

This author accepted manuscript is deposited under a Creative Commons Attribution Non-commercial 4.0 International (CC BY-NC) licence. This means that anyone may distribute, adapt, and build upon the work for non-commercial purposes, subject to full attribution. If you wish to use this manuscript for commercial purposes, please contact permissions@emerald.com

Postprint of: Szulc J., Davies J., Tomczak M., Mcgregor F., AMO perspectives on the well-being of neurodivergent human capital, *Employee Relations* (2021), pp. 1-21, DOI: [10.1108/ER-09-2020-0446](https://doi.org/10.1108/ER-09-2020-0446)

AMO perspectives on the well-being of neurodivergent human capital.

Journal:	<i>Employee Relations</i>
Manuscript ID	ER-09-2020-0446.R1
Manuscript Type:	Research Paper
Keywords:	AMO Model, HR practices, Human capital, Neurodiversity, Well-being

SCHOLARONE™
Manuscripts

AMO perspectives on the well-being of neurodivergent human capital

Abstract

Purpose Existing management research and management practices frequently overlook the relationship between the above-average human capital of highly functioning neurodivergent employees, their subjective well-being in the workplace and performance outcomes. This paper calls for greater attention to the hidden human capital associated with neurodiversity by mainstreaming implementation of neurodiversity-friendly policies and practices.

Approach - Drawing on the ability, motivation and opportunity (AMO) framework, this conceptual paper integrates research on employee neurodiversity and well-being to provide a model of HR-systems level and human capital development policies, systems and practices for neurodivergent minorities in the workplace.

Findings - This paper illustrates that workplace neurodiversity, like biodiversity, is a natural phenomenon. For subjective individual psychological and organisational well-being, neurodivergent employees require an empathetic culture and innovative talent management approaches that respect cognitive differences.

Practical implications - The case is made for neurodivergent human capital development and policy-makers to promote inclusive employment and decent work in a context of relatively high unemployment for neurodivergent individuals.

Originality - This paper extends current debates on organisational equality, diversity and inclusion to a consideration of workplace well-being for highly functioning neurodivergent workers. It calls for more equitable and empathetic approaches to investing in employees with neurodevelopmental and cognitive disabilities.

Keywords AMO model, HR practices, Human capital, Neurodiversity, Well-being

Paper type Conceptual

Introduction

Are you aware of the superpowers that are shared with Albert Einstein and theoretical physics, to Jennifer Aniston and acting, to Greta Thunberg and environmental activism? The common theme here is they are all neurodivergent. Neurodivergence refers to a natural range of differences in human brain functions in the workplace based on alternative thinking styles, such as **attention deficit hyperactivity disorder (ADHD)**, autism, dyspraxia and dyslexia. Prominent companies are increasingly leveraging the above average abilities of high functioning neurodivergent employees as a source of human capital for competitive advantage (Krzeminska *et al.*, 2019). This is because highly functioning neurodivergent individuals often possess unique abilities akin to human superpowers that are likely to make them excel in professional settings (Austin and Pisano, 2017). However, many organisations still unintentionally exclude or discard neurodivergent talent (Scott *et al.*, 2019) based on innocent assumptions of employee homogeneity (Winterton and Cafferkey, 2019).

Indeed, neurodivergent employees are often barred from work opportunities and experience significant levels of employment exclusion (Knapp *et al.*, 2009). Those who secure employment frequently experience isolation (Hedley *et al.*, 2018), stigmatization (Müller *et al.*, 2003), and stereotyping and biases (Maroto and Pettinicchio, 2015; **Premeaux, 2001**) with negative impact on their well-being and mental health (Mastroianni and Storberg-Walker, 2014) and disappointing employment outcomes (Tomczak, 2020). However, from a strengths-based perspective, the problem does not lie with neurodivergent individuals but with the limited opportunities for engagement and growth (Johnson *et al.*, 2020) and employment practices that fail to acknowledge that the concept of well-being is pluralistic (Hagner and Cooney, 2005; Krzeminska *et al.*, 2019).

By providing a conceptual model **underpinned by a literature review** to explore how the abilities, motivations, and opportunities for neurodivergent individuals can be enhanced in the workplace, the article makes several contributions to existing employee relations literature. First, it takes neurological developments traditionally regarded as atypical and conceptualizes them as normal human variations (Jaarsma and Welin, 2012). By highlighting extraordinary knowledge, skills, and abilities offered by neurodivergent individuals, a nuanced and less obvious consideration of human capital that resides in a specific category of people is presented. Second, the well-established Ability-Motivation-Opportunity (AMO) framework is adopted in an adapted version (Kellner *et al.*, 2019) to enhance our understanding of workplace well-being from the perspective of neurodivergent minorities. Third, this paper explains how perceptions of, and reactions to the same HR practices differ for neurodivergent and

1
2
3 neurotypical employees. In doing so, it addresses the call by Cafferkey *et al.* (2019) to move
4 away from universal HRM as a route to positive employee outcomes and it facilitates a more
5 accurate reflection of organisational reality (see also: Kinnie *et al.*, 2005) for disadvantaged
6 members of society. Finally, while diversity management is a core competency for HR scholars
7 (Bierema, 2010), the areas of study are largely limited to age, gender, and race with little
8 emphasis paid to neurodevelopmental and cognitive disability (Procknow and Rocco, 2016).
9 Our study adds to the existing limited research scrutinizing how neurodivergent human capital
10 could be integrated into organisations and developed for organisational performance and
11 employee satisfaction.

12
13 This paper is structured as follows. First, we discuss the literature review methodology and
14 key debates on human capital and neurodiversity in organisational settings. Second, building
15 on the dynamic AMO model, we investigate the abilities and motivations of neurodivergent
16 individuals and consider what organisational practices can enhance these. Finally, we discuss
17 implications for future research and practice.

18 **Literature review methodology**

19
20 To review the existing literature, we identified human capital, neurodiversity, and well-being
21 studies in three ways. First, we engaged in a manual scan of leading HR and management
22 journals rated two and above in the 2018 CABS Academic Journal Guide, journals in the field
23 of developmental disabilities, professional body literature, and key textbooks. Second, we
24 conducted a comprehensive web-based search of relevant themes (e.g., neurodiversity at work,
25 neurodiversity and well-being) using several electronic databases (e.g., Business Source
26 Premier, Web of Science, Google Scholar) covering the last three decades (1991-2021). Third,
27 we further scanned the references lists from the articles identified through the first two
28 methods. This strategy was aimed at the specific question: how can we support the well-being
29 of neurodivergent human capital in the workplace? The subsequent analysis resulted in a
30 development of a conceptual model of neurodivergent abilities-motivation-opportunities for
31 HRM research. Importantly, we do not intend to be exhaustive with our model, but the
32 constructs we chose illustrate possibilities for neurodiversity research.

33 **Human capital and neurodiversity**

34
35 Human capital generally describes the knowledge, skills, and attitudes that make employees
36 assets to organisations (Beardwell and Thompson, 2017). This paper supports Winterton and
37 Cafferkey's (2019) argument that human capital is preferable to human resources to
38 conceptualise workers. Human resources are exploited for organisational advantage and human
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 capital, which is owned by individual employees, needs to be invested in (Cappelli, 2020) by
4 organisations. This perspective thus advocates creating opportunities for development
5 (Garavan *et al.*, 2001) and emphasises that the way in which human capital is managed is vital
6
7 for organisational success (Davenport and Prusak, 1998).
8
9

10 To manage human capital, it is important to recognise that distinct categories of employees
11 have different needs and require specific HRM practices to contribute to organisational
12 performance (Kinnie *et al.*, 2005). For instance, HR practices may have different effects based
13 on employment modes (Lepak and Snell, 2002), occupational identities (Cafferkey *et al.*,
14 2020), or employee demographic dissimilarity (Jiang *et al.*, 2017). Clearly, existing human
15 capital typologies are not designed to consider neurodevelopmental differences in the
16 workplace. Accommodating the values and specific needs of neurodivergent individuals,
17 however, should be high on organisational agenda since neurodivergent individuals represent
18 in total over 10% of the overall population (CIPD, 2018). This, in turn, poses particular
19 challenges for organisations and HR functions.
20
21
22
23
24
25
26

27 First, hiring processes still tend to define talent too narrowly (Krzeminska *et al.*, 2019) and
28 over-reliance on interviews introduces bias against neurodivergent people who adopt atypical
29 forms of interaction (Patton, 2019). **For instance, research highlighted difficulties with shared**
30 **intentionality (Tomasello *et al.*, 2005) and reciprocating nonverbal cues (García-Pérez *et al.*,**
31 **2007). This, in turn, leads to what has been described by Heasman and Gillespie (2019: 911)**
32 **as ‘mutual misunderstanding’ which can be further intensified in the interview situation. Partly**
33 **as a result of such inappropriate organisational hiring practices, neurodivergent individuals**
34 **become unemployed or underemployed, with estimates as high as 90% for the autistic minority**
35 **group (Lever, 2016). Second major challenge is concerned with how neurodivergent talent**
36 **could be integrated into organisations to overcome potential problems relating to difficulties**
37 **with social interaction, stress control and maintenance of interpersonal relationships (Hedley**
38 ***et al.*, 2018). Such difficulties that neuro-minorities face may be further exacerbated in light of**
39 **the COVID-19 crisis. More specifically, recent changes to working patterns and new modes of**
40 **communication (Davies, 2020) may have a negative impact on job experience (Kelly and**
41 **Senior, 2021) and may be particularly difficult to navigate and manage for individuals who**
42 **experience difficulties with adapting to change (Annabi *et al.*, 2019). In light of these**
43 **challenges, we call to move away from employment perspectives that view diversity as ‘the**
44 **problem’ and instead we suggest that the problem lies in inappropriate management of diversity**
45 **(see also: Härtel and Fujimoto, 2015).**
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Despite calls for more theoretical and empirical research on the inclusion of neurodivergent individuals into employment (Johnson *et al.*, 2020), 90% of HR professionals in the UK reported that they do not consider neurodiversity in their people management practices (CIPD, 2018). Similarly, we know little about the well-being of neurodivergent employees beyond studies that show autistic minority groups suffer disproportionately from under and unemployment (Lever, 2016) as well as social isolation (Hedley *et al.*, 2018) with potentially detrimental effects on their mental health (Mastroianni and Storberg-Walker, 2014). Consistently, this paper highlights the impact of the ways in which human capital is managed in organisations in relation to wider issues of well-being for disadvantaged individuals and employers where there are particular workforce shortages.

A dynamic model of neurodivergent AMO for HRM research

In our consideration of neurodivergent human capital, we adapt the dynamic version of the AMO model introduced by Kellner *et al.* (2019) to understand how varying needs of neurodivergent individuals can be accounted for by tailored HR practices. The model clearly delineates individual-level ability and motivation, and systems-level practices that enhance or inhibit these variables. It also points our attention to opportunities that overlap individual and systems levels. Kellner *et al.* (2019) suggest that all dimensions of the model interact with each other as well as with performance.

The utility of this model in the context of neurodivergent human capital is based on its assumptions that individuals do not blindly conform to HR intentions and the emphasis placed on the role of individual characteristics in meeting organizationally-relevant goals. By elevating the role of individuals and their specific characteristics, the model appears particularly well suited to emphasise the need for diversified HRM systems that are capable of recognizing but also effectively utilising and further developing the specific skills that reside within neurodivergent individuals. In fact, HR practices have been associated with their ability to disrupt the vicious cycle of inequality (Audenaert *et al.*, 2020). Consistently, adapting the dynamic version of the AMO model to the context of neurodivergent employees could help us not only to better utilise employees' skills (Boxall *et al.*, 2019) but to adopt a multi-stakeholder perspective for mutual gains from HR (Troth and Guest, 2020).

Figure 1 illustrates the adapted dynamic model induced from the literature review. It relates to the abilities and motivation of neurodivergent employees at individual and system levels. It further includes opportunities designed to create an inclusive workplace environment

1
2
3 where both neurodivergent but also neurotypical employees can thrive and equally contribute
4 to organisational success.
5

6 ---Insert Figure 1 around here---
7

8 9 *Abilities*

10 Ability is the essence of human capital (Winterton and Cafferkey, 2019). It relates to
11 individuals' skills, the occupation-relevant knowledge contextualised in work processes, as
12 well as effectiveness in social interactions. At an individual level, neurodivergent individuals
13 are described as having cognitive functioning different from what is seen as standard (CIPD,
14 2018). While not all neurodivergent individuals are the same, it is generally accepted that there
15 are common characteristics and behaviours for each group as shown in Table I.
16
17
18
19
20

21 ---Insert Table I around here---
22

23 Analytical thinking and attention to detail by individuals with autism often make them
24 successful in a variety of roles, specifically in the IT industry (Annabi and Locke, 2019). The
25 ability of dyslexic and dyspraxic individuals to think innovatively is useful for individual
26 employees and teams (Doyle, 2020). Individuals with ADHD have become successful
27 entrepreneurs because of their extraordinary ability to multitask and remain calm under
28 pressure (Antshel, 2018).
29
30
31
32
33

34 35 *Recruitment and selection*

36 To realize the above-average abilities of neurodivergent individuals, organisations would have
37 to adjust their recruitment and selection processes to reflect a broader definition of talent.
38 Traditional interviews may constitute a significant challenge for many neurodivergent
39 individuals (Carrero *et al.*, 2019). For instance, difficulties with making eye contact, stress
40 control, or lack of confidence may be challenging in interview situations particularly for
41 individuals with autism (Hagner, 2003). Austin and Pisano (2017) concluded that
42 neurodivergent individuals are likely to earn lower scores in interviews than their less-talented
43 neurotypical counterparts. Hands-on skills assessment over an extended period of time may be
44 preferable (Annabi and Locke, 2019) and project-based assessment with more relaxed
45 interactions should allow for candidates' capabilities to emerge (Hurley-Hanson *et al.*, 2020;
46 Patton, 2019).
47
48
49
50
51
52
53
54
55

56 57 *Training and development*

58 Effective training and development practices not only increase the skills abilities of employees
59 but also help organisations to boost employees' morale (Jiang *et al.*, 2012). In order to combat
60

1
2
3 the difficulties neurodivergent employees face when processing social information,
4 communicating, or adapting to changes (Johnson *et al.*, 2020) organisations may consider
5 developing special training initiatives to support their skills, e.g. on-the-job interpersonal skills
6 training, skills coaches providing individualized support or team buddies who provide
7 assistance with daily tasks and workload management.
8
9
10

11 **Motivation**

12 Motivation relates to an individual's willingness to use their abilities in a productive manner
13 (Purcell *et al.*, 2003). Strategies commonly used for motivating typical employees may not
14 resonate well with their neurodivergent counterparts (Parr *et al.*, 2013). In contrast with typical
15 employees, individuals with autism spectrum disorders may be more motivated by menial and
16 repetitive tasks and will find too much autonomy or skill variety as overwhelming (Doyle,
17 2020) while employees with ADHD are likely to be motivated only if the task is intrinsically
18 interesting (Brown, 2017). Additionally, the prospective workplace challenges that
19 neurodivergent employees face (see Table I) will often perpetuate stigmatizing and
20 discriminatory practices against these individuals (Hurley-Hanson *et al.*, 2020; Silvers, 2011)
21 with a potentially negative effect on their motivation (Whelpley *et al.*, 2020). Interestingly, the
22 challenges associated with communication faced by some neurodivergent employees (Doyle,
23 2020), being less responsive to social and monetary rewards (Scot Van-Zeeland *et al.*, 2010)
24 and placing less emphasis on impression management (Chevallier *et al.*, 2012) often lead to
25 the false perception that neurodivergent employees are disengaged and unmotivated (Patton,
26 2019). In reality, however, neurodivergent individuals may differ in their social and
27 communication skills and often struggle to have their needs met but they do not lack motivation
28 (Morrison *et al.*, 2020: 2-3).
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43

44 *Communication enhancement*

45 Prior research proved the need to facilitate communication between neurodivergent employees
46 and employers for motivational outcomes (Scott *et al.* 2015). Since electronically mediated
47 forms of communicating based on non-direct and non-verbal contact can improve
48 communication processes disturbed by the difficulties in social interaction and social
49 reciprocity (Tomczak, 2020, Tomczak *et al.*, 2020), HR can incorporate the use online
50 communicators, chats, discussion forums and chatbots to their more formal internal
51 communication strategy. Personal digital assistants could be further used as vocational support
52 to reduce personal support needs on the job and improve motivation to perform (see: Gentry *et*
53 *al.*, 2015). Cross-organisational neurodiversity awareness training may also be implemented as
54
55
56
57
58
59
60

1
2
3 there are positive links between disability awareness training and improved communication
4 outcomes (Philips *et al.*, 2016). Such programmes explore, for example, coworker resentment
5 (Jones, 1997), health-focused leadership, creating an inclusive organisational climate and
6 diversity-related HR practices (Boehm and Dwertmann, 2015).
7
8
9

10 *Job design*

11 Although the impact of job design on employee motivation is well established, not much is
12 known on its impact on neurodiverse employees. Initial insights from the extant literature
13 suggest that some neurodivergent employees who experience difficulties with demands of
14 flexibility may benefit from a structured work environment (Scott *et al.*, 2015). It is also
15 suggested that combining consistent and predictable tasks with a job that matches the intrinsic
16 interests of neurodivergent individuals may bring further motivational benefits (Goldfarb *et al.*,
17 2019). Work environment should be also designed in a way that gives neurodivergent
18 individuals feelings of relatedness to maintain motivation. Indeed, caring workplace
19 relationships are known to enhance well-being (Szulc, 2020) and work is portrayed as an
20 opportunity for positive social interaction for neurodivergent employees through day-to-day
21 communication and ad-hoc social events (Hedley *et al.*, 2018), especially in small-group
22 settings (Dreaver *et al.*, 2020). Finally, research emphasised the role of positive reinforcement
23 on the motivation of neurodivergent individuals (Müller *et al.*, 2003). Consistently, clear,
24 regular and constructive feedback is likely to have a positive impact on employee's motivation
25 to complete a task (see also: Dreaver *et al.*, 2020).
26
27
28
29
30
31
32
33
34
35
36
37
38

39 **Opportunities**

40 Neurodivergent individuals frequently face obstacles that prevent them from using their skills
41 effectively (Patton, 2019). A number of opportunities aimed at supporting specific areas where
42 neurodivergent individuals face the greatest difficulties can support effective interpersonal
43 communication, coping with stressful situations, or sensory sensitiveness. These must be
44 ingrained in wider inclusive organisational culture (Shore *et al.*, 2018) based on inclusive
45 leadership (Randel *et al.*, 2018) and perceiving neurodivergent individuals through the prism
46 of their strength and competence as opposed to potential deficits (see also: Annabi and Locke,
47 2019). Such an environment should allow for the utilization of the possibilities created by
48 diversity not only in the context of performance-increasing effects (Roberge and van Dick,
49 2010) but in the context of enhanced well-being of neurodivergent individuals in the first place.
50
51
52
53
54
55
56
57

58 The subsequent sections introduce specific opportunities that could be adopted as
59 potential solutions to the problematic areas identified. They comprise non-technological (e.g.,
60

1
2
3 Johnson *et al.*, 2020, Dreaver *et al.*, 2020, Hayward *et al.*, 2019) as well as technology-based
4 interventions (e.g., Tomczak, 2020, Walsh *et al.*, 2016) used to maintain, increase, and improve
5 the functional capabilities of individuals with disabilities.
6
7

8 9 *Use of technology*

10 Management scholars have started to recognize the opportunities for neurodivergent employees
11 arising from digital technology development (Tomczak, 2020), specifically assistive
12 technology (Tomczak, 2018). For instance, multi-sensor stress measurement tools and
13 dedicated mobile applications can reduce their workplace stress (Tomczak *et al.*, 2020). HR
14 may further consider how digitized technologies can assist them with the development of a
15 remote form of work which gained importance in light of the COVID-19 pandemics. For
16 instance, research suggests that the use of virtual reality within the workplace context provides
17 a predictable and stable environment (Mpofu *et al.*, 2019) which is so much needed for
18 neurodivergent individuals and can serve as a vocational support device.
19
20
21
22
23
24
25

26 27 *Physical work environment*

28 Successful employment for neurodivergent individuals requires modification of the physical
29 work environment to meet the specific needs as a result of sensory sensitiveness (Hayward *et*
30 *al.*, 2019). A network of sensors and controllers dynamically customizing ambient environment
31 parameters such as temperature, humidity, noise, smell, and sunlight exposure can reduce
32 distracting factors negatively affecting work comfort and efficiency (Tomczak, 2020). Office
33 space can be further rearranged according to the needs of neurodivergent employees by
34 providing relaxation areas - chill rooms, avoiding flashy colors, enabling work with
35 headphones. Research demonstrates how such practices could result in increased opportunities
36 to use neurodivergent skills more effectively with associated positive effects on one's
37 subjective well-being (Dreaver *et al.*, 2020; Hedley *et al.*, 2018).
38
39
40
41
42
43
44
45

46 47 *External relations*

48 Since few organisations have expertise in neurodiversity, they could build relations with
49 experts such as government and non-for-profit organisations committed to supporting
50 neurodivergent individuals. Building on a number of case studies of prominent organizations
51 engaged in wider neurodiversity programs, Austin and Pisano (2017) demonstrated how such
52 social partners can assist organisations with local employment regulations, assist with
53 recruitment and selection, delivering training and ongoing support.
54
55
56
57
58
59
60

Discussion

The aim of this paper was to show the increased importance of understanding the well-being of neurodivergent employees from the perspectives of human capital systems to enhance their abilities, motivations and opportunities in the workplace. The model developed in this paper emphasizes the need for talent and diversity management policies to incorporate more nuanced approaches pre-appointment and throughout the employee life cycle. **The insights generated provide several theoretical and practical cues, which we discuss next.**

Theoretical implications

Our first contribution pertains to providing a more nuanced and less obvious consideration of human capital that resides in a specific category of neurodivergent people. While we observe a tendency in research to move away from focusing on privileged workers as organizational assets (Ashley and Empson 2013) to acknowledge the contribution of disabled employees to organizational success (Luu, 2018), little is still known about the value of neurodivergent human capital. We therefore contribute to the emerging strength-based approach to mental disorders (Wiklund *et al.*, 2020) and neurodiversity (Wiklund *et al.*, 2018) where a focus is placed on a person's assets as opposed to weaknesses.

Second, we emphasize the need for examining the strengths of neurodivergent individuals and highlight potential adjustments. Our conceptual framework of interactions between individual and systems factors enables a better theoretical understanding of the conditions under which high performance of neurodivergent individuals could be achieved with associated positive impact on their well-being. We partly answer the calls for existing mainstream HRM research to stop treating employees as an undifferentiated mass (Jiang *et al.*, 2017) and to acknowledge the importance of differentiated HRM practices that capture unique needs of different groups of employees (Cafferkey *et al.*, 2020).

Third, while dominant HRM models focus largely on performance, we elevate the importance of employee well-being (Boxall *et al.*, 2016; Guest, 2017). By providing a more nuanced understanding as to how employers can promote a customised well-being agenda while supporting the abilities and motivations of neurodivergent individuals and facilitating the opportunities for human capital development, we answer Troth and Guest's (2020) calls for multi-stakeholder perspectives to explore the scope for mutual gains from HRM. This, in turn, has several practical implications discussed in the subsequent sections.

Practical implications

The conceptual model presented in this paper can assist HR practitioners in developing a comprehensive approach to skill-, motivation-, and opportunity-enhancing practices tailored at specific needs of neurodivergent individuals to generate mutual gains. We demonstrated that traditionally understood systems-level practices may constitute a significant challenge for individuals (Krzeminska *et al.*, 2019) who vary in terms of their neurocognitive ability in comparison to a typical employee (Doyle, 2020). For instance, we suggested that traditional interviews should be de-emphasised in favour of more inclusive recruitment approaches reflecting a broader definition of talent (for practical examples see: Carrero *et al.*, 2019). Such practices will facilitate realizing the above-average abilities of neurodivergent employees only if they are combined with inclusive work designs and environments embedded in the entire organization (Obeidat *et al.*, 2016). Consistently, we advocated a number of accommodations designed to make a significant difference to the quality of working life of neurodivergent employees and to enable them to reach full potential. Accommodations such as sensory sensitive office space design, transparent work structure or clear communication channels are often cheap and simple to implement but can bring real value for all employees (see: CIPD, 2018) through ensuring high levels of job involvement and fulfilment (Torraco, 2005).

The expectations placed on line managers to be involved in HR practice (Harney and Cafferkey, 2014) point our attention to their important role in the process of carrying out the practices tailored at specific needs of neurodivergent employees. We argue that organizations should explore what it means to be ‘an effective line manager of neurodiversity’ (see: Richards *et al.*, 2019: 1917). By providing necessary resources (such as awareness training), they are likely to enable line managers to act as neurodiversity-confident HRM agents aware of the talents that neurodivergent individuals bring to the business. Since successful mentoring and coaching relationships are commonly positively associated with employee development and performance outcomes (Kim *et al.*, 2013), further support from job coaches, team buddies, and external parties may not only facilitate building on the neurodivergent talent and skills but also to provide a more holistic view on their well-being and mental health.

Organizations could further work with medical and psychology professionals to develop cross-organizational awareness training fostering understanding of neurodiversity among organizational members. Such activities are found to promote relationship building and increase support for neurodivergent employees (Johnson *et al.*, 2020: 141) and to remove the stigma associated with their employment (Hidegh & Csillag, 2013).

Future research directions

Although the topic of neurodiversity is gaining attention among management (Krzeminska, 2019) and HR scholars (Johnson *et al.*, 2020), the work in this area is largely atheoretical. Most research is interested in the effectiveness of particular workplace accommodations (e.g., Scott *et al.*, 2019) but not in the underlying processes of desirable employment outcomes (see: Goldfarb *et al.*, 2019). We, therefore, call for a wider use of theory to promote a more comprehensive understanding of how neurodiversity-friendly accommodations can be administered and how they help to achieve positive outcomes. As Vogus and Taylor (2018) suggest, using validated measures associated with diversity climate, psychological safety and inclusive leadership may be a good starting point. Similarly, extensive theories on work experience such as self-determination theory (Deci & Ryan, 2012) or job characteristics model (Hackman, 1980) can address the style of management most adaptive for neurodivergent employees in terms of autonomy support, or other social variables that promote stability and well-being (Goldfarb *et al.*, 2019).

Beyond understanding the process behind workplace accommodations for neurodivergent employees, there is an urgent need for future research to evaluate the effectiveness of such adjustments. As Doyle (2020) argues, further research in this area would enable us to see what particular adjustments work for different individuals and roles and what impact this may have on organizational performance and employee well-being.

To accurately address the challenges of neurodiversity and an increasingly challenging environment for employability and organisational sustainability (Bailey and Breslin, 2021), collaborative research between neurodiversity and organizational researchers may be particularly useful (Vogus and Taylor, 2018). Such interdisciplinary collaborations can lead to developing integrated and comprehensive solutions to the persistent problems faced by neurodivergent minorities.

References

- Annabi, H. and Locke, J. (2019), "A theoretical framework for investigating the context for creating employment success in information technology for individuals with autism", *Journal of Management & Organization*, Vol. 25 No. 4, pp.499-515.
- Antshel, K.M. (2018), "Attention Deficit/Hyperactivity Disorder (ADHD) and Entrepreneurship", *Academy of Management Perspectives*, Vol. 31 No. 2, pp.243–265.
- Ashley, L. and Empson, L. (2013), "Differentiation and discrimination: understanding social class and social exclusion in leading law firms", *Human Relations*, Vol. 66 No. 2, pp.219-244.
- Audenaert, M., Van der Heijden, B., Conway, N., Crucke, S. and Decramer, A. (2020), "Vulnerable workers' employability competences: the role of establishing clear expectations, developmental inducements, and social organizational goals", *Journal of Business Ethics*, Vol. 166 No. 3, pp.627-641.
- Austin, R. D. and Pisano, G. P. (2017), "Neurodiversity as a competitive advantage", *Harvard Business Review*, Vol. 95 No. 3, pp.96-103.
- Bailey, K. and Breslin, D. (2021), "The COVID-19 pandemic: what can we learn from past research in organizations and management?", *International Journal of Management Reviews*, Vol. 23 No 1, pp.3-6.
- Beardwell, J. and Thompson, A. (2017), *Human Resource Management: A Contemporary Approach*. 8th ed., Harlow: Pearson.
- Bierema, L.L. (2010), "Resisting HRD's resistance to diversity", *Journal of European Industrial Training*, Vol. 34 No. 6, pp.565-576.
- Boehm, S.A., and Dwertmann, D.J.G. (2015), "Forging a singleedged sword: facilitating positive age and disability diversity effects in the workplace through leadership, positive climates, and HR practices", *Work, Aging and Retirement*, Vol. 1 No. 1, pp.41-63.
- Boxall, P., Guthrie, J.P. and Paauwe, J. (2016), "Editorial introduction: progressing our understanding of the mediating variables linking HRM, employee well-being and organisational performance", *Human Resource Management Journal*, Vol. 26 No. 2, pp.103-111.
- Boxall, P., Huo, M.L. and Winterton, J. (2019), "How do workers benefit from skill utilisation and how can these benefits be enhanced?", *Journal of Industrial Relations*, Vol. 61 No. 5, pp.704-725.
- Brown, T. E. (2017), *"Outside the Box: Rethinking ADD/ADHD in Children and Adults: A Practical Guide"*, American Psychiatric Association Publishing, Arlington, VA.
- Cafferkey, K., Dundon, T., Winterton, J. and Townsend, K. (2020), "Different strokes for different folks: Group variation in employee outcomes to human resource management", *Journal of Organizational Effectiveness: People and Performance*, Vol. 7 No. 1, pp.1-19.
- Cafferkey, K., Heffernan, M., Harney, B., Dundon, T. and Townsend, K. (2019), "Perceptions of HRM system strength and affective commitment: the role of human relations and internal process climate", *The International Journal of Human Resource Management*, Vol. 30 No. 21, pp.3026-3048.

- 1
2
3 Cappelli, P. (2020), "Stop overengineering people management", *Harvard Business Review*, Vol. 98 No. 5, pp.55-63.
4
5
6 Carrero, J., Krzeminska, A. and Härtel, C. (2019), "The DXC technology work experience
7 program: Disability-inclusive recruitment and selection in action", *Journal of
8 Management & Organization*, Vol. 25 No. 4, pp.535-542.
9
10 Chevallier, C., Kohls, G., Troiani, V., Brodtkin, E.S. and Schultz, R.T. (2012), "The social
11 motivation theory of autism", *Trends in Cognitive Sciences*, Vol. 16 No. 4, pp.231-239.
12
13 CIPD. (2018), *Neurodiversity at Work*, CIPD, London.
14
15 Davenport, T.H. and Prusak, L. (1998), *Working Knowledge: How Organizations Manage
16 What They Know*, Boston, MA: Harvard Business Press, Boston, MA.
17
18 Davies, J. (2020), "Editorial. Implications for HRD practice and impact in the COVID-19
19 era", *Human Resource Development Review*, Vol. 19 No. 4, pp.335-338.
20
21 Deci, E.L. and Ryan, R.M. (2012), "Self-determination theory", Van Lange, P.A.M.,
22 Kruglanski, A.W. and Higgins, E.T. (Ed.s.), *Handbook of Theories of Social Psychology*,
23 Sage, London, pp.416-436.
24
25 Doyle, N. (2020), "Neurodiversity at work: a biopsychosocial model and the impact on
26 working adults", *British Medical Bulletin*, Vol. 135 No. 1, pp.108-125.
27
28 Dreaver, J., Thompson, C., Girdler, S., Adolfsson, M., Black, M.H. and Falkmer, M.
29 (2020), "Success factors enabling employment for adults on the autism spectrum from
30 employers' perspective", *Journal of Autism Developmental Disorders*, Vol. 50 No. 5,
31 pp.1657-1667.
32
33 Garavan, T.N., Morley, M., Gunnigle, P. and Collins, E. (2001), "Human capital accumulation:
34 The role of human resource development", *Journal of European Industrial Training*, Vol.
35 25 No. 2/3/4, pp.48-68.
36
37 García-Pérez, R.M., Lee, A. and Hobson, R.P. (2007), "On intersubjective engagement in
38 autism: a controlled study of nonverbal aspects of conversation", *Journal of Autism and
39 Developmental Disorders*, Vol. 37 No. 7, pp.1310-1322.
40
41 Gentry, T., Kriner, R., Sima, A., McDonough, J. and Wehman, P. (2015), "Reducing the need
42 for personal supports among workers with autism using an iPod touch as an assistive
43 technology: delayed randomized control trial", *Journal of Autism and Developmental
44 Disorders*, Vol. 45 No. 3, pp.669-684.
45
46 Goldfarb, Y., Gal, E. and Golan, O.A. (2019), "Conflict of interests: a motivational perspective
47 on special interests and employment success of adults with ASD", *Journal of Autism and
48 Developmental Disorders*, Vol. 49 No. 9, pp.3915-3923.
49
50 Guest, D. E. (2017), "Human resource management and employee well-being: towards a new
51 analytic framework", *Human Resource Management Journal*, Vol. 27 No. 1, pp.22-38.
52
53 Hackman, J.R. (1980), "Work redesign and motivation", *Professional Psychology*, Vol. 11 No.
54 3, pp.445-455.
55
56 Hagner, D. (2003), "Job development and job search assistance", Szymanski, E.M., and Parker,
57 R.M. (Ed.s.), *Work and Disability: Issues and Strategies in Career Development and Job
58 Placement.*, 2nd edition, Pro-Ed, Austin, TX, pp.343-372.
59
60

- 1
2
3 Hagner, D. and Cooney, B.F. (2005), "“I do that for everybody”": Supervising employees
4 with Autism", *Focus on Autism and Other Developmental Disabilities*, Vol. 20 No. 2,
5 pp.91-97.
6
7 Härtel, C.E.J. and Fujimoto, Y. (2015), "Diversity is not the problem – openness to perceived
8 dissimilarity is", *Journal of the Australian and New Zealand Academy of*
9 *Management*, Vol. 6 No. 1, pp.14-27.
10
11 Harney, B. and Cafferkey, K. (2014), "The Role of the Line Manager in HRM-Performance
12 Research". In: Machado, C. and Davim, P. (Ed.s) *Work Organization and Human*
13 *Resource Management*. Switzerland: Springer International Publishing, pp.43-53.
14
15 Hayward, S.M., McVilly, K.R., and Stokes, M.A. (2019), "Autism and employment: what
16 works", *Research in Autism Spectrum Disorders*, Vol. 60, pp.48-58.
17
18 Heasman B. and, Gillespie A. (2019), "Neurodivergent intersubjectivity: distinctive features of
19 how autistic people create shared understanding", *Autism*, Vol. 23 No. 4, pp.910-921.
20
21 Hedley, D., Cai, R., Uljarević, M., Wilmot, M., Spoor, J., Richdale, A. and Dissanayake, C.
22 (2018), "Transition to work: perspectives from the autism spectrum", *Autism*, Vol. 22,
23 pp.528-541.
24
25 Hidegh, A.L. and Csillag, S. (2013), "Toward ‘mental accessibility’: changing the mental
26 obstacles that future human resource management practitioners have about the
27 employment of people with disabilities", *Human Resource Development*
28 *International*, Vol. 16 No. 1, pp.22-39.
29
30 Hurley-Hanson A.E., Giannantonio C.M. and, Griffiths A.J. (2020), "The stigma of autism",
31 Hurley-Hanson A.E., Giannantonio C.M. and Griffiths A.J. (Ed.s.), In: *Autism in the*
32 *Workplace. Palgrave Explorations in Workplace Stigma*. Palgrave Macmillan, Cham,
33 pp.21-45.
34
35 Jaarsma, P. and Welin, S. (2012), "Autism as a natural human variation: reflections on the
36 claims of the neurodiversity movement", *Health Care Analysis*, Vol. 20 No. 1, pp.20-30.
37
38 Jiang, K., Hu, J., Liu, S. and Lepak, D.P. (2017), "Understanding employees’ perceptions of
39 human resource practices: effects of demographic dissimilarity to managers and
40 coworkers", *Human Resource Management*, Vol. 56 No. 1, pp.69-91.
41
42 Jiang, K., Lepak, D.P., Hu, J. and Baer, J.C. (2012), "How does human resource management
43 influence organisational outcomes? A meta-analytic investigation of mediating
44 mechanisms", *Academy of Management Journal*, Vol. 55 No. 6, pp.1264-1294.
45
46 Johnson, K.R., Ennis-Cole, D. and Bonhamgregory, M. (2020), "Workplace success strategies
47 for employees with autism spectrum disorder: a new frontier for human resource
48 development", *Human Resource Development Review*, Vol. 19 No. 2, pp.122-151.
49
50 Jones, G.E. (1997), "Advancement opportunity issues for persons with disabilities", *Human*
51 *Resources Management Review*, Vol. 7 No. 1, pp.56-76.
52
53 Kellner, A., Cafferkey, K. and Townsend, K. (2019), "Ability, Motivation and Opportunity
54 theory: a formula for employee performance?", Townsend, K., Cafferkey, K.,
55 McDermott, A.M. and Dundon, T. (Ed.s.), *Elgar Introduction to Theories of Human*
56 *Resources and Employment Relations*, Edward Elgar Publishing, Cheltenham, pp.311-
57 323.
58
59
60

- 1
2
3 Kelly, S. and Senior, A. (2021), "Towards a feminist parental ethics", *Gender Work &*
4 *Organization*.
- 5
6 Kim, S., Egan, T.M., Kim, W. and Kim, J. (2013), "The impact of managerial coaching
7 behavior on employee work-related reactions", *Journal of Business and Psychology*, Vol.
8 28 No. 3, pp.315-330.
- 9
10 Kinnie, N., Hutchinson, S., Purcell, J., Rayton, B. and Swart, J. (2005), "Satisfaction with HR
11 practices and commitment to the organisation: Why one size does not fit all", *Human*
12 *Resource Management Journal*, Vol. 15 No. 4, pp.9-29.
- 13
14 Knapp, M., Romeo, R. and Beecham, J. (2009), "Economic cost of autism in the
15 UK", *Autism*, Vol. 13 No. 3, pp.317-336.
- 16
17 Krzeminska, A., Austin, R., Bruyère, S. and Hedley, D. (2019), "The advantages and
18 challenges of neurodiversity employment in organizations", *Journal of Management &*
19 *Organization*, Vol. 25 No. 4, pp.453-463.
- 20
21 Lever, M. (2016), *The Autism Employment Gap: Too Much Information in the Workplace*, The
22 National Autistic Society, London.
- 23
24 Luu, T.T. (2018), "Engaging employees with disabilities in Vietnamese business context",
25 *Employee Relations*, Vol. 40 No. 5, pp.822-847.
- 26
27 Maroto, M. and Pettinicchio, D. (2015), "Twenty-five years after the ADA: situating disability
28 in America's system of stratification", *Disability Studies Quarterly*, Vol. 35 No. 3, pp.1-
29 34.
- 30
31 Mastroianni, K. and Storberg-Walker, J. (2014), "Do work relationships matter?
32 Characteristics of workplace interactions that enhance or detract from employee
33 perceptions of well-being and health behaviors", *Health Psychology and Behavioral*
34 *Medicine*, Vol. 2 No. 1, pp.798-819.
- 35
36 Mpfungu, E., Tansey, T., Mpfungu, N., Tu, W.M. and, & Li, Q. (2019), "Employment practices
37 with people with autism spectrum disorder in the digital age", Potgieter, I.L., Ferreira, N.,
38 Coetzee, M. (Ed.s), *Theory, Research and Dynamics of Career Wellbeing*, Springer,
39 Cham, pp.309-326.
- 40
41 Müller, E., Schuler, A., Burton, A.B. and Yates, G.B. (2003), "Meeting the vocational support
42 needs of individuals with Asperger syndrome and other autism spectrum
43 disabilities", *Journal of Vocational Rehabilitation*, Vol. 18 No. 3, pp.163-175.
- 44
45 Obeidat, S.M., Mitchell, R. and Bray, M. (2016), "The link between high performance work
46 practices and organizational performance: empirically validating the conceptualization of
47 HPWP according to the AMO model", *Employee Relations*, Vol. 38 No. 4, pp.578-595.
- 48
49 Parr, A.D., Hunter, S.T. and Ligon, G.S. (2013), "Questioning universal applicability of
50 transformational leadership: Examining employees with autism spectrum disorder", *The*
51 *Leadership Quarterly*, Vol. 24 No. 4, pp.608-622.
- 52
53 Patton, E. (2019), "Autism, attributions and accommodations: overcoming barriers and
54 integrating a neurodiverse workforce", *Personnel Review*, Vol. 48 No. 4, pp.915-934.
- 55
56 Philips, B.N., Deiches, J., Morrison, B., Chan, F. and Bezyak, J.L. (2016), "Disability diversity
57 training in the workplace: systematic review and future directions", *Journal of*
58 *Occupational Rehabilitation*, Vol. 26 No. 3, pp.264-275.
- 59
60

- 1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Premeaux, S.F. (2001), "Impact of applicant disability on selection: the role of disability type, physical attractiveness, and proximity", *Journal of Business and Psychology*, Vol. 16 No. 2, pp.291-298.
- Procknow, G. and Rocco, T. (2016), "The unheard, unseen, and often forgotten: an examination of disability in the human resource development literature", *Human Resource Development Review*, Vol. 15 No. 4, pp.379-403.
- Purcell, J., Hutchinson, S., Kinnie, N., Rayton, B. and Swart, J. (2003), *Understanding the People and Performance Link: Unlocking the Black Box*, CIPD Publishing, London.
- Randel, A.E., Galvin, B.M., Shore, L.M., Ehrhart, K.H., Chung, B.G., Dean, M.A. and Kedharnath, U. (2018), "Inclusive leadership: realizing positive outcomes through belongingness and being valued for uniqueness", *Human Resource Management Review*, Vol. 28 No. 2, pp.190-203.
- Richards, J., Sang, K., Marks, A., and Gill, S. (2019), "I've found it extremely draining", *Personnel Review*, Vol. 48 No. 7, pp.1903-1923.
- Roberge, M.-É. and van Dick, R. (2010), "Recognizing the benefits of diversity: when and how does diversity increase group performance?", *Human Resource Management Review*, Vol. 20 No. 4, pp.295-308.
- Scott, M., Falkmer, M., Girdler, S. and Falkmer, T. (2015), "Viewpoints on factors for successful employment for adults with autism spectrum disorder", *PloS one*, Vol. 10 No. 10.
- Scott, M., Milbourn, B., Falkmer, M., Black, M., Bölte, S., Halladay, A., Lerner, M., Taylor, J.L. and Girdler, S. (2019), "Factors impacting employment for people with autism spectrum disorder: a scoping review", *Autism*, Vol. 23 No. 4, pp.869-901.
- Scott-Van Zeeland, A.A., Dapretto, M., Ghahremani, D.G., Poldrack, R.A. and Bookheimer, S.Y. (2010), "Reward processing in autism", *Autism Research*, Vol. 3 No. 2, pp.53-67.
- Shore, L.M., Cleveland, J.N. and Sanchez, D. (2018), "Inclusive workplaces: a review and model", *Human Resource Management Review*, Vol. 28 No. 2, pp.176-189.
- Silvers, A. (2011), "Better than new! Ethics for assistive technologists" Oishi, M., Mitchell, I. and Van der Loos, H. (Ed.s), *Design and Use of Assistive Technology*, Springer, Cham, pp.3-15.
- Szulc, J.M. (2020), "Beyond quid pro quo: good soldiers and characteristics of their helping behaviours", *Personnel Review*.
- Tomasello, M., Carpenter, M., Call, J., Behne, T. and Moll, H. (2005), "Understanding and sharing intentions: The origins of cultural cognition", *Behavioral and Brain Sciences*, Vol. 28 No. 5, pp.675-735.
- Tomczak, M.T. (2020), "Employees with autism spectrum disorders in the digitized work environment: perspectives for the future", *Journal of Disability Policy Studies*.
- Tomczak, M.T., Wójcikowski, M., Pankiewicz, B., Łubiński, J., Majchrowicz, J., Majchrowicz, D., Walasiewicz, A., Kiliński, T. and Szczerska, M. (2020), Stress monitoring system for individuals with autism spectrum disorders. *IEEE Access*, Vol. 8, pp.22823-22834.

- 1
2
3 Tomczak, M.T., Wójcikowski, M., Listewnik, P., Pankiewicz, B., Majchrowicz, D. and
4 Jędrzejewska-Szczerska, M. (2018), "Support for Employees with ASD in the Workplace
5 Using a Bluetooth Skin Resistance Sensor—A Preliminary Study", *Sensors*, Vol. 18 No.
6 10, pp.3530-3544.
7
- 8 Torraco, R.J. (2005), "Work design theory: A review and critique with implications for human
9 resource development", *Human Resource Development Quarterly*, Vol. 16 No. 1, pp.85-
10 109.
11
- 12 Troth, A.C. and Guest, D.E. (2020), "The case for psychology toin human resource
13 management research", *Human Resource Management Journal*, Vol. 30 No. 1, pp.34-48.
14
- 15 Vogus, T.J. and Taylor, J.L. (2018), "Flipping the script: bringing an organizational perspective
16 to the study of autism at work", *Autism*, Vol. 22 No. 5, pp.514-516.
17
- 18 Walsh, E., Holloway, J., McCoy, A. and Lydon, H. (2017), "Technology-Aided Interventions
19 for Employment Skills in Adults with Autism Spectrum Disorder: A Systematic
20 Review", *Review Journal of Autism and Developmental Disorders*, Vol. 4 No. 1, pp.12-
21 25.
22
- 23 Whelpley, C.E., Banks, G.C., Bochantin, J.E. and Sandoval, R. (2020), "Tensions on the
24 spectrum: an inductive investigation of employee and manager experiences of
25 autism", *Journal of Business and Psychology*.
26
- 27 Wiklund, J., Hatak, I., Lerner, D.A., Verheul, I., Thurik, R. and Antshel, K.
28 (2020), "Entrepreneurship, clinical psychology, and mental health: an exciting and
29 promising new field of research", *Academy of Management Perspectives*, Vol. 34,
30 pp.291-295.
31
- 32 Wiklund, J., Hatak, I., Patzelt, H. and Shepherd, D.A. (2018), "Mental disorders in the
33 entrepreneurship context: when being different can be an advantage", *Academy of
34 Management Perspectives*, Vol. 32, No. 2, pp.182-206.
35
- 36 Winterton, J. and Cafferkey, K. (2019), "Revisiting human capital theory: progress and
37 prospects", Townsend, K., Cafferkey, K., McDermott, A.M. and Dundon, T.
38 (Ed.s), *Elgar Introduction to Theories of Human Resources and Employment
39 Relations*. Edward Elgar Publishing, Cheltenham, pp.218-234.
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

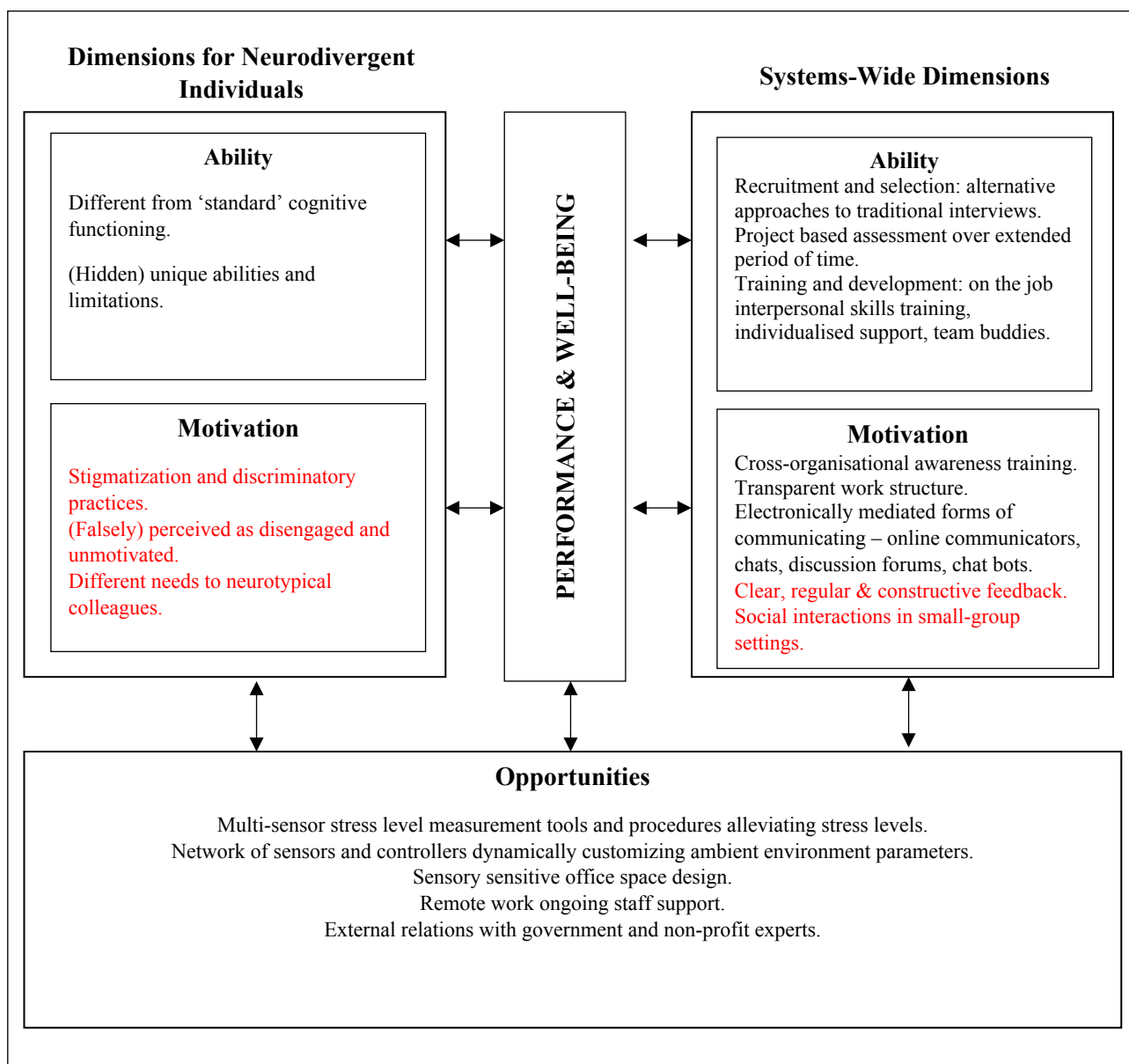


Figure 1. Dynamic model of neurodivergent AMO for HRM research. Adapted from: Kellner *et al.* (2019)

Table I. Neurodivergent individuals' abilities

CONDITION	PROSPECTIVE WORKPLACE CONTRIBUTIONS	PROSPECTIVE WORKPLACE CHALLENGES
ADHD	Creativity, hyper-focus, energy and passion, authenticity, entrepreneurialism	Impulsive temper outbursts, hyperactivity, low frustration threshold, poor listening skills, difficulty with maintaining employment, difficulty with team-work
Autism Spectrum Conditions	Concentration, fine detail processing, memory, honesty, sensory awareness	Over- and under-sensitive to light, noise, touch, temperature, difficulty with speech and language, difficulty with stress control, poor listening skills
DCD/Dyspraxia	Verbal skills, empathy, intuition, honesty	Difficulties with planning, movements, coordination, poor spatial awareness, over- and under-sensitive to light, noise, touch, temperature, difficulty with speech and language, poor listening skills
Dyscalculia	Verbal skills, innovative thinking, creativity	Difficulty with number concepts and calculations, poor listening skills
Dyslexia	Visual thinking, creativity, 3D mechanical skills, authenticity, entrepreneurialism	Difficulty with words: reading, writing, spelling, speaking, listening; preference for non-linear thought, distractibility, poor listening skills
Tourette Syndrome	Observational skills, cognitive control, creativity, hyper-focus, innovative thinking	Verbal and physical tics, poor listening skills

Adapted from: Doyle (2020)