified from that discussion. Say who will have access to participants' personal data and for how long personal data will be stored or accessed after the study has ended.

The online data will be kept and accessed on an encrypted password-protected computer and stored on a password protected file on OneDrive. This is compliant with the Data Protection Act. The Student Researcher and Supervisor will be the only people to have access to the data. The participant's data will not have any identifiable information. The raw data will be held in a password-protected file until a final mark for the study is given should it be needed, after which it will be destroyed in line with Data Protection requirements.

STAFF ONLY

19. Open data.

Notes: Please give details regarding data sharing including platforms and access policies.

Click here to enter text.

DECLARATION & SIGNATURES OF THE RESEARCH TEAM

I declare that:

- The research will conform to the above protocol and that I will inform the School of Psychology Ethics Committee of any significant changes or new ethics issues and have these agreed before they are implemented.
- I have read and will adhere to the School of Psychology Ethical Guidance and the University Regulations as identified in the Ethics Handbook.

Notes: The primary applicant and all co-applicants must sign and date the form. Scanned or electronic signatures are acceptable.

Michelle Tytherleigh

28/10/2021

ETHICS COMMITTEE DATE

[Click here to enter a date.](#)

ACCEPTABLE

You may now commence data collection subject to approval from any relevant external agencies.

CHAIRS COMMENTS

Read and review all reviewers comments

PSYCHOLOGY TECHNICAL SUPPORT [Choose an item.](#)

DATA COLLECTION IS NOT PERMISSABLE UNDER THE FOLLOWING 3 CONDITIONS.

Please address the issues indicated.

ACCEPTABLE SUBJECT TO SUBMISSION OF AMENDMENT FORM

UG and PG students should discuss any recommendations with their supervisors.

ACCEPTABLE SUBJECT TO CONDITIONS OF CHAIR

Resubmit application for full review after addressing the issues described, ensuring you have indicated on the front page of the form that this is a resubmission.

REVISE AND RESUBMIT

Resubmit application for full review ensuring you have indicated on the front page of the form that this is a resubmission

SIGNATURE: [Click here to enter text.](#)

APPENDIX II



University of
Chester

**UNIVERSITY OF CHESTER, DEPARTMENT OF
PSYCHOLOGY
APPLICATION FOR ETHICAL APPROVAL AMENDMENT**

A) **DOPEC Identifier:** _____

B) **Applicant and Personnel**

Applicant: MADELEINE CHALKER

Project title: The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD

Applicant status: Staff → Go to Section B PGR Undergraduate

Postgraduate taught

Supervisor: *Michelle Tytherleigh*

C) **Declaration**

1. x I have submitted an application for ethical approval to the Department of Psychology Ethics Committee and I am required to make the following amendments to my application.

List the recommendations of the committee.

- a. Clarity required over relationship to external agency and using company platform to advertise and recruit for study, confirmation of permission from Axia required.

- b. Committee needs to see the final questionnaire.
- c. Refers throughout to attention deficient hyperactivity disorder rather than deficit.
- d. Form is full of track changes and has not been finalized for submission.
- e. I'm concerned that the study aims to recruit those with ADHD but access to such a sample has not been confirmed or approved. This seems to be a crucial part of the research so I am not sure I can review this.
- f. It is not clear how data will be analysed other than it will be done using SPSS. More information is needed here to ensure that the data collected can be analysed in response to the hypothesis.
- g. I am a little confused as to whether the measures stated are the final ones for the study. The method section closes with a statement on permissions required which implies that this has not already been checked – can you clarify this?
- h. The contingency plan is very vague and could be more concrete in terms of actions to taken.
- i. The advert for social media is very long and not really social media friendly – I would suggest a more concise version be constructed.
- j. I would also add some more detail on the purpose of the study – there are some terms here which participants may not be familiar with and hence they will not be able to make an informed decision as to whether to take part.

Describe how you have addressed these requirements, attach any necessary documentation

- a. I have been able to get approval from Axia ASD Ltd. to use their website and social media to recruit participants for my study. A copy of this email can be found in Appendix III in the revised ethics application form.
- b. The questions which will appear in the final questionnaire are as shown in Appendix VI in the revised ethics application form. There are no copyright permissions that need obtaining.
- c. Correct reference to ADHD has been made throughout the original ethics application form and attachments in the appendices. These are shown in red in the revised ethics application form.
- d. The ethics form has now been finalised and all track changes have been removed and spelling mistakes corrected.
- e. As stated in (a), an approval email has now been obtained from Axia – see Appendix III in the revised ethics application.
- f. An updated explanation of how data will be analysed is in the new ethics form. This appears in red text in Section 7a of the revised ethics application form.
- g. Please see response (b) above.
- h. The contingency plan has been updated and made more concrete. This appears in Section 7b of the revised ethics application form
- i. The advert for social media has been shortened to make it more suited for social media platforms – see Appendix II in the revised ethics application form.

- j. The participant information sheet has been updated with a better explanation of the purpose of the study. It will also include a statement about how the results might be used by Axia ASD Ltd – see Appendix III in the revised ethics application form.
2. I have submitted an application for ethical approval to the Department of Psychology Ethics Committee that was approved on 30/11/21
I wish the committee to consider an amendment to data collection dates (please list)
I wish to use the following addition internet sites (please list and include any permissions)
I would like to make to the research plan (please list and attach the original approved application form)
Other

I am a member of staff. **Signed:** _____ **Date:** _____

Print the amendment form on BLUE PAPER and submit to the Dept. Office

I am an UG/PGT/PGR student. I have discussed any amendments with my project supervisor.

Print the amendment form on BLUE PAPER and submit to the Dept. Office

Signed: Madeleine Chalker **(Lead Applicant)** **Date:** 05/01/22.

Supervisor comments:

I have discussed the recommendations of the committee with the applicant and I am satisfied they have met the stated requirements./I support the amendments to the research plan. (delete as appropriate)

X Yes. **Signed:** Michelle Tytherleigh **Date:** 6/1/22

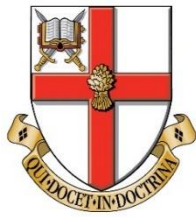
No **Comments:** [Click here to enter text.](#)

Signed: _____ **(Supervisor)** **Date:** _____

Click here to enter a date.

COMMITTEE COMMENTS:

ACCEPTABLE: You may now commence with data collection subject to approval from any relevant external agencies.



University of
Chester

APPENDIX III

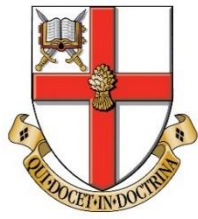
The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD**

INVITATION FOR RECRUITING PARTICIPANTS ON RPS

I would like to invite you to take part in a research study as part of my BSc dissertation project in Psychology. The study involves completing an online questionnaire which will explore wellbeing and self-efficacy in adults with ADHD and those without ADHD. It will also be looking at whether strength's use and strength's knowledge has an impact on these factors. Please note that it is advised not to take part if you believe reflecting on your strengths, wellbeing and self-efficacy will negatively affect you. This questionnaire should take around **20-25 minutes** and all responses will be kept anonymous as no personally identifiable information will be used in the analysis, or presented in the findings.

Before making a decision whether to take part, please carefully read the Participant Information sheet which will be available once you click the link. If you have any questions regarding the study please contact Madeleine Chalker, 1806246@chester.ac.uk. If you choose to participate, you will be asked to provide informed consent before starting the questionnaire. You are free to withdraw from the study at any point without providing a reason; in this circumstance all data you provide will, either, not saved or will be destroyed.

If you are using RPS (for University of Chester Psychology Students), you will receive 2 credits.



University of
Chester

APPENDIX IV

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD**

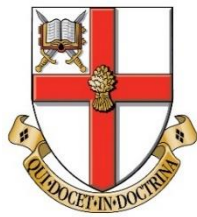
**INVITATION FOR RECRUITING PARTICIPANTS ON SOCIAL MEDIA
(FACEBOOK, INSTAGRAM AND REDDIT)**

Facebook, Instagram and Reddit Post

I would like to invite you to take part in a research study as part of my BSc dissertation project in Psychology. The study involves completing an online questionnaire which will explore wellbeing and self-efficacy in adults with ADHD and those without ADHD. Please note that it is advised not to take part if you believe reflecting on your strengths, wellbeing and self-efficacy will negatively affect you. This online questionnaire should take between 20-25 minutes and will help with my research immensely.

Anyone aged 18 and above is welcome to take part and it would be great if you could share this link with anyone you think might be interested. A big thank you in advance!

<https://chester.onlinesurveys.ac.uk/the-relationship-between-strengths-use-and-strengths-kno>




University of Chester

APPENDIX V

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD**

Approval email from Axia to use their platforms for recruitment

 **Madeleine Chalker** <madeleine.e.chalker@gmail.com>
to Sue ▾ Wed, Oct 13, 2021, 12:09 PM ☆ ↶ ⋮


Hi Sue,

Hope all is great with you.

I am starting my ethics form for my dissertation looking at ADHD strengths and how they impact wellbeing and academic confidence within students; just checking if it is still okay to recruit participants through your facebook group or webpage?

All the best

Maddy

 **Sue Power** <Sue.Power@axia-asd.co.uk>
to me ▾ Thu, Oct 14, 2021, 1:43 PM

Hi Maddy,

All is good here thank you.

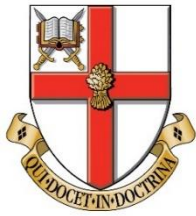
I hope you are well too.

That sounds really interesting and will be absolutely fine as long as ethical approval is granted.

Thanks,

Sue

Yours Sincerely,
Sue Power
Company Secretary and Educational Lead
Axia ASD Ltd - Diagnosis, Training, Support & Consultancy
07308 148189 / 01244 567656



University of
Chester

APPENDIX VI

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD**

PARTICIPANT INFORMATION SHEET (PIS)

You are invited you to take part in a research study as part of my BSc dissertation project in Psychology. The study involves completing an online questionnaire which will explore wellbeing and self-efficacy in adults with ADHD and those without ADHD. It will also be looking at whether strength's use and strength's knowledge has an impact on these factors. Please note that it is advised not to take part if you believe reflecting on your strengths, wellbeing and self-efficacy will negatively affect you.

Before you decide whether to take part, please carefully read the following information about why the research is being conducted and what it will consist of. Please feel free to take your time with deciding and do not hesitate to contact me if you have any questions. Thank you for your consideration.

What is the purpose of the study?

The purpose of this study is to look at the difference between adults with ADHD and those without ADHD. The data obtained will be analysed to look at the relationships between wellbeing and self-efficacy with strength's use and strength's knowledge in both groups, as well as any differences in these between the groups. It will focus on over 18s due to the lack of research around the ADHD adult population.

Why have I been chosen?

You have been chosen to take part in this study as you are 18 or older and you, either, do not have ADHD, or you do have ADHD. If this is not the case, thank you for your interest but you should not participate in this study.

Is it Voluntary?

Yes, this study is completely voluntary. If, after reading this information, you decide to take part in the study, you will be asked to give your online consent before the study begins. You can also withdraw, at any point whilst completing the questionnaire, during the study and with no need for an explanation. This is done by simply exiting the browser, or not clicking 'finish' at the end, and any collected data prior to withdrawal will not be saved. Submitted questionnaires are unidentifiable, however, so you will not be able to withdraw your data after submitting it due to there being no identifiable information.

What will happen if I take part?

If you agree to take part, you will click 'next' at the bottom of this page which will take you to a consent form. After you confirm your consent to participate, you will then be provided with the questionnaire which will take around **20-25 minutes** to complete. However, you can take as much time as needed to complete it. The questions will look at levels of strength's use, strength's knowledge, wellbeing and self-efficacy. There is no correct way to answer these questions and there will be a 'prefer not to answer' option for every question. The questions are not designed to be used as a self-diagnostic tool and all responses will be used for research purposes only. On completion of the questionnaire, you will receive a Debrief Sheet to read this can be printed or screenshot if you would like to keep it for future use.

What are the possible disadvantages of taking part?

There are no anticipated risks connected with the study, although participants will be asked to reflect on their well-being, strengths, and self-efficacy, which some participants might find distressing. It is, therefore, advised that if you will be affected by this that you may prefer not to participate. You are welcome to exit the study and refer to the sources of support provided.

What are the possible advantages of taking part?

Your data will help build on research in this area at how understanding and using your strengths can impact well-being and self-efficacy. It will also help build on the research done around neurodiversity's, such as ADHD, and address a gap in this research on adults with ADHD.

If you are a University of Chester psychology student, you can provide you unique RPS ID Number you will then receive 2 RPS credits for completing this study.

Is my data confidential?

All data collected will be kept anonymous and remain confidential. The first four questions will ask for your age, gender, education status and if you have ADHD or not. However, you will not be asked any personally identifiable information, such as your name. Your data will be stored safely and kept on a password encrypted computer, and safely destroyed after my dissertation has been marked. **The findings of this study will be published and used by Axia who are private company that diagnose neurodiversity's such as ADHD.**

Who may I contact for further information?

Student Researcher: Madeleine Chalker, via 1806246@chester.ac.uk

Supervisor: Dr Michelle Tytherleigh, via m.tytherleigh@chester.ac.uk

Support and helplines:

For students at the University of Chester only:

Student Support <https://portal1.chester.ac.uk/studentsupport/Pages/wellbeing-mentalhealth.aspx>

Email: wellbeing@chester.ac.uk

General helplines for all participants:

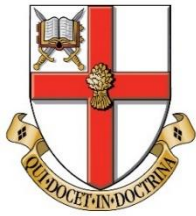
Samaritans <https://www.samaritans.org/how-we-can-help-you>

Please consider taking a screenshot of this information sheet so you are able to return to it at a later date if needed.

This research study complies with current legislative requirements for England and with the commonly agreed international standards for good practice in research. *These are laid down in the Singapore Statement on Research Integrity and are categorised as: Honesty in all aspects of Research; Accountability in the conduct of research; Professional courtesy and fairness in working with others and good stewardship of research on behalf of others. The University of Chester recognises that there may be ethical and cultural differences across jurisdictions. Participants are therefore advised to be aware of any local requirements and to exercise care in their decisions to take part.*

The Department of Psychology Research Ethics Committee has reviewed and approved this study. If you have any complaints, queries, or concerns about any aspect of this research then please contact the department head at the Department of Psychology, University of Chester, Parkgate Road, Chester CH1 4BJ.

The University does not accept liability for harm which does not result from its negligence. In the event that something does go wrong and a participant is harmed during the research and the harm sustained is due to the negligent acts of those undertaking the research, then the participant may have grounds to bring legal action. Anyone bringing such legal action may incur legal costs.



University of
Chester

APPENDIX VII

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD**

CONSENT AGREEMENT – this will appear at start of the questionnaire.

Please tick the boxes below to confirm that you have understood the above Participant Information and agree to participate in the research:

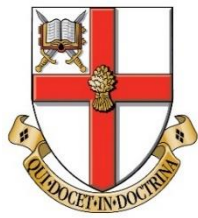
I confirm that I am at least 18 years old.	
I understand my participation is voluntary.	
I understand that once I have completed the survey, all data will be unidentifiable, and therefore it is not possible to withdraw responses.	
I have read the Participant Information and I consent to take part in this study.	

I agree to participate in the research:

I agree	Continue to survey
I do not agree	Exit study*

If you are on RPS, please supply your number for the purpose of assigning credit:

[* clicking this option will take the individual to an exit survey page]



University of
Chester

APPENDIX VIII

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD**

RESEARCH QUESTIONNAIRE

Section A – Demographic Questions

Please tick all relevant information and complete any further tasks in the space provided. All data gathered is anonymous and unidentifiable following submission.

Age (please state)		Prefer not to say
--------------------	--	-------------------

	Female	Male	Other (please state)	Prefer not to say
Preferred gender identity				

	Current University Student	Previous University Student	Other (please state)	Prefer not to say
Education Status				

	ADHD	Self-diagnosed	Currently on pathway for diagnosis	More than one diagnosis (E.g., ASD and ADHD)	Non-ADHD
ADHD Status					

Questions from standardised questionnaires are below, which will be formatted with instructions from the final questionnaire

Section B Strength Knowledge scale (Govindji & Linley 2007)

The following questions ask you about your strengths, that is, the things that you are able to do well or do best

Please tick one box per answer

Question	Strongly Agree	Somewhat Agree	A little Agree	Neither agree nor disagree	A little Disagree	Somewhat Disagree	Strongly Disagree	Prefer not to say
Other people see the strengths that I have								

Attention Deficit Hyperactivity Disorder, Strength's Use, Strength Knowledge, Wellbeing and Self-Efficacy

I have to think hard about what my strengths are								
I know what I do best								
I am aware of my strengths								
I know the things I am good at doing								
I know my strengths well								
I know the things I do best								
I know when I am at my best								

Section C Strength Use Scale (SUS) (Govindji & Linley 2007)

The following questions ask you about your strengths, that is, the things that you are able to do well or do best

Please tick one box per answer

Question	Strongly Agree	Somewhat Agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree	Prefer not to say
	Attention Deficit Hyperactivity Disorder, Strength's Use, Strength Knowledge, Wellbeing and Self-Efficacy							
1. I am regularly able to do what I do best								
I always play to my strengths								
I always try to use my strengths								
I achieve what I want by using my strengths								
I use my strengths everyday								
I use my strengths to get what I want out of life								
My work gives me lots of opportunities to use my strengths								
My life presents me with lots of different ways to use my strengths								

Using my strengths comes naturally to me								
I find it easy to use my strengths in the things I do								
I am able to use my strengths in lots of different situations								
Most of my time is spent doing the things that I am good at doing								
Using my strengths is something I am familiar with								
I am able to use my strengths in lots of different ways								

Section D Psychological Wellbeing Scale (Ryff et al, 2010)

Please tick one box per question

Question	Strongly Agree	Somewhat Agree	A little agree	Neither agree nor disagree	A little disagree	Somewhat disagree	Strongly disagree	Prefer not to say
1. "I like most parts of my personality."								
"When I look at the story of my life, I am pleased with how things have turned out so far."								
3. "Some people wander aimlessly through life, but I am not one of them."								
4. "The demands of everyday life often get me down."								
5. "In many ways I feel disappointed about my achievements in life."								
6. "Maintaining close relationships has been difficult and frustrating for me."								
7. "I live life one day at a time and don't really think about the future."								
8. "In general, I feel I am in charge of the situation in which I live."								
9. "I am good at managing the responsibilities of daily life."								

10. "I sometimes feel as if I've done all there is to do in life."								
11. "For me, life has been a continuous process of learning, changing, and growth."								
12. "I think it is important to have new experiences that challenge how I think about myself and the world."								
13. "People would describe me as a giving person, willing to share my time with others."								
14. "I gave up trying to make big improvements or changes in my life a long time ago"								
15. "I tend to be influenced by people with strong opinions"								
16. "I have not experienced many warm and trusting relationships with others."								
17. "I have confidence in my own opinions, even if they are different from the way most other people think."								
18. "I judge myself by what I think is important, not by the values of what others think is important."								

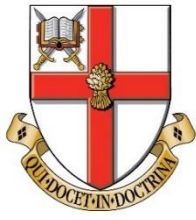
Section E New General Self-Efficacy Scale (Chen et al 2001)

General self-efficacy relates to “one’s estimate of one’s overall ability to perform successfully in a wide variety of achievement situations, or to how confident one is that they can perform effectively across different tasks and situations. Self-esteem relates to the overall affective evaluation of one’s own worth, value, or importance, or to how one feels about oneself as a person.

Please tick one box for each question

Question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Prefer not to say
1. I will be able to achieve most of the goals that I set for myself.						
2. When facing difficult tasks, I am certain that I will accomplish them.						
3. In general, I think that I can obtain outcomes that are important to me.						

<p>4. I believe I can succeed at most any endeavor to which I set my mind.</p>						
<p>5. I will be able to successfully overcome many challenges. 6. I am confident that I can perform effectively on many different tasks.</p>						
<p>7. Compared to other people, I can do most tasks very well.</p>						
<p>8. Even when things are tough, I can perform quite well.</p>						



University of Chester

APPENDIX IX

The relationship between strength's use and strength's knowledge with wellbeing and self-efficacy in individuals with **Attention Deficit Hyperactivity Disorder (ADHD) and without ADHD**

DEBRIEF SHEET

A big thank you for taking your time to participate in this study. Your data is extremely important to my research, and it will help to look at ADHD in adults and the factors that can impact well-being and self-efficacy.

Please print or take a screenshot of this Debrief Sheet if you wish to keep it for further reference.

Contact details

If you would like to find out more about the topic area, or follow up on the results of the study once completed, please contact:

Student Researcher:

Madeleine Chalker: 1806246@chester.ac.uk

Supervisor:

Dr Michelle Tytherleigh: m.tytherleigh@chester.ac.uk

Department of Psychology, University of Chester, Parkgate Road, Chester, CH1 4BJ.

It would be a big help if you could share the link to this study with anyone else who you think will be interested; remember any one aged 18 and above is welcome to take part. [INSERT LINK].

Many thanks in advance.

Support and helplines

If participation in this study has caused you any distress and you would like to seek help and guidance, please contact one of the following:

For students at the University of Chester only:

Student Support <https://portal1.chester.ac.uk/studentsupport/Pages/wellbeing-mentalhealth.aspx>

Email: wellbeing@chester.ac.uk

For others:

Samaritans <https://www.samaritans.org/how-we-can-help-you>

