A R T I C L E

Neurodivergence and well-being: The fulfilment of fundamental psychological needs, work-related stress and life satisfaction

Jan van Rijswijk[1] | Petru Lucian Curşeu[1,2]

[1]Department of Organization, Open Universiteit, Heerlen, The Netherlands

[2]Department of Psychology, Babeş – Bolyai University, Cluj-Napoca, Romania

Correspondence
Petru Lucian Curşeu, Psychology Department, Babeş – Bolyai University, 37 Republicii Street, 400015 Cluj-Napoca, Romania.
Email: petrucurseu@psychology.ro; petru.curseu@ou.nl

Abstract

This paper presents two complementary studies on the impact of neurodivergent conditions such as autism, AD(H)D, dyslexia/dyscalculia and giftedness on well-being. In Study 1, survey data from 2157 participants in a true probabilistic sample of Dutch households show that respondents with autism and ADHD report significantly lower life satisfaction and higher levels of stress and maladjustment than neurotypical peers. Other conditions present more nuanced patterns. Study 2 builds on Self-Determination Theory and uses Large Language Models (LLMs) to analyse 2214 Reddit life stories, evaluating the mediating role of autonomy, competence and relatedness need fulfilment in the relationship between neurodivergence and well-being. Our results indicate that giftedness and dyslexia are positively related to psychological needs satisfaction, whereas other neurodivergent conditions are predominantly negatively associated with needs fulfilment. Indirect association analyses show that, except for ADD, the fulfilment of autonomy, competence and relatedness needs accounts for the association between neurodivergence on the one hand and life satisfaction and stress on the other hand. This study provides initial empirical evidence and contributes novel empirical insights by combining multimethod data sources and LLM-based narrative analysis, advancing our understanding of how different forms of neurodivergence affect well-being.

K E Y W O R D S
autonomy, competence, life satisfaction, neurodiversity, relatedness, self-determination, stress, well-being

BACKGROUND

Neurodivergent employees, such as those with autism, AD(H)D, dyslexia, dyscalculia and giftedness, often face significant barriers at work that can negatively affect their well-being. Research shows that stigma and prejudices from co-workers and supervisors lead to feelings of misunderstanding and isolation among neurodivergent employees (Hedley et al., 2018; Kapp, 2018; Szulc et al., 2021). Unemployment rates among these individuals remain disproportionately high (Bölte et al., 2025; Bury et al., 2024), and even among those who are employed, well-being scores average just 2.02 out of 5 (McDowall et al., 2023). Although recent studies show that neurodivergent people can be a valuable asset to organizations, especially in neurodiverse teams and other forms of collaborative arrangements (van Rijswijk et al., 2024, 2025), the lack of adequate workplace support leads to excessive workload (35% of neurodivergent employees) and exhaustion (45% of neurodivergent employees) (Thompson & Miller, 2024), while around 70% of neurodivergent workers report struggling with mental health challenges (WTW, 2022).

Existing research reports specific mental health challenges associated with individual neurodivergent conditions, such as, for example, autistic burnout or ADHD-related stress (Oscarsson et al., 2022; Tomczak & Kulikowski, 2024). However, these condition-specific findings lack an integrative view that explains how such challenges undermine well-being across work contexts. These markers of psychological maladjustment potentially reflect the deprivation of fundamental autonomy, competence and relatedness needs (Deci & Ryan, 2012). The Self-Determination Theory (SDT) (Deci et al., 2017) offers a powerful lens to examine these mechanisms, as it emphasizes the universal role of these needs in sustaining well-being.

We therefore build on the SDT to expand the research examining well-being aspects, such as stress, life satisfaction and psychological maladjustment, across neurodivergent conditions. Scholarly progress in this area is hindered by the condition-specific, context-limited and methodological challenges of studying such complex relationships in naturalistic work and life settings. Two of the most critical complexities arise from (a) the broad range of neurodivergent conditions as they impact psychological needs differently and (b) the difficulty of collecting representative samples for various neurodivergent conditions. Consequently, the scarce scholarly attempts to examine this area focus exclusively on autism or ADHD, target specific life settings such as work, educational or personal contexts, involve relatively small sample sizes and use predominantly student participants (Goldfarb et al., 2023; Serrano et al., 2023; Thompson-Hodgetts et al., 2023). Taking an integrative approach to neurodiversity may inform effective interventions and workplace policies focusing on the fulfilment of fundamental psychological needs that shape well-being across neurodivergent conditions.

Although neurodivergent conditions differ in the observable traits, recent evidence (Apperly et al., 2024) shows that neurodivergent conditions share common underlying features (e.g. sensory sensitivities, difficulties in executive functions, difficulties in social communication), closeted under the so-called 'N-factor'. We posit that shared cognitive, emotional and social challenges place neurodivergent individuals at heightened risk for the deprivation of their fundamental psychological needs, including autonomy, competence and relatedness. Studies that explore the well-being challenges of neurological conditions without referring to a framework such as SDT also tend to focus on specific life settings (Kapp, 2018; Peasgood et al., 2016), even though the fulfilment of the psychological needs fundamentally transcends these settings (Deci et al., 2017). Although these efforts are valuable, we lack a comprehensive and comparative view of fundamental needs and aspects of well-being across different neurodivergent conditions.

To address this gap, our paper presents two studies in order to answer the overarching research question: *'How do neurodivergent conditions affect aspects of the well-being of working individuals?'* The first study is based on panel data from 2157 respondents with work experience, aiming to explore the differences between neurodivergent and neurotypical individuals regarding life satisfaction, work-related stress and psychological maladjustment. We explore these differences across various neurodivergent conditions in order to take the first step in understanding the association between these conditions and predictors

of an individual's well-being. Building on these results, in our second study, we dive deeper into this association as we examine neurodivergence in relation to the fundamental needs of the SDT by analysing a large set of life stories posted on social media by neurodivergent individuals. We gathered 2214 life stories from individuals worldwide, shared on Reddit, and used two open-source Large Language Models (LLMs), Llama and Qwen, to code these life stories and extract data on need fulfilment as well as life satisfaction and stress that we analysed in relation to neurodivergence.

Our paper uses a multimethod approach that combines the strengths of a large sample from a true probabilistic sample of Dutch households with the strengths of contextually rich narrative analysis using advanced LLMs to report comprehensive empirical evidence concerning the association between different forms of neurodivergence and well-being. In particular, the study is among the first to explore the association with life satisfaction, work-related stress and psychological maladjustment and compare need satisfaction across different neurodivergent conditions as they relate to life satisfaction and stress. Using a pilot study based on a rich dataset with neurodivergent and neurotypical individuals, as well as a study based on a large dataset of life stories and recent LLM technologies, our study provides a comprehensive overview that transcends specific demographic boundaries or life contexts. Our multimethod approach combines quantitative analyses on a representative sample with a rich contextual embedding to explore the mechanisms linking neurodivergence to well-being that are critical for developing supportive workplace policies, reducing mental health risks and informing neuroinclusive managerial practices and policies (van Rijswijk et al., 2025).

STUDY 1

Theory and hypotheses

In recent decades, scholars have increasingly adopted the neurodiversity paradigm that criticized disorder-based views of neurodivergence and viewed neurodivergent conditions as a natural evolutionary variation of human neurocognitive functioning (Singer, 1999). However, despite the growing adoption of a more inclusive perspective, societal structures and work environments are still largely shaped by neurotypical standards and expectations (Bal et al., 2023; Erbil et al., 2024). The Social Model of Disability (Oliver, 1990; Oliver, 2013) explains how these barrier-rich contexts shape the challenges that neurodivergent people experience rather than their intrinsic individual limitations. According to this model, it is essentially the failure of social structures to accommodate cognitive differences that creates a form of disability.

The misalignment between the natural behaviour, abilities and needs of neurodivergent individuals and the expectations broadly shared in their social environments regarding cognitive, behavioural and sensory standards often results in masking behaviours and exhaustion (Pryke-Hobbes et al., 2023; Sedgewick et al., 2021; Weber et al., 2022). Paradoxically, conforming to neurotypical expectations through masking may enhance adaptive daily living, albeit at a high psychological cost, as camouflaging traits positively predict mental health challenges (South et al., 2025). Minority-related, stress-inducing processes that neurodivergent individuals experience, including stigma, anticipated rejection and internalized devaluation, create chronic stress loads and elevated risk of psychological difficulties (Botha & Frost, 2020; Frost & Meyer, 2023; Meyer, 2003). Moreover, there is growing evidence that these stressors are associated with higher rates of anxiety, depression, burnout and broader psychological maladjustment reported by neurodivergent individuals (Uljarević et al., 2020). Research among people with autism suggests that neurodivergent individuals experience a notable decline in life satisfaction when they are subjected to ongoing environmental stress and social marginalization (Griffiths et al., 2019; Mazurek, 2014; Schmidt et al., 2015). Similar results are shown in stress and life satisfaction studies on people with ADHD (Agarwal et al., 2012), DCD (Rathbone & Wilmut, 2025) and dyslexia (Kalka & Lockiewicz, 2018). This fully aligns with the recent study by Apperly et al. (2024), which shows that neurodivergent people share a transdiagnostic 'N-factor' reflecting commonalities across a broad range

of neurocognitive features. Therefore, we expect that stress and social marginalization are also prevalent in other neurodivergent conditions and act as important drivers of lower life satisfaction compared to neurotypical individuals. Consistent with the minority stress processes and the transdiagnostic N-factor, we posit a generic impact of neurodivergence on both life satisfaction and work-related stress, hypothesizing the following:

H1a. Neurodivergent individuals report lower life satisfaction than neurotypicals.

H1b. Neurodivergent individuals report higher levels of work-related stress than neurotypicals.

Recent research has shown the profound psychological consequences of environmental stress and masking behaviours among neurodivergent individuals (Pryke-Hobbes et al., 2023; Sedgewick et al., 2021). Masking behaviours, where neurodivergent individuals suppress or cover up their natural characteristics to align with neurotypical expectations, are a common response to environmental stress (Sedgewick et al., 2021). Sustained exposure to stress erodes psychological resilience and may contribute to psychological maladjustment, especially when individuals feel compelled to engage in masking behaviours and constantly monitor their behaviour to appear neurotypical (Pryke-Hobbes et al., 2023). Individuals who belong to multiple marginalized groups, such as neurodivergent people who are also part of gender or sexual minorities (Kroll et al., 2025), face even greater risks of psychological maladjustment. Together, the psychological toll of social non-acceptance and environmental incompatibility can significantly undermine aspects of well-being in neurodivergent populations, leading us to the following additional hypothesis on psychological maladjustment, we hypothesize as follows:

H1c. Neurodivergent individuals report higher levels of psychological maladjustment than neurotypicals.

Methods

For this study, we make use of data from the LISS (Longitudinal Internet studies for the Social Sciences) panel, which is administered and managed by the independent non-profit research institute Centerdata in the Netherlands, and collected among a representative sample of the Dutch population at the invitation and control of Ipsos I&O and Statistics Netherlands (CBS). Our total sample consists of 2157 people (1115 women with an average age of 47.2 years old) from which 248 received one or more neurodivergent formal diagnoses or test results, and we used two LISS panel data waves collected in November 2024 and February 2025 to extract our variables in order to reduce concerns with common method bias.

Life satisfaction was evaluated with two items: 'Please choose the answer that best describes how you felt during this past month: (1) I felt happy and (2) I felt calm and peaceful' (1 = never to 6 = continuously). Cronbach's alpha for these items was .77, revealing an acceptable reliability of the scale.

Psychological maladjustment was assessed with three items capturing aspects of depression and anxiety: 'Please choose the answer that best describes how you felt during this past month: (1) I felt anxious, (2) I felt so down that nothing could cheer me up, and (3) I felt depressed and gloomy' (1 = never to 6 = continuously). Cronbach's alpha for this scale was .86, indicating good reliability of the scale.

Work-related stress was assessed using a single item: 'When someone experiences stress at work, they feel tense, restless, nervous, or anxious. How much stress have you experienced at work in the past month?' (1 = no stress at all to 5 = lots of stress).

Neurodivergence was assessed by asking participants to reveal whether they were formally diagnosed or tested with one or more of the following conditions: giftedness, autism, ADHD, ADD, DCD, dyslexia or dyscalculia.

Education was assessed as the highest level of education with a diploma and it was used as a control variable.

Results

The means, standard deviations and correlations are presented in Table 1.

In order to preliminarily test our first hypotheses, we used ANCOVA to compare the scores reported by neurodivergent respondents for life satisfaction, stress and psychological maladjustment with those reported by neurotypical respondents. We controlled for age, gender and education and the results show that neurodivergent respondents reported lower life satisfaction ($M = 3.89$, SD = .97) than neurotypical respondents ($M = 4.21$, SD = .92), $F(1,2152) = 20.99$, $p < .001$, $\eta^2 = .01$, observed power was .99. Moreover, neurodivergent respondents also reported higher scores for psychological maladjustment ($M = 2.34$, SD = .95) than neurotypical respondents ($M = 1.93$, SD = .83), $F(1,2152) = 26.96$, $p < .001$, $\eta^2 = .01$, observed power was .99. Finally, neurodivergent respondents also reported higher levels of work-related stress ($M = 2.77$, SD = .99) as compared to neurotypical respondents ($M = 2.45$, SD = .95), $F(1,2152) = 10.33$, $p = .001$, $\eta^2 = .005$, observed power was .89. Given this pattern of results, we can consider that Hypothesis 1 received preliminary support. Even though η^2 values of .01 and .005 are generally viewed as small according to Cohen's (2013) standards, they still indicate noteworthy differences in life satisfaction and stress, as these variables tend to be stable and shaped by multiple factors. Further on, we conducted OLS regression with heteroskedasticity-consistent standard error estimator (Hayes & Cai, 2007) to examine the effects of each neurodivergent condition on life satisfaction, psychological maladjustment and work-related stress. The results are presented in Table 2.

As indicated in Table 2, only the neurodivergent conditions autism, ADHD, ADD and DCD were significantly negatively associated with life satisfaction, suggesting lower levels of life satisfaction from these neurodivergent individuals compared to their neurotypical counterparts. Our results show no significant effects for giftedness, dyslexia and dyscalculia, resulting in only partial support for Hypothesis 1a. Further, our results show that ADHD, ADD, DCD, dyscalculia and autism are positively associated with psychological maladjustment. Giftedness and dyslexia were not significantly associated with psychological maladjustment, nuancing the support for Hypothesis 1b. ADHD and autism were positively related to work-related stress, although the effect of autism was only marginally significant. None of the other neurodivergent conditions were significantly associated with work-related stress, resulting in only partial support for Hypothesis 1c. In sum, our additional analyses for Hypothesis 1 with the neurodivergent conditions entered separately as predictors received full support for ADHD and autism, partial support for ADD, DCD, dyscalculia, yet they showed no significant effects for giftedness and dyslexia. Although the R^2 values are relatively small, accounting for even 7–11% of the variation in well-being is meaningful in practice, since workplace programmes rarely produce effect sizes in that range.

Regarding the control variables, gender has a significant effect, as women reported slightly lower life satisfaction and higher levels of psychological maladjustment and work-related stress than men. Age was positively associated with life satisfaction but negatively with work-related stress and psychological maladjustment, suggesting a slight improvement in well-being with age. Education was only significantly associated with work-related stress, indicating that individuals with higher levels of education tend to experience more stress.

DISCUSSION

Although some effect sizes were small, the results of this pilot study indicate a nuanced picture of the psychological footprint of different neurodivergent conditions, showing that their impact on life

TABLE 1 Means, standard deviations and correlations (Study 1).

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	.51	.50	1											
2. Age	47.20	12.78	−.102**	1										
3. Education	4.50	1.21	.080**	−.230**	1									
4. Giftedness	.02	.14	.014	−.038	.086**	1								
5. Autism	.02	.13	−.046*	−.099**	−.024	.059**	1							
6. ADHD	.03	.18	−.027	−.080**	.003	.067**	.098**	1						
7. ADD	.01	.12	.017	−.090**	.030	.011	.015	.087**	1					
8. DCD	.00	.05	−.001	.001	−.066**	−.008	−.007	−.010	−.006	1				
9. Dyslexia	.04	.20	−.059**	−.118**	.024	.039	.011	.056**	−.004	−.011	1			
10. Dyscalculia	.01	.08	.028	−.065**	−.003	.032	.037	.019	.091**	−.004	.077**	1		
11. Life satisfaction	4.18	.93	−.111**	.106**	−.048**	−.047*	−.075**	−.059**	−.067**	−.057**	−.005	−.073**	1	
12. Psychological maladjustment	1.98	.86	.129**	−.264**	.075**	.050*	.085**	.126**	.088**	.091**	.012	.065**	−.679**	1
13. Stress	2.49	.96	.089**	−.210**	.155**	.055*	.047*	.077**	.040	.028	.031	.035	−.331**	.369**

*p < .05; **p < .01.

TABLE 2 Results of the regression analysis (Study 1).

Variable	Life satisfaction	Psychological maladjustment	Work-related stress
Constant	4.14*** (.13)	2.52*** (.11)	2.54*** (.12)
Gender	**−.19*** (.04)**	**.18*** (.04)**	**.13*** (.04)**
Age	**.005** (.002)**	**−.02*** (.001)**	**−.01*** (.002)**
Education	−.02 (.02)	.01 (.02)	**.09*** (.02)**
Giftedness	−.21 (.17)	.17 (.16)	.23 (.14)
Autism	**−.47** (.17)**	**.37** (.17)**	.27† (.14)
ADHD	−.22* (.12)	**.48*** (.12)**	.29* (.13)
ADD	−.38* (.18)	.37* (.17)	.18 (.16)
DCD	**−1.07** (.28)**	**1.52*** (.36)**	.67 (.48)
Dyslexia	.03 (.10)	−.08 (.09)	.03 (.10)
Dyscalculia	**−.69** (.25)**	**.44** (.16)**	.23 (.24)
N	2157	2157	2351
R^2	.04	.11	.07
F	8.90***	28.05***	15.73***

Note: Unstandardized coefficients with robust standard errors (HC3 estimator) in parentheses are presented in the table; values in bold are deemed significant after adjusting for multiple comparisons using the false discovery rate correction (Benjamini & Hochberg, 1995).
$^†p < .10$;
$*p < .05$; $**p < .01$; $***p < .001$.

satisfaction, psychological maladjustment and work-related stress varies considerably across conditions rather than following the uniform pattern that we hypothesized. Individuals with autism, ADHD, ADD, dyscalculia and DCD report both lower life satisfaction and higher psychological maladjustment compared to neurotypical individuals, suggesting that these neurodivergent conditions may be linked to greater emotional or behavioural challenges. However, contrary to our expectations, only ADHD and autism were associated with increased work-related stress, indicating that stress is not the (only) explanation for forms of neurodivergence that have a negative impact on life satisfaction and psychological maladjustment. The fact that DCD, ADD and dyscalculia were not significantly associated with stress, while these participants report lower life satisfaction and higher psychological maladjustment, may indicate that the challenges faced by these individuals are less related to acute workplace tension and more to broader emotional or behavioural difficulties. Also, we found no significant maladjustment effects for giftedness and dyslexia. These results suggest that giftedness and dyslexia may share commonalities in terms of lived experiences with no major consequences for psychological maladjustment.

In this first study, we based our hypotheses on the key argument that neurodivergent conditions share similar well-being challenges as predicted by the underlying N-factor (Apperly et al., 2024). Our results reveal substantial heterogeneity in life satisfaction, work-related stress and psychological maladjustment across neurodivergent conditions. These results do not challenge the relevance of the N-factor itself; they merely suggest that shared transdiagnostic phenotypic features do not necessarily translate into uniform patterns of well-being outcomes. While the N-factor captures commonalities in underlying cognitive, social or emotional characteristics across various neurodivergent conditions (Apperly et al., 2024), its implications for subjective well-being appear to be more contingent on condition-specific experiences. Our results show that the heterogeneity of lived experiences among neurodivergent individuals shapes their well-being and underscores the importance of exploring the extent to which fulfilled psychological needs may explain differences in life satisfaction and stress among various forms of neurodiversity.

To better understand the mechanisms underlying differences in well-being across neurodivergent conditions and replicate our results, our follow-up study focuses on the satisfaction of basic psychological needs as conceptualized in the SDT. In order to meet the methodological barriers that we described

in the introduction, we use a large number of life stories to examine autonomy, competence and relatedness in relation to stress and life satisfaction. Life stories are autobiographical recollections that shape our sense of well-being and are the building blocks of identity (McAdams, 2001). According to the SDT (Deci et al., 2017), humans universally seek self-actualization by being in charge of their lives, having meaningful relationships and making unique contributions to the world, yet many people struggle at different points to meet these fundamental psychological needs. Because the fulfilment of autonomy, relatedness and competence needs is so fundamental to human existence, they often become central themes of our life stories (Bauer & McAdams, 2000). When these needs are fulfilled or rather chronically deprived, they become key themes in autobiographical narratives. Proclivities of neurodivergent individuals are often associated with the deprivation of relatedness, competence and autonomy needs, leading to diminished well-being compared to their neurotypical peers (Colombo-Dougovito et al., 2021; Najeeb & Quadt, 2024). Social marginalization and the ongoing sense of 'being different' have far-reaching consequences for neurodivergent individuals, fuelling feelings of disempowerment, loneliness and disconnection, often leading to unemployment and burnout (Colombo-Dougovito et al., 2021; Szulc et al., 2021; Tomczak & Kulikowski, 2024). Considering such personal and social struggles, we expect that the life stories of neurodivergent individuals often reflect the deprivation of their fundamental needs and capture their identity struggles and sense-making attempts to give coherence to their existence.

STUDY 2

Theory and hypotheses

SDT is one of the most influential motivational theories that explains the role of need fulfilment for self-actualization and the pursuit of happiness (Deci et al., 2017; Deci & Ryan, 2012). SDT emphasizes three basic psychological needs, namely autonomy, competence and relatedness, that are essential for psychological health and well-being (Deci & Ryan, 2012). Autonomy refers to a state in which individuals are intrinsically motivated and actively involved in different aspects of their lives, experiencing a genuine sense of willingness, self-direction and freedom of choice (Deci et al., 2017). Competence reflects a sense of confidence in the ability to influence one's surroundings and successfully achieve meaningful outcomes (Bauer & McAdams, 2000; Deci et al., 2017). In other words, the satisfaction of competence needs recognizes agency and capacity to positively impact the environment. Relatedness reflects the fundamental need to feel connected with others; to give and receive love, care and support in meaningful relationships (Bauer & McAdams, 2000). Given the centrality of these fundamental needs in personal and work settings (Deci et al., 2017), they often become central narratives in one's life stories (Bauer & McAdams, 2000). Life stories are personal narratives that individuals create about their past and present experiences, helping them to make sense of their lives (McAdams, 2001). Neurodivergent individuals often experience significant challenges to their well-being (Najeeb & Quadt, 2024; Peasgood et al., 2016), but as we showed in our first study, what particular aspect of well-being is affected varies depending on the specific (combination of) neurological conditions. Therefore, in line with our findings in Study 1, we expect that the three basic psychological needs are affected in distinct ways across different neurodivergence conditions.

Gifted individuals, often intrinsically motivated to master their interests, tend to have stronger self-esteem (Hornstra et al., 2020; Litster & Roberts, 2011). This essential component of self-concepts is reflected in their sense of autonomy, as they often exhibit higher levels of creative self-efficacy (Chen & Cheng, 2023). Their ability to set and achieve personal goals further spurs their sense of competence (Phillips & Lindsay, 2006). Especially in work environments that foster self-awareness, supportive leadership and a willingness to compromise, the well-being of individuals can be enhanced as the fulfilment of these two psychological needs can be significantly augmented (van Casteren et al., 2021).

Nevertheless, the heightened sensitivity and asynchronous development of gifted individuals can make it challenging to fulfil their relatedness needs (Hornstra et al., 2020). Therefore, we hypothesize:

> **H2.** Giftedness positively affects autonomy and competence and negatively affects relatedness needs.

For autism, scholars report a broad negative impact on well-being, including difficulty building and maintaining relationships and functioning independently in society and at work (Najeeb & Quadt, 2024; Thompson-Hodgetts et al., 2023). People with autism often feel compelled to mask their authentic selves towards neurotypical peers, negatively affecting their autonomy (Pryke-Hobbes et al., 2023). They frequently encounter difficulties in social interactions, such as miscommunication with colleagues, and experience elevated levels of stress and anxiety that harm their performance (Hendricks, 2010). Consistent with these characteristics, we expect a negative association with all three SDT needs and hypothesize as follows:

> **H3.** Autism negatively affects autonomy, competence and relatedness needs.

ADHD and ADD are characterized by pervasive challenges in executive functioning, such as organizing and prioritizing work and focusing on tasks (Brown, 2005), that lead to experiences of failure and negative feedback in work and social domains, thereby undermining individuals' perceptions of competence (Champ et al., 2023; Morsink et al., 2022). Along with impulsivity and social skill development challenges, these factors may also contribute to difficulties in sustaining long-term social relationships (Su et al., 2025). When individuals significantly struggle with self-regulation, have to cope with suboptimal executive functioning, and lack an autonomy-supportive environment, it can harm their sense of being in control over their lives, as they constantly face failures (Morsink et al., 2022). Therefore, we hypothesize:

> **H4.** ADHD and ADD negatively affect autonomy, competence and relatedness needs.

Dyslexia and dyscalculia are negatively related to the satisfaction of competence needs due to challenges in acquiring and applying literacy and numeracy skills, possibly leading to lower performance and impaired self-efficacy (Goegan et al., 2023; Rahbar Karbasdehi et al., 2019). Scholars also mention other executive functioning-related challenges, such as working memory and spatial awareness (Ademolu, 2024). Because these people often need support for completing tasks that require these skills, while peers can do so independently, this dependence can harm their sense of autonomy. Conversely, although dyslexia and dyscalculia may trigger bullying and other negative interpersonal attitudes (Livingston et al., 2018), they can also foster the development of strong supportive networks. Therefore, we hypothesize the following:

> **H5.** Dyslexia and dyscalculia negatively affect autonomy and competence and positively affect relatedness needs.

One of the key tenets of SDT is that the fulfilment of autonomy, competence and relatedness needs is quintessential to life satisfaction (Deci & Ryan, 2012). Moreover, Ilies et al. (2018) tested a compositional bottom-up approach for predicting life satisfaction, suggesting that the aggregation of fulfilment of various individual factors, such as job satisfaction, financial satisfaction and health satisfaction, determines life satisfaction. In line with this and building on the principles of SDT, we propose that the three psychological needs are integral predictors of overall life satisfaction. Therefore, we argue that the satisfaction of these needs collectively defines life satisfaction and reduces overall stress, leading to our final hypothesis:

H6. The fulfilment of autonomy, competence and relatedness needs explains the association between neurodivergence on the one hand and stress and life satisfaction on the other hand.

Table 3 summarizes the hypothesized relations between neurodivergence and the key SDT needs.

Methods

To collect a large dataset of life stories, we gather data from startposts of different relevant subreddits in which individuals share their neurodivergence-related experiences. We identify relevant subreddits by asking LLM Llama with specific prompts to provide a list (see supplemental material). Data from these subreddits were collected using the research tool Communalytic on 25 and 26 November 2024. The search query used for data collection is as follows:

(neurodiversity OR neurodiverse OR neurominorities OR neuromajorities OR neurodivergent OR neurodivergence OR neuroatypical OR neurotypical OR ADHD OR ADD OR autism OR asperger OR dyslexia OR dyscalculia OR giftedness)

AND

(team OR collaboration OR collaborate OR organisation OR organization OR company OR business OR work OR workplace OR job OR career OR manager OR director OR leader OR leadership OR lead OR supervisor OR onboarding OR HR OR recruitment OR recruiter OR colleague OR training)

After gathering the dataset, we employed the open-source Llama 3.1 70B-Instruct and Qwen 2.5 72B-Instruct LLM models (Touvron et al., 2023; Yang et al., 2024). Python code was developed to connect the data set to these models to extract variables from each life story. For each variable, we developed a prompt based on the prompt engineering process described in Marvin et al. (2024) and the prompt patterns of White et al. (2023). This approach follows the practices for reliable LLM-powered psychology research as described by Demszky et al. (2023) concerning prompt refinement and reliability benchmarks to avoid potential limitations or errors in LLM applicability. All code, prompts and subreddits are provided as supplemental material. Below, we concisely describe the variables and their associated rating scales.

Neurodivergent conditions were assessed using a search query per condition, resulting in 1 if the condition was applicable and 0 otherwise.

Autonomy, competence and relatedness needs were assessed by relying on the same prompt implemented separately in both LLMs, Llama and Qwen. We asked the LLMs to estimate whether the fundamental needs were fully deprived (−2), partially deprived (−1), neutral or cannot be determined (0), partially fulfilled (+1) or fully fulfilled (+2). This coding is aligned with the need fulfilment view of SDT and captures differences as rated by the LLMs. Because the ratings of autonomy, competence, and relatedness

TABLE 3 Overview of the hypothesized relations between neurodivergence and SDT needs (Study 2).

	Autonomy	Competence	Relatedness
Giftedness	Positive	Positive	Negative
Autism	Negative	Negative	Negative
ADHD	Negative	Negative	Negative
ADD	Negative	Negative	Negative
Dyslexia	Negative	Negative	Positive
Dyscalculia	Negative	Negative	Positive

relied on prompts that shared commonalities (need satisfaction), we used two separate ratings derived from Llama and Qwen as distinct indicators of the extent to which the three fundamental needs were fulfilled. Such an approach addresses the concerns with the common method bias, as the two LLMs are trained on different datasets and use different search and rating algorithms; therefore, such an approach allows us to capture the three needs in a more differentiated manner. We ran a Confirmatory Factor Analysis with the two scores for each of the autonomy, competence and relatedness needs, and the three-factor solution has a good fit $\chi^2 = 281.30$, $df = 6$, $p < .001$, CFI = .97, TLI = .92, NFI = .97, RMSEA = .14, SRMR = .02. The fit indices for the single factor solution were poorer $\chi^2 = 905.11$, $df = 9$, $p < .001$, CFI = .89, TLI = .82, NFI = .89, RMSEA = .21, SRMR = .06, showing that the three-factor solution accurately captures the three distinct needs. The omega reliability scores derived from the CFA were .79 for autonomy, .86 for competence and .82 for relatedness, showing good internal consistencies for the three ratings. We, therefore, used the average scores of the LLMs estimates to compute the final autonomy, competence and relatedness fulfilment.

Stress was evaluated by using a prompt that instructed Llama to analyse the level of stress and exhaustion as follows: neutral or cannot be determined (0), mild stress (1), moderate stress (2), high stress (3) or burnout/exhaustion (4). Llama was determined to be the superior LLM for this purpose through a manual comparative expert evaluation (Demszky et al., 2023) based on the first 50 records in the dataset.

Life satisfaction was assessed using a prompt that instructed Llama (selected based on manual expert evaluation) to classify their life satisfaction as either very dissatisfied (−2), dissatisfied (−1), neutral or cannot be determined (0), satisfied (+1) or very satisfied (+2).

Results

The means, standard deviations and correlations are presented in Table 4. A sentiment analysis of 2187 life stories using VADER and TextBlob showed that VADER classified 35.53% as negative, 4.07% neutral and 60.40% positive, while TextBlob classified 12.44% as negative, 26.75% neutral and 60.81% positive. Vader and TextBlob agreed on 58.54% (Cohen's $\kappa = 0.282$, indicating fair agreement). Detoxify's average toxicity score based on 2193 life stories was 0.04816 (non-toxic).

To account for the length of the life stories, we added the standardized word count as a control variable in all analyses. We used OLS regression with heteroskedasticity-consistent standard error estimator (Hayes & Cai, 2007) to predict the autonomy, competence and relatedness fulfilment using the neurodivergence conditions coded as dummy variables as predictors. Regression analyses are presented in Table 5.

As indicated in Table 5, giftedness had overall a positive association with need fulfilment, significant for competence and autonomy. Therefore, Hypothesis 2 received partial support. Autism was negatively and significantly associated with all fundamental needs. Therefore, Hypothesis 3 was fully supported. ADHD was significantly and negatively related to competence, while ADD had no significant relation with need fulfilment, yielding only weak support for Hypothesis 4. Dyscalculia was negatively and significantly associated with the fulfilment of competence needs, while dyslexia was positively and significantly related to the fulfilment of all fundamental needs, a pattern of results opposed to what we hypothesized in Hypothesis 5.

To test the indirect association hypothesis, we used the multiple indicators and multiple mediators procedure implemented in JASP version 0.19.3.0, a procedure that estimates the indirect paths as well as the overall mediation through the fulfilment of the three fundamental needs. Because our data was cross-sectional, we used the framework for associational variable analysis (Weems, 2025) that allowed us to test the extent to which the satisfaction of the fundamental needs has incremental validity in predicting life satisfaction and stress. As indicated in Table 5 (Model 1), the neurodivergent conditions alone explain 15% of the variance in scores for stress and 2% of the variance in scores for life satisfaction. When the three fundamental needs are added as predictors, the model explains 57% of the variance in stress and 72% of the variance in life satisfaction, and most of the effects of neurodivergent conditions

TABLE 4 Means, standard deviations and correlations (Study 2).

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Word count	307.76	283.98	1										
2. ADHD	.58	.49	.094**	1									
3. ADD	.01	.11	−.003	−.029	1								
4. Autism	.38	.49	.033	−.489**	−.005	1							
5. Dyslexia	.07	.25	−.047*	−.190**	.089**	−.125**	1						
6. Dyscalculia	.01	.09	−.030	−.065**	−.010	−.040	.055**	1					
7. Giftedness	.06	.24	.147**	−.083**	−.010	−.056**	−.020	−.003	1				
8. Autonomy	.20	.88	−.009	−.001	.008	−.073**	.053*	−.023	.083**	1			
9. Competence	−.29	1.02	.014	−.072**	−.010	−.048*	.076**	−.049*	.116**	.759**	1		
10. Relatedness	−.07	.74	−.027	.049*	.017	−.145**	.065**	−.001	.020	.646**	.611**	1	
11. Stress	2.51	1.24	.322**	.143**	.001	.050*	−.153**	.020	−.053*	−.574**	−.657**	−.496**	1
12. Personal life satisfaction	−.40	1.32	−.008	−.041	−.013	−.058**	.087**	−.037	.099**	.732**	.822**	.633**	−.637**

*$p < .05$; **$p < .01$.

TABLE 5 Results of the regression analyses (Study 2).

Variable	Autonomy	Competence	Relatedness	Stress		Life satisfaction	
				Model 1	Model 2	Model 1	Model 2
Constant	.25*** (.04)	−.13* (.05)	.03 (.04)	2.29*** (.07)	2.40*** (.05)	−.28*** (.07)	−.44*** (.04)
Word count	−.01 (.02)	.01 (.02)	−.02 (.02)	.39*** (.03)	.39*** (.03)	−.01 (.03)	−.02 (.02)
ADHD	−.04 (.04)	−.21*** (.05)	−.01 (.04)	.33*** (.07)	.20*** (.05)	−.16* (.07)	.02 (.04)
ADD	.03 (.22)	−.17 (.23)	.08 (.17)	.18 (.28)	.11 (.19)	−.26 (.31)	−.17 (.16)
Autism	−.14** (.04)	−.19*** (.05)	−.22*** (.04)	.22*** (.26)	.05 (.04)	−.20** (.07)	.04 (.04)
Dyslexia	.14* (.07)	.21* (.09)	.13* (.06)	−.53*** (.12)	−.35*** (.09)	.37*** (.11)	.14* (.06)
Dyscalculia	−.29 (.20)	−.69** (.20)	−.08 (.13)	.65*** (.20)	.17 (.13)	−.71** (.23)	−.08 (.15)
Giftedness	.29*** (.08)	.42*** (.09)	.04 (.07)	−.43*** (.11)	−.13 (.08)	.50*** (.11)	.09 (.06)
Autonomy					−.16*** (.03)		.25*** (.03)
Competence					−.60*** (.03)		.76*** (.03)
Relatedness					−.13*** (.02)		.20*** (.02)
R²	.02	.03	.02	.15	.57	.02	.72
F	5.74***	11.50***	7.34***	41.64***	256.24***	9.55***	897.26***

Note: Unstandardized coefficients with robust standard errors (HC3 estimator) in parentheses are presented in the table; values in bold are deemed significant after adjusting for multiple comparisons using the False Discovery Rate correction (Benjamini & Hochberg, 1995).

*p < .05; **p < .01; ***p < .001.

TABLE 6 Indirect association of neurodivergence conditions on stress and life satisfaction *via* autonomy, competence and relatedness needs (Study 2).

Dependent variable mediator	Stress						Life satisfaction					
	Autonomy	95%CI	Competence	95%CI	Relatedness	95%CI	Autonomy	95%CI	Competence	95%CI	Relatedness	95%CI
ADHD	.008 (.008)	[−.01; .02]	.13*** (.03)	[.06; .19]	.002 (.007)	[−.01; .02]	.01 (.01)	[−.04; .01]	−.16*** (.04)	[−.24; −.08]	.004 (.01)	[−.02; .01]
ADD	−.005 (.03)	[−.07; .06]	.10 (.12)	[−.13; .33]	−.01 (.03)	[−.07; .04]	.008 (.05)	[−.09; .11]	−.13 (.15)	[−.42; .17]	.02 (.04)	[−.06; .10]
Autism	.03** (.009)	[.01; .04]	.11*** (.03)	[.05; .17]	.04*** (.01)	[.02; .06]	−.04** (.01)	[−.07; −.01]	−.14*** (.04)	[−.22; −.06]	−.06*** (.01)	[−.08; −.04]
Dyslexia	−.03† (.02)	[−.006; .003]	−.13* (.05)	[−.23; −.02]	−.02† (.01)	[−.05; 0]	.04† (.02)	[−.01; .08]	.16* (.07)	[.03; .29]	.04** (.02)	[.001; .07]
Dyscalculia	.05 (.04)	[−.02.13]	.41** (.14)	[.13; .69]	.02 (.03)	[−.05; .08]	.08 (.06)	[−.20; .03]	−.52** (.18)	[−.87; −.17]	.02 (.05)	[−.12; .07]
Giftedness	−.05** (.02)	[−.09; −.02]	−.25*** (.05)	[−.35; −.15]	−.008 (.01)	[−.03; .01]	.08*** (.02)	[.04; .13]	.32*** (.07)	[.18; .45]	.01 (.02)	[−.02; .05]

Note: Unstandardized indirect effects with robust standard errors (HC3 estimator) in parentheses are presented in the table;

†$p < .10$;

*$p < .05$; **$p < .01$; ***$p < .001$.

were found to be not significant. As a final step of the associational variable approach, we estimated the indirect association between the neurodivergence conditions, on the one hand, and stress and life satisfaction, on the other hand. Indirect association paths are presented in Table 6, while the total indirect association of neurodivergence carried out by the overall fulfilment of the three fundamental needs is presented in Table 7. For simplicity, in our interpretation, we will focus on the total indirect associations that offer partial support for Hypothesis 6, as all indirect associations of neurodivergence on stress and life satisfaction are significant, except for ADD.

GENERAL DISCUSSION

Our study goes beyond condition-specific, context-limited and often underpowered studies in neurodiversity research as it examines, using a multimethod approach and large samples, the impact of neurodivergent conditions on life satisfaction and stress through the fulfilment of the three psychological needs (autonomy, relatedness and competence) as described in SDT. The study combines a mixed-method approach that leverages the large sample from a true probabilistic sample of Dutch households and large-scale narrative analysis using advanced LLMs to enhance together the contextual richness and generalizability of the negative association between neurodivergence and well-being. As hypothesized, only giftedness had a positive overall effect on need satisfaction, while other neurodivergent conditions had a predominantly negative effect. This aligns with our findings on giftedness in the first study, where we found no significant negative effects on life satisfaction, psychological maladjustment or work-related stress. While effect sizes are small, one other notable exception in the second study was dyslexia, which stood out from the otherwise predominantly negative pattern in well-being across neurodivergent conditions. Contrary to our expectations, dyslexia positively influenced not only relatedness needs but also autonomy and competence needs. The study of Cross et al. (2024) provides a possible explanation, as they found that individuals with dyslexia are less disability biased compared to non-disabled or physically disabled people, and given their less prejudiced nature, people with dyslexia can be perceived as warmer and socially attractive, leading to the fulfilment of their needs for relatedness and autonomy. Compared to most other neurodivergent conditions in our study, people with dyslexia also report higher life satisfaction and less stress, indicating higher levels of well-being. These findings align with those of our initial study, which also showed no significant adverse effects on work-related stress or life satisfaction. Such results challenge the deficit-based narratives surrounding neurodivergence and show that giftedness and dyslexia are linked to enhanced psychological resources, underscoring the need for a more differentiated and strength-based approach to neurodivergence. Besides these salient patterns for giftedness and dyslexia, our multimethod findings reveal consistent results for autism, ADHD and dyscalculia, which showed negative associations with well-being in both studies. In Study 1, these conditions predicted lower life satisfaction and higher psychological maladjustment, and in Study 2, they were linked to significant deprivation of competence

TABLE 7 Total indirect association estimates of neurodivergence conditions with stress and life satisfaction (Study 2).

	Stress			Life satisfaction		
Variable	Estimate (SE)	$Z\,(p)$	95% CI	Estimate (SE)	$Z\,(p)$	95%CI
ADHD	.14 (.04)	3.14 (.002)	[.05; .22]	−.17 (.06)	−3.01 (.003)	[−.29; −.06]
ADD	.08 (.16)	.49 (.62)	[−.24; .40]	−.10 (.22)	−.43 (.66)	[−.53; .34]
Autism	.17 (.04)	4.05 (<.001)	[.09; .26]	−.24 (.06)	−4.13 (<.001)	[−.35; −.13]
Dyslexia	−.17 (.07)	−2.42 (.02)	[−.32; −.03]	.24 (.10)	2.42 (.02)	[.05; .43]
Dyscalculia	.48 (.19)	2.48 (.01)	[.10; .86]	−.63 (.26)	2.41 (.02)	[−1.14; −.12]
Giftedness	−.31 (.07)	−4.25 (<.001)	[−.45; −.17]	.41 (.10)	4.19 (<.001)	[.22; .60]

needs, with autism additionally showing reduced relatedness and autonomy. These converging results suggest that systemic barriers and unmet psychological needs are central mechanisms undermining well-being for these groups. ADD displayed weaker and inconsistent effects across studies, indicating that its impact may be more context dependent.

Our associational variable analysis shows that the relationship between neurodivergent conditions and both life satisfaction and stress is carried out by the fulfilment of three psychological needs globally, although our results vary between neurodivergent conditions, and some individual indirect paths were not significant. Except for ADD, the fulfilment of the three psychological needs together accounts for the observed association between neurodivergence on the one hand and life satisfaction and stress on the other hand. Given the cross-sectional nature of our data, we follow Weems (2025) and interpret these significant indirect associations as associational and not causal. Our models assume that neurocognitive differences associated with neurodivergence explain need satisfaction and well-being, yet the cross-sectional design limits any causal claims in this respect. Chronic deprivation of autonomy, competence or relatedness needs could motivate individuals to seek a formal diagnosis, yet seeking a formal diagnosis and need deprivation are both endogenous to the neurocognitive differences underlying neurodivergence.

These results are fully in line with the tenets of SDT and show the importance of addressing psychological needs in well-being interventions for neurodivergent individuals, as well as reinforcing the applicability of SDT in research efforts focused on enhancing well-being in the context of neurodiversity. Our results also have implications for workplace and policy design, calling for neuroinclusive strategies that prioritize the fulfilment of fundamental psychological needs that are adapted to the challenges and strengths of various neurodivergent conditions.

PRACTICAL IMPLICATIONS

Our studies show a nuanced picture of the mechanisms that determine well-being across neurodivergent individuals. Neurodivergent people (depending on the exact neurodivergent conditions) experience a combination of lower life satisfaction, higher work-related stress and psychological maladjustment (Study 1), and these experiences seem closely associated with the extent to which their need for autonomy, competence and relatedness is met (Study 2). Our results imply a need for interventions to involve the reduction of psychological barriers and address psychological need fulfilment in organizational settings to support the well-being of neurodivergent individuals. Since organizations often do not know the specific neurodivergent conditions of their employees, and individuals themselves may also be unaware or undiagnosed, we advocate for interventions that go beyond diagnosis-specific approaches. Instead, organizations should focus on reducing psychological barriers for all employees and fostering environments that generally support need fulfilment. This can be achieved by, for instance, offering flexible work arrangements that allow employees to choose how and when they work (autonomy), providing structured guidance, clear feedback and opportunities for skill development (competence), and fostering inclusive team cultures that promote psychological safety and belonging (relatedness). For example, managers can schedule regular one-on-one check-ins to discuss workload and support needs, implement buddy systems to strengthen social connections, and ensure that communication norms accommodate different communication and processing styles. Such practices can have a positive impact on the fulfilment of the three psychological needs that we discussed and thereby help mitigate stress and psychological maladjustment as well as enhance life satisfaction across a neurodiverse workforce, regardless of whether individuals are formally diagnosed.

LIMITATIONS

Our study has methodological limitations that should be considered when interpreting the results. Concerning the first study, the well-being constructs of work-related stress, life satisfaction and

psychological maladjustment are measured with generic scales, limiting the depth and nuances of these evaluated constructs. Regarding our second study, while using life stories from Reddit provides a rich and globally representative data source, it can be sensitive to potential biases related to self-selection. Individuals who choose to share their experiences online may not fully represent the broader neurodivergent population, as they are likely a younger, tech-savvy and English-speaking group than the neurodivergent population in general, and we did not have enough demographic details to control for these variables. In addition, not all posts may contain reliable details on the workplace context, limiting the inferences about workplace well-being outcomes from narrative data that may only loosely reference workplace themes. Moreover, to the best of our knowledge, there is currently no validation of LLM-generated ratings against human-coded benchmarks, and our study did not address this either. We acknowledge this as a limitation and encourage scholars to investigate this in future research. Although we employed two different LLMs to mitigate common method bias, these models, despite their advanced capabilities, may share commonalities in misinterpreting some of the textual nuances. Another limitation concerns the use of different criteria to identify neurodivergent conditions across studies: formal diagnosis in Study 1 and self-identification as presented in the Reddit posts in Study 2. However, prior research indicates that self-identification closely mirrors formally diagnosed neurodivergent conditions in terms of cognitive difference, decision-making styles and psychological outcomes and provides incremental predictive value when included alongside formal diagnoses in multivariate models (van Rijswijk & Curşeu, 2025).

In study 2, standard SDT dimensions were used in the prompts to extract data from posts for assessing autonomy, competence and relatedness, yet we acknowledge that when asked to report on self-rating scales, neurodivergent individuals may interpret these constructs differently due to their unique cognitive and social experiences. Another methodological limitation concerns the interpretations of effect sizes and R^2 values that we provided to enhance practical significance. These interpretations should be considered with caution, as effect sizes in psychological and organizational research on large samples are typically small, yet they can still have meaningful implications for well-being and workplace interventions. In addition, we employed a binary classification of different neurodivergent conditions, which does not capture the inherently dimensional nature of some of these conditions, and we did not model the interplay of multiple neurodivergent conditions (e.g. ADHD and autism) that may influence well-being in more complex ways. Finally, as the life stories are based on a single point in time, they do not capture how the impact of neurodivergence on psychological needs evolves over time.

FURTHER RESEARCH DIRECTIONS

Our findings suggest that enhancing the satisfaction of three psychological needs could support neurodivergent individuals, as it mitigates stress and improves life satisfaction. Future research could explore the underlying mechanisms of these needs, as this is essential for developing effective interventions that promote well-being among these individuals. Additionally, scholars studying well-being in the context of neurodivergent human capital can utilize SDT as a complementary theory to the currently used AMO model (Szulc, 2022; Szulc et al., 2021), aiding in developing neurodiversity-friendly policies and practices for workplaces. Scholars can also use our results as an aid in explaining the duality of positive and negative effects of neurodivergence on work performance, yet while we present some statistically significant differences, several effect sizes are considered small, suggesting that the practical relevance of these differences may be modest. Future research should examine whether these differences translate into meaningful outcomes in applied settings. Therefore, we call for more research that examines the relationship between neurodivergence, well-being and job performance and satisfaction. In this study, we used different operationalizations of neurodivergence across the two studies and future research could integrate condition-specific and transdiagnostic perspectives while jointly modelling formal diagnosis and self-identification to better capture the psychological footprint of neurodivergence.

AUTHOR CONTRIBUTIONS

Jan van Rijswijk: Conceptualization; investigation; writing – original draft; methodology; writing – review and editing; data curation. **Petru Lucian Curşeu:** Conceptualization; investigation; methodology; validation; formal analysis; supervision; software.

CONFLICT OF INTEREST STATEMENT

The authors have no competing interests to declare that are relevant to this article's content.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available in LISS data panel at https://www.lissdata.nl/. These data were derived from the following resources available in the public domain: https://www.lissdata.nl/, https://www.lissdata.nl/.

ORCID

Petru Lucian Curşeu https://orcid.org/0000-0003-0067-6310

REFERENCES

Ademolu, E. (2024). Appreciating dyslexic thinking in qualitative research: Reflections and recommendations for culturally competent, neuro-inclusive academia. *Higher Education*, *90*, 131–156. https://doi.org/10.1007/s10734-024-01314-x

Agarwal, R., Goldenberg, M., Perry, R., & IsHak, W. W. (2012). The quality of life of adults with attention deficit hyperactivity disorder: A systematic review. *Innovation in Clinical Neuroscience*, *9*(5–6), 10–21.

Apperly, I. A., Lee, R., van der Kleij, S. W., & Devine, R. T. (2024). A transdiagnostic approach to neurodiversity in a representative population sample: The N+ 4 model. *JCPP Advances*, *4*(2), e12219. https://doi.org/10.1002/jcv2.12219

Bal, M., Brookes, A., Hack-Polay, D., Kordowicz, M., & Mendy, J. (2023). From hypernormalization of workplace inequality to dehumanization: A way out for human resource management. In M. Bal, A. Brookes, D. Hack-Polay, M. Kordowicz, & J. Mendy (Eds.), *The absurd workplace: How absurdity is normalized in contemporary society and the workplace* (pp. 79–115). Springer International Publishing. https://doi.org/10.1007/978-3-031-17887-0_4

Bauer, J. J., & McAdams, D. P. (2000). Competence, relatedness, and autonomy in life stories. *Psychological Inquiry*, *11*(4), 276–279. https://www.jstor.org/stable/1449620

Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B, Statistical Methodology*, *57*(1), 289–300. https://doi.org/10.1111/j.2517-6161.1995.tb02031.x

Bölte, S., Carpini, J. A., Black, M. H., Toomingas, A., Jansson, F., Marschik, P. B., Girdler, S., & Jonsson, M. (2025). Career guidance and employment issues for neurodivergent individuals: A scoping review and stakeholder consultation. *Human Resource Management*, *64*(1), 201–227. https://doi.org/10.1002/hrm.22259

Botha, M., & Frost, D. M. (2020). Extending the minority stress model to understand mental health problems experienced by the autistic population. *Society and Mental Health*, *10*(1), 20–34. https://doi.org/10.1177/2156869318804297

Brown, T. E. (2005). *Attention deficit disorder: The unfocused mind in children and adults*. Yale University Press.

Bury, S. M., Hedley, D., Uljarević, M., Li, X., Stokes, M. A., & Begeer, S. (2024). Employment profiles of autistic people: An 8-year longitudinal study. *Autism*, *28*(9), 2322–2333. https://doi.org/10.1177/13623613231225798

Champ, R. E., Adamou, M., & Tolchard, B. (2023). Seeking connection, autonomy, and emotional feedback: A self-determination theory of self-regulation in attention-deficit hyperactivity disorder. *Psychological Review*, *130*(3), 569–603. https://doi.org/10.1037/rev0000398

Chen, X., & Cheng, L. (2023). Emotional intelligence and creative self-efficacy among gifted children: Mediating effect of self-esteem and moderating effect of gender. *Journal of Intelligence*, *11*(1), 17. https://doi.org/10.3390/jintelligence11010017

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge. https://doi.org/10.4324/9780203771587

Colombo-Dougovito, A. M., Dillon, S. R., & Mpofu, E. (2021). The wellbeing of people with neurodiverse conditions. In E. Mpofu (Ed.), *Sustainable community health: Systems and practices in diverse settings* (pp. 499–535). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-59687-3_15

Cross, L., Atherton, G., & Nicolson, R. I. (2024). People with dyslexia or dyscalculia are less biased: Results of a preregistered study from over 450,000 people on the implicit association test. *Neurodiversity*, *2*, 1–7. https://doi.org/10.1177/27546330241288164

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, *4*(1), 19–43. https://doi.org/10.1146/annurev-orgpsych-032516-113108

Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In P. A. M. Van Lange, E. T. Higgins, & A. W. Kruglanski (Eds.), *Handbook of theories of social psychology* (Vol. *1*, pp. 416–436). Sage Publications Ltd. https://doi.org/10.4135/9781446249215.n21

Demszky, D., Yang, D., Yeager, D. S., Bryan, C. J., Clapper, M., Chandhok, S., Eichstaedt, J. C., Hecht, C., Jamieson, J., Johnson, M., Jones, M., Krettek-Cobb, D., Lai, L., JonesMitchell, N., Ong, D. C., Dweck, C. S., Gross, J. J., & Pennebaker, J. W. (2023). Using large language models in psychology. *Nature Reviews Psychology*, *2*(11), 688–701. https://doi.org/10.1038/s44159-023-00241-5

Erbil, C., Özbilgin, M. F., & Gündoğdu, N. (2024). Neuronormativity as ignorant design in human resource management: The case of an unsupportive national context. *Human Resource Management Journal*, *35*(2), 454–475. https://doi.org/10.1111/1748-8583.12573

Frost, D. M., & Meyer, I. H. (2023). Minority stress theory: Application, critique, and continued relevance. *Current Opinion in Psychology*, *51*, 101579. https://doi.org/10.1016/j.copsyc.2023.101579

Goegan, L. D., Parker, P. C., & Daniels, L. M. (2023). Connecting basic psychological needs and assessment: Perspectives of postsecondary students with dyslexia. *Journal of Postsecondary Education & Disability*, *36*(3), 241–255. https://files.eric.ed.gov/fulltext/EJ1434999.pdf

Goldfarb, Y., Golan, O., & Gal, E. (2023). A self-determination theory approach to work motivation of autistic adults: A qualitative exploratory study. *Journal of Autism and Developmental Disorders*, *53*(4), 1529–1542. https://doi.org/10.1007/s10803-021-05185-4

Griffiths, S., Allison, C., Kenny, R., Holt, R., Smith, P., & Baron-Cohen, S. (2019). The vulnerability experiences quotient (VEQ): A study of vulnerability, mental health and life satisfaction in autistic adults. *Autism Research*, *12*(10), 1516–1528. https://doi.org/10.1002/aur.2162

Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, *39*(4), 709–722. https://doi.org/10.3758/BF03192961

Hedley, D., Cai, R., Uljarevic, M., Wilmot, M., Spoor, J. R., Richdale, A., & Dissanayake, C. (2018). Transition to work: Perspectives from the autism spectrum. *Autism*, *22*(5), 528–541. https://doi.org/10.1177/1362361316687697

Hendricks, D. (2010). Employment and adults with autism spectrum disorders: Challenges and strategies for success. *Journal of Vocational Rehabilitation*, *32*(2), 125–134. https://doi.org/10.3233/jvr-2010-0502

Hornstra, L., Bakx, A., Mathijssen, S., & Denissen, J. J. A. (2020). Motivating gifted and non-gifted students in regular primary schools: A self-determination perspective. *Learning and Individual Differences*, *80*, 101871. https://doi.org/10.1016/j.lindif.2020.101871

Ilies, R., Yao, J., Curşeu, P. L., & Liang, A. X. (2018). Educated and happy: A four-year study explaining the links between education, job fit, and life satisfaction. *Applied Psychology*, *68*(1), 150–176. https://doi.org/10.1111/apps.12158

Kalka, D., & Lockiewicz, M. (2018). Happiness, life satisfaction, resiliency and social support in students with dyslexia. *International Journal of Disability, Development and Education*, *65*(5), 493–508. https://doi.org/10.1080/1034912X.2017.1411582

Kapp, S. K. (2018). Social support, well-being, and quality of life among individuals on the autism spectrum. *Pediatrics*, *141*(Supplement_4), S362–S368. https://doi.org/10.1542/peds.2016-4300N

Kroll, E., Lederman, M., Kohlmeier, J., Ballard, J., Zant, I., & Fenkel, C. (2025). Examining the mental health symptoms of neurodivergent individuals across demographic and identity factors: A quantitative analysis. *Frontiers in Psychology*, *16*, 1499390. https://doi.org/10.3389/fpsyg.2025.1499390

Litster, K., & Roberts, J. (2011). The self-concepts and perceived competencies of gifted and non-gifted students: A meta-analysis. *Journal of Research in Special Educational Needs*, *11*(2), 130–140. https://doi.org/10.1111/j.1471-3802.2010.01166.x

Livingston, E., Siegel, L., & Ribary, U. (2018). Developmental dyslexia: Emotional impact and consequences. *Australian Journal of Learning Difficulties*, *23*(2), 1. https://doi.org/10.1080/19404158.2018.1479975

Marvin, G., Hellen, N., Jjingo, D., & Nakatumba-Nabende, J. (2024). Prompt engineering in large language models. In *Data Intelligence and Cognitive Informatics* (pp. 387–402). Springer Nature Singapore. https://doi.org/10.1007/978-981-99-7962-2_30

Mazurek, M. O. (2014). Loneliness, friendship, and well-being in adults with autism spectrum disorders. *Autism*, *18*(3), 223–232. https://doi.org/10.1177/1362361312474121

McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology*, *5*(2), 100–122. https://doi.org/10.1037/1089-2680.5.2.100

McDowall, A., Doyle, N., & Kiseleva, M. (2023). Neurodiversity at work 2023: Demand, supply and a gap analysis. https://eprints.bbk.ac.uk/id/eprint/50834/22/50834c.pdf

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Morsink, S., Van der Oord, S., Antrop, I., Danckaerts, M., & Scheres, A. (2022). Studying motivation in ADHD: The role of internal motives and the relevance of self determination theory. *Journal of Attention Disorders*, *26*(8), 1139–1158. https://doi.org/10.1177/10870547211050948

Najeeb, P., & Quadt, L. (2024). Autistic well-being: A scoping review of scientific studies from a neurodiversity-affirmative perspective. *Neurodiversity*, *2*, 1–26. https://doi.org/10.1177/27546330241233088

Oliver, M. (1990). The politics of disablement — New social movements. In M. Oliver (Ed.), *The politics of disablement. Critical texts in social work and the welfare state* (pp. 112–131). he Macmillan Press Ltd. https://doi.org/10.1007/978-1-349-20895-1_8

Oliver, M. (2013). The social model of disability: Thirty years on. *Disability & Society*, *28*(7), 1024–1026. https://doi.org/10.1080/09687599.2013.818773

Oscarsson, M., Nelson, M., Rozental, A., Ginsberg, Y., Carlbring, P., & Jönsson, F. (2022). Stress and work-related mental illness among working adults with ADHD: A qualitative study. *BMC Psychiatry*, *22*(1), 751. https://doi.org/10.1186/s12888-022-04409-w

Peasgood, T., Bhardwaj, A., Biggs, K., Brazier, J. E., Coghill, D., Cooper, C. L., Daley, D., De Silva, C., Harpin, V., Hodgkins, P., Nadkarni, A., Setyawan, J., & Sonuga-Barke, E. J. S. (2016). The impact of ADHD on the health and well-being of ADHD children and their siblings. *European Child & Adolescent Psychiatry*, *25*(11), 1217–1231. https://doi.org/10.1007/s00787-016-0841-6

Phillips, N., & Lindsay, G. (2006). Motivation in gifted students. *High Ability Studies*, *17*(1), 57–73. https://doi.org/10.1080/13598130600947119

Pryke-Hobbes, A., Davies, J., Heasman, B., Livesey, A., Walker, A., Pellicano, E., & Remington, A. (2023). The workplace masking experiences of autistic, non-autistic neurodivergent and neurotypical adults in the UK. *PLoS One*, *18*(9), e0290001. https://doi.org/10.1371/journal.pone.0290001

Rahbar Karbasdehi, E., Abolghasemi, A., & Hossein Khanzadeh, A. A. (2019). The effect of self-regulation empowerment program training on neurocognitive and social skills in students with dyscalculia. *Archives of Psychiatry and Psychotherapy*, *21*(2), 71–80. https://doi.org/10.12740/app/103051

Rathbone, C. J., & Wilmut, K. (2025). "I Am Dyspraxic": Self-concept and wellbeing in adults with developmental coordination disorder. *Advances in Neurodevelopmental Disorders*, *9*, 637–654. https://doi.org/10.1007/s41252-025-00436-2

Schmidt, L., Kirchner, J., Strunz, S., Broźus, J., Ritter, K., Roepke, S., & Dziobek, I. (2015). Psychosocial functioning and life satisfaction in adults with autism spectrum disorder without intellectual impairment. *Journal of Clinical Psychology*, *71*(12), 1259–1268. https://doi.org/10.1002/jclp.22225

Sedgewick, F., Hull, L., & Ellis, H. (2021). *Autism and masking: How and why people do it, and the impact it can have*. Jessica Kingsley Publishers.

Serrano, J. W., Abu-Ramadan, T. M., Vasko, J. M., Leopold, D. R., Canu, W. H., Willcutt, E. G., & Hartung, C. M. (2023). ADHD and psychological need fulfillment in college students. *Journal of Attention Disorders*, *27*(8), 912–924. https://doi.org/10.1177/10870547231161530

Singer, J. (1999). Why can't you be normal for once in your life? From a problem with no name to the emergence of a new category of difference. In M. Corker & S. French (Eds.), *Disability discourse* (pp. 59–70). Open University Press.

South, M., Park, S. Y., & Berman, M. (2025). Mental health as a key mediator for outcomes in postsecondary education, employment, and everyday living in autistic adults. *Autism in Adulthood*, *7*(4), 479–492. https://doi.org/10.1089/aut.2024.0122

Su, W., Jia, H., Yang, L., Zhang, J., Wei, Z., Tsikwa, P., & Wang, Y. (2025). The etiology of attention deficit disorder with hyperactivity: A protocol for an umbrella review. *PLoS One*, *20*(1), e0318141. https://doi.org/10.1371/journal.pone.0318141

Szulc, J. M. (2022). AMO model for neuro-inclusive remote workplace. *Personnel Review*, *51*(8), 1867–1882. https://doi.org/10.1108/PR-02-2022-0085

Szulc, J. M., Davies, J., Tomczak, M. T., & McGregor, F.-L. (2021). AMO perspectives on the well-being of neurodivergent human capital. *Employee Relations: The International Journal*, *43*(4), 858–872. https://doi.org/10.1108/ER-09-2020-0446

Thompson, E., & Miller, J. (2024). Neuroinclusion at work. Survey report. https://www.cipd.org/globalassets/media/knowledge/knowledge-hub/reports/2024-pdfs/2024-neuroinclusion-at-work-report-8545.pdf

Thompson-Hodgetts, S., Ryan, J., Coombs, E., Brown, H. M., Xavier, A., Devlin, C., Lee, A., Kedmy, A., & Borden, A. (2023). Toward understanding and enhancing self-determination: A qualitative exploration with autistic adults without co-occurring intellectual disability. *Frontiers in Psychiatry*, *14*, 1250391. https://doi.org/10.3389/fpsyt.2023.1250391

Tomczak, M. T., & Kulikowski, K. (2024). Toward an understanding of occupational burnout among employees with autism—The job demands-resources theory perspective. *Current Psychology*, *43*(2), 1582–1594. https://doi.org/10.1007/s12144-023-04428-0

Touvron, H., Lavril, T., Izacard, G., Martinet, X., Lachaux, M.-A., Lacroix, T., Rozière, B., Goyal, N., Hambro, E., & Azhar, F. (2023). Llama: Open and efficient foundation language models. *arXiv* Preprint. arXiv:2302.13971. https://doi.org/10.48550/arXiv.2302.13971

Uljarević, M., Hedley, D., Rose-Foley, K., Magiati, I., Cai, R. Y., Dissanayake, C., Richdale, A., & Trollor, J. (2020). Anxiety and depression from adolescence to old age in autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *50*(9), 3155–3165. https://doi.org/10.1007/s10803-019-04084-z

van Casteren, P. A. J., Meerman, J., Brouwers, E. P. M., van Dam, A., & van der Klink, J. J. L. (2021). How can wellbeing at work and sustainable employability of gifted workers be enhanced? A qualitative study from a capability approach perspective. *BMC Public Health*, *21*(1), 392. https://doi.org/10.1186/s12889-021-10413-8

van Rijswijk, J., Curşeu, P. L., & van Oortmerssen, L. A. (2024). Neurodivergence and boundary spanning as predictors of social skills and diversity climate. *Administrative Sciences*, *14*(11), 285. https://doi.org/10.3390/admsci14110285

van Rijswijk, J., Curşeu, P. L., & van Oortmerssen, L. A. (2025). Unlocking neurodiversity: The role of horizontal differentiation and social cognitive integration as antecedents of team performance. *Team Performance Management: An International Journal*, *31*(3/4), 116–132. https://doi.org/10.1108/TPM-09-2024-0097

van Rijswijk, J., & Curşeu, P. L. (2025). Formal versus self-identified neurodivergence: A comparative study in work environments. *Behavioral Sciences*, *15*(4), 420. https://doi.org/10.3390/bs15040420

Weber, C., Krieger, B., Häne, E., Yarker, J., & McDowall, A. (2022). Physical workplace adjustments to support neurodivergent workers: A systematic review. *Applied Psychology*, *73*, 910–962. https://doi.org/10.1111/apps.12431

Weems, C. F. (2025). An alternative framework for nonexperimental cross-sectional mediation studies: Associational variable analysis. *Psychological Methods*. Advance online publication. https://doi.org/10.1037/met0000774

White, J., Fu, Q., Hays, S., Sandborn, M., Olea, C., Gilbert, H., Elnashar, A., Spencer-Smith, J., & Schmidt, D. C. (2023). A prompt pattern catalog to enhance prompt engineering with chatgpt. *arXiv* Preprint. arXiv:2302.11382. https://doi.org/10.48550/arXiv.2302.11382

WTW. (2022). *Almost three quarters of neurodiverse employees suffering with mental health issues*. https://www.wtwco.com/en-gb/news/2022/09/almost-three-quarters-of-neurodiverse-employees-suffering-with-mental-health-issues

Yang, A., Yang, B., Zhang, B., Hui, B., Zheng, B., Yu, B., Li, C., Liu, D., Huang, F., & Wei, H. (2024). Qwen2.5 technical report. *arXiv* Preprint. arXiv:2412.15115. https://doi.org/10.48550/arXiv.2412.15115

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: van Rijswijk, J., & Curşeu, P. L. (2026). Neurodivergence and well-being: The fulfilment of fundamental psychological needs, work-related stress and life satisfaction. *British Journal of Psychology*, *00*, 1–21. https://doi.org/10.1111/bjop.70057