



BIROn - Birkbeck Institutional Research Online

Doyle, Nancy and Bradley, Emily (2022) Disability coaching in a pandemic. Journal of Work-Applied Management , ISSN 2205-2062.

Downloaded from: <https://eprints.bbk.ac.uk/id/eprint/49417/>

Usage Guidelines:

Please refer to usage guidelines at <https://eprints.bbk.ac.uk/policies.html>
contact lib-eprints@bbk.ac.uk.

or alternatively

Disability coaching in a pandemic

Disability
coaching in a
pandemic

Nancy Doyle

*Department of Business, Economics and Informatics, Birkbeck College,
London, UK, and*

Emily Bradley

Department of Psychology, Genius Within CIC, Lewes, UK

Received 22 July 2022
Revised 26 August 2022
Accepted 13 September 2022

Abstract

Purpose – An applied study using convenience data was conducted to compare the experiences of neurodivergent adults undergoing workplace coaching before and during the pandemic.

Design/methodology/approach – The naturally occurring opportunity permitted a comparison of face-to-face and remote coaching in three cohorts, pre-pandemic (100% face-to-face), forced-remote (100% remote) and choice (remote or face-to-face; 85% selected remote). A total of 409 participants self-reported performance before and 12 weeks after completing an average of 11 h coaching.

Findings – Significant differences between before and after scores for performance, with large effect sizes, were reported for all three cohorts across six dependent variables: memory, time management, organisational skills, stress management, understanding neurodiversity and concentration. There was no significant difference between the cohorts in terms of the magnitude of the effect. There were significant differences between the cohorts in terms of which topics were chosen as foci for the coaching, with executive functions related topics becoming less popular in the choice cohort.

Research limitations/implications – The authors abductively reasoned the results to suggest a positive relationship between personalised environments and cognitive demands for this client group. They call for further, theoretically grounded research exploring the role of coaching and environment in understanding the work performance of neurodivergent adults at work.

Originality/value – The study contributes to the emerging knowledge on the different experiences of in-person and video-mediated coaching. The focus on neurodivergent employees, which are heretofore less well researched within the workplace, provides essential data to support practitioners in maximising opportunity for a marginalised group.

Keywords Neurodiversity, Coaching psychology, Disability, Workplace coaching, Diversity and inclusive

Paper type Research paper

Introduction

Coaching is considered a supportive activity for neurodivergent and disabled people, as a process for facilitating self-efficacy (McGonagle *et al.*, 2014), metacognition (McLoughlin and Leather, 2013), well-being (Doyle and McDowall, 2019) and improving performance related to executive functions deficits (Doyle and McDowall, 2019; Parker and Boutelle, 2009). In the UK,

© Nancy Doyle and Emily Bradley. Published in *Journal of Work-Applied Management*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

The authors acknowledge the support of the coaching provider in supplying anonymous data for analysis, which provided indirect funding for the study, and to Professor Almuth McDowall for friendly review and ethical oversight in relation to the potential conflict of interest.

Funding: The authors acknowledge funding support by Genius Within CIC.

Conflict of interest: The authors acknowledge that both of them are employed at least part-time by the coaching provider who submitted data for analysis. However, they have balanced this by anonymising all data and the companies involved, and through ethical oversight from academic colleagues with no connection to the company.



such coaching activities are facilitated and sanctioned by a government department (Access to Work or A2W) established to buffer disabled adults in their careers, widely believed to be successful in preventing unnecessary unemployment for vulnerable people (Gifford, 2011; Melvill *et al.*, 2015).

In this study, we present descriptive and inferential quantitative analysis of a convenience sample of longitudinal coaching data to draw insights on the naturally occurring shift from face-to-face to remote coaching during the pandemic. Prior to the Covid-19 pandemic of 2020, A2W-style coaching was delivered in face-to-face settings, typically in a coachee's work environment. Yet between January and April 2020, UK workers moved from 27.6% to 77.5% working at home always or sometimes (Parry *et al.*, 2022). This sudden pivot created a seismic shift in the delivery of coaching, forcing almost all coachees to a remote setting, via video link, thus providing a rare, naturalistic opportunity to learn more about remote, or video-mediated coaching, which to date has mixed reviews and relies on qualitative feedback (Berry *et al.*, 2011; Deniers, 2019; Garratt *et al.*, 2022; Jones *et al.*, 2018). As per most applied research, the data collected are subject to heterogeneity in context and the personal circumstances of coachees, without stringent controls. Nevertheless, we defend the reportable value of our results in being realistic, quantitative and longitudinal, as opposed to the heretofore mainly cross-sectional, qualitative analysis, thereby adding to the extant literature from which we can build a more comprehensive interpretation to inform further research and practice. After outlining the needs of our specific client group and the potential impacts of the historical context, we present our hypotheses.

Workplace neurodiversity coaching

Neurodivergent people are those belonging to a minority neurotype such as attention deficit hyperactivity disorder (ADHD), autism, dyslexia, dyspraxia and Tourette syndrome (Weinberg and Doyle, 2017). Though historically aetiological theories of neurodiversity are vast and differential (Chapman, 2020; Doyle, 2020; Ihuri and Olvera, 2015; Koi, 2021; Singer, 1998), these naturally occurring neurodevelopmental conditions share deficits in executive functions and a pattern of large disparities between strengths and weaknesses in cognitive abilities (Grant, 2009). The specific pattern (i.e. what are strengths and what are weaknesses) may vary between individuals and conditions, yet there are commonalities in educational and occupational presentation, which lead some contemporary researchers to group them together for analysis and mapping of functional performance (Astle and Fletcher-Watson, 2020; Astle *et al.*, 2019; Siugzdaitė *et al.*, 2020). Practitioner-based reports tend to concur, citing difficulties as those related to time management, organisational skills, memory/concentration, communication and managing well-being (Fung, 2021; LeFevre-vy *et al.*, 2022; Pollack, 2009; Smith and Kirby, 2021); these are topics well known to coaching psychology research (Jones *et al.*, 2016). These applied skills have a direct impact on career success.

When coaching neurodivergent individuals, it is particularly important to use carefully considered language and employ a rational approach to avoid miscommunication or misunderstanding. It is imperative to encourage and facilitate self-development and meta-cognition, to help increase awareness of their own thought processes and learning style using self-directed goal setting and person-centred coaching models that facilitate self-efficacy (Doyle, 2021; Doyle and McDowall, 2019). Neurodivergent people are more vulnerable to social exclusion than their neurotypical counterparts, with disproportionate representation in unemployment (Jensen *et al.*, 2000; Kirby *et al.*, 2011; Lorenz *et al.*, 2016; Palmer and Stern, 2015) and incarceration (CJJI, 2021; Snowling *et al.*, 2000; Young *et al.*, 2018). Previous evaluations of A2W-style coaching (Doyle and McDowall, 2015; Doyle *et al.*, 2022) found significant improvements in self-reports/manager reports of executive functions-related job performance (memory skills, organisational skills, time management) and stress levels. The

present study revisits the same analysis, adding two more dependent variables (understanding my neurodivergent strengths and concentration) comparing the coaching effect between three cohorts: pre pandemic (2019, all face-to-face), forced-remote (2020) and choice (2021, remote/face-to-face choice, but 85% chose remote).

The effects of the pandemic on neurodivergent people

Arguably, the pandemic could have affected clients at multiple levels (Corrie and Kovacs, 2020; Williams and Palmer, 2020), changing the effectiveness of the intervention and the types of problems coaches sought to remedy through coaching. For a neurodivergent cohort, there is a paucity of research involving adults, as most studies have focused on the experience of young people and children during remote education (Hollingdale *et al.*, 2021). There is, however, qualitative evidence that remote working had a deleterious effect on those with time management difficulties (Ando *et al.*, 2021) due to the lack of external referencing cues for time during the pandemic. Cross-sectional research from Oomen *et al.* (2021) found that though stress levels reportedly increased significantly for all, the impact for autistic people was exacerbated due to the lack of social routines. Another cross-sectional survey identified that ADHD and autistic recipients of telehealth during the pandemic found the experience satisfactory, though they stated they would have preferred face-to-face (Adamou *et al.*, 2021). Dyslexia research is mixed, with medical students in one study ($N = 7$) preferring remote working and reporting increased uptake of assistive technology (Shaw *et al.*, 2022); however, a larger survey undertaken by the British Dyslexia Association ($N = 171$; dyspraxic and dyslexic people) indicated an overall negative picture, reporting an increase in written communication resulting in significant additional time burdens (BDA, 2021). In general, remote working is thought to provide a mixed bag for neurodivergent people, reducing sensory overwhelm and permitting personalised accessible environments (where privileged to do so), but exacerbating difficulties in processing non-verbal cues (including written) and maintaining attention (Das *et al.*, 2021).

Remote and pandemic coaching in general

Prior to the pandemic, blended format and remote coaching were found to be more effective for improving well-being for coachees, compared with in-person coaching (Jones *et al.*, 2018). The research team (*ibid*) hypothesised that this was related to the strain of coordinating logistics such as time and location for face-to-face sessions, as well as questioning whether remote access made coaches more responsive between sessions for “quick questions”, which also increases contact time. Both these features are highly relevant to our neurodivergent cohort and therefore point to a potential acceptance of remote coaching. However, there is a dearth of general population evidence regarding the impact of remote coaching on the working alliance between coach and coachee (Henderson and Palmer, 2021), which could arguably become more fraught with a neurodivergent cohort who find social cues and communication more difficult. Research into the cognitive impact of video-based communication during the pandemic found it likely to drain resources (Bailenson, 2021), and the sensory demand of increased, unnatural eye contact and forced stillness (Bohannon *et al.*, 2013) may or may not be offset by increased agency on the part of the coachee to control the environment (Deniers, 2019).

It must be noted, however, that remote coaching under normal circumstances is not the same as remote coaching under pandemic conditions. Corrie and Kovacs (2020) note the crisis focus of pandemic coaching but propose the conceptual framework of “anti-fragility” (Taleb, 2012) as a potential mechanism for effective coaching therein. Anti-fragility is essentially the ability to develop strength and flexibility from negative experiences, something to which neurodivergent people would arguably already have been exposed to and could therefore

develop further during their coaching experience. In summary, remote neurodiversity coaching during a pandemic is likely to be influenced by a range of mechanisms, including the need to build in strategies for well-being and resilience, the changes to social communication norms and the logistical and time burdens of planning the sessions.

Research questions

From the above brief introduction, we note the patchwork of theoretical work on which we could draw to ground an empirical proposal. The novelty of the pandemic and the paucity of adult, work-based neurodiversity studies in general make us rely heavily on existing frameworks within cognitive and coaching psychology to propose hypotheses for our comparisons. Firstly, we expect that the interaction between the cognitive deficits of our cohort and the qualitative reports from the effect of the pandemic will result in an increased focus for executive function support, with a larger percentage of coachees selecting these as foci for the content of sessions during the pandemic compared with before. Secondly, we do not expect the shift from face-to-face to remote during the pandemic to impact on effectiveness. While there is evidence of a potential deleterious effect on in-person rapport building, this should be counterbalanced by the increased logistical ease with which the coaching can be accessed. The hypotheses are therefore as follows:

- H1.* Compared with pre-pandemic, neurodivergent coachees will require significantly more support with executive function-related topics during coaching, namely memory, organisation, time management and concentration as well as stress management. The topic “understanding neurodiverse strengths” will remain the same.
- H2.* The magnitude of improvement for all measures will remain constant when compared between the forced-remote and pre-pandemic conditions.

The study received ethical approval from Birkbeck College, University of London, School of Business, Economics and Informatics.

Method

Participants

The participants in this study were an opportunistic sample of 409 coachees from the UK, with an average age of 41 years old; 61% of them were female and 81% were white. They were all clients of a non-profit company, whose anonymised data were collected from their database. These 409 coachees were selected because they had provided complete pairs of performance self-evaluation ratings before and after coaching. The coachees mainly worked in the service sector, office-based and private sector, civil service-based roles, technology, finance and health. The participants' coaching interventions were either commissioned and paid for by their employers, funded by A2W or paid for privately if they were self-referrals.

Participants in this study had a range of neurodivergent diagnoses which we were not able to acquire individually to use as an independent variable in the analysis, since the company collects these demographic variables separately to coaching evaluations. However, a sample of 1,106 participants from the same company over the same time period shows that the majority of participants were diagnosed with dyslexia (42%), followed by complex cases (27% – defined as two or more presenting conditions, i.e. autism and dyspraxia) and ADHD (21%). See [Table 1](#) for more details. We can reasonably assume a similar breakdown across the sample with evaluation data, indicating relevance to the main neurominorities.

The participants in this study were divided into 3 cohorts based on when they received their coaching intervention. The pre-pandemic cohort received coaching between June 2019

and February 2020, and this coaching was exclusively face-to-face ($n = 113$). The forced-remote cohort received coaching between June 2020 and February 2021 ($n = 196$). The choice cohort received coaching between June 2021 and December 2021 ($n = 100$); the majority (85%) of this cohort chose remote coaching and 15% chose a blend of both face-to-face and remote coaching.

Coaching intervention

Specialist coaches, external to the employer and supplied, trained and supervised by the non-profit, undertook the coaching. The number of coaches involved in the study and their exact qualifications were not available; however, the company has over 100 coaches registered, who are qualified in professional workplace coaching, and/or psychology to graduate level or above. Specialist knowledge concerning the impact of neurodivergence in the workplace was provided by the social enterprise. On average, 60% of the coaches associated with the non-profit also have lived experience of neurodivergence and/or disability. Remote coaching took place online via a video-calling platform such as Zoom, Microsoft Teams or Skype. Face-to-face coaching took place in person at a location of the coachee and coach's choosing. This is predominantly a quiet space in the employee's workspace, and very occasionally a serviced office. If there is a need to support coachees in their home (for example, if they are self-employed and have difficulty travelling), a safeguarding protocol is applied. The coaching protocol was based on a comprehensive psychology pedagogy, using frameworks such as clean language interviewing (Lawley and Linder-Pelz, 2016), strengths and solution focus (McDowall and Butterworth, 2014) and feedforward (McDowall *et al.*, 2014). The coaching protocols are coachee directed, but similar in delivery to those described in previous studies concerning this client group (Doyle, 2021; Doyle and McDowall, 2019). In this approach, the coachee is seen as the expert, and the aim of coaching is to develop self-efficacy and autogenic coping strategies. Coachees are expected to practice the strategies they self-develop between sessions and review how well they have worked in the following session.

A random sample of 20 participants were taken from each cohort ($N = 60$) to determine the average number and length of coaching sessions. In the pre-pandemic cohort, the sample of coaches provided an average of 2.9 h of coaching over an average of 4.6 sessions. Coaches in the forced-remote cohort provided an average of 2.5 h of coaching over an average of 4.7 sessions. In the choice cohort, the coaches provided an average of 2.4 h of coaching over an average of 3.8 sessions.

In the pre-pandemic cohort, the coaches were allocated to the coachees based on geographical location, whereas in the forced-remote cohort they were allocated randomly. In the choice cohort, coachees were allocated either geographically or randomly based on their decision about remote or face-to-face coaching. If coachees had made any requests in terms of specialisms, then this was taken into account when allocating a coach. Allocations were actioned by the client services team at the non-profit organisation based predominantly on availability. Coachees are encouraged to change coach if they do not build rapport quickly and are offered a change without penalty (i.e. the first session will be re-delivered at no costs).

Data collection and design

A within-subject, longitudinal design was implemented to measure and compare performance self-evaluation ratings prior to receiving the coaching intervention and 12 weeks after the coaching intervention finished. Pre-coaching scores were collected before the coaching intervention began via an online survey, asking coachees to select from a predetermined list of potential topics (including an "other" box should they wish) and then rate their current skills on a scale from 1 to 10 for their selected topics. The pre-coaching scores were collected by the allocated coach and entered onto a secure database, which is

property of the non-profit organisation. Twelve weeks after the final coaching session, the coachees were sent an email asking them to complete an online survey where they provided performance ratings once again, without sight of their original scores. The survey asked coachees to “please score the following areas from 1 to 10, with 1 meaning you find this topic most challenging and 10 being more of a strength”. Each coaching topic was accompanied by a description; for example, time management was described as “your process of planning & exercising conscious control of time spent on specific activities”. There was also an “other” box where coachees were able to write on any topics not listed.

Measures and analysis

The coachees provided pre-coaching and post-coaching performance evaluation scores on a 10-point scale (ranging from 1 as “very poor” to 10 as “excellent”). For the purpose of this study, the scores from the six most popular coaching topics were analysed: memory, organisation, time management, stress management, understanding neurodiversity and concentration. These coaching topics were chosen because they were the most frequent topics that coachees were choosing to cover in their coaching sessions. These topics are in line with previous studies of this nature (Doyle and McDowall, 2015), which analysed the most popular four topics of memory, organisation, time management and stress management. The data were analysed using SPSS statistics, v26. We planned simple *t*-tests to assess the effectiveness of the coaching, one-way analysis of variance to assess if there were any differences between the cohorts in terms of performance improvement and chi-square to assess any differences in the topics chosen. Bonferroni corrections were applied for twelve dependent variables (six x two intervals), then reduced to eight according guidance on reducing type II error (Perrett and Mundfrom, 2010), resulting in an adjusted *p*-value of 0.00625 (see Table 2).

Results

The dependent variables were all normally distributed. Table 2 shows a comparison of the pre- and post-coaching scores within each coaching topic, using paired samples *t*-tests, across the whole sample. These numbers were calculated to confirm the sample behaved in a similar way to previous neurodivergent coaching samples. We confirm they are in line with the medium to large effect sizes reported by Doyle and McDowall (2015, 2022).

Table 3 shows the percentage of coachees selecting each topic per cohort with chi-square analysis, showing a significant difference between the cohorts for all topics but for stress management, which remained high. The other topics differed between the final (choice)

Table 1.
Percentage of participants with neurodiverse diagnoses in a sample of 1,106 participants

| Diagnosis | Percentage |
|------------------|------------|
| ABI | 1% |
| ADHD | 21% |
| Anxiety | 13% |
| Autism | 13% |
| Bipolar | 1% |
| CFS/Fibromyalgia | 2% |
| Depression | 2% |
| Dyscalculia | 1% |
| Dyslexia | 42% |
| Dyspraxia | 4% |
| Complex cases | 27% |

cohort, whereas pre-pandemic and forced-remote were more similar, with small increases for the forced-remote cohort.

Table 4 compares the average improvement in scores for each coaching topic across the 3 cohorts, using one-way ANOVA per coaching topic.

The results in Table 4 show that improvement in coaching scores trended down in the forced-remote cohort, before recovering in the choice cohort (except for concentration); however, none of these achieved statistical significance.

Discussion

Hypothesis 1: Compared with pre-pandemic, neurodivergent coachees will require significantly more support with executive function-related topics during coaching, namely, memory, organisation, time management and concentration as well as stress management. The topic “understanding neurodiverse strengths” will remain the same.

Partial support was found for hypothesis one, in that there was a slight increase in request for executive function-related topics during the forced-remote coaching setting of the pandemic (memory, organisation, time management and concentration); however, this was very minor compared with the large drop in the later choice cohort. This calls for abductive analysis, in which we try to make sense of an unexpected result, within context, and suggest avenues for further exploration. In this case, we propose that the significantly lower requests for executive functions related topics may be driven by two factors: hybrid working and stress. Reports of home working as more accessible and less of a drain on cognitive resources

| Topic | Mean Imp. (SD) | <i>t</i> -test (before and after pairs) (df) | <i>p</i> -value | Cohen's <i>d</i> |
|------------------|----------------|--|-----------------|------------------|
| Memory | 2.74 (2.03) | 23.73 (309) | <0.001 | 1.55 |
| Organisation | 2.51 (2.04) | 20.63 (282) | <0.001 | 1.44 |
| Time | 2.74 (2.14) | 21.43 (279) | <0.001 | 1.57 |
| Stress | 3.13 (2.22) | 26.90 (365) | <0.001 | 1.68 |
| Understanding ND | 3.47 (2.69) | 22.20 (295) | <0.001 | 1.78 |
| Concentration | 2.95 (2.15) | 24.00 (303) | <0.001 | 1.67 |

Table 2. Means, standard deviations and results of a paired sample *t*-test across the 6 coaching topics

| Topic | Pre-pandemic | Forced-remote | Choice | Chi-square |
|----------------------------|--------------|---------------|--------|------------------------------|
| Memory | 79% | 82% | 60% | $X^2 = 18.44 (2), p < 0.001$ |
| Organisation | 71% | 77% | 53% | $X^2 = 17.39 (2), p < 0.001$ |
| Time | 73% | 76% | 48% | $X^2 = 25.88 (2), p < 0.001$ |
| Stress | 86% | 91% | 90% | $X^2 = 2.33 (2), p = 0.312$ |
| Understanding ND strengths | 76% | 81% | 59% | $X^2 = 13.75 (2), p < 0.001$ |
| Concentration | 76% | 81% | 59% | $X^2 = 17.24 (2), p < 0.001$ |

Table 3. Percentage of coachees selecting each topic, per cohort with chi-square analysis

| Topic | Pre-pandemic M(SD) | Forced-remote M(SD) | Choice M(SD) | <i>F</i> (df) | <i>p</i> |
|------------------|--------------------|---------------------|--------------|---------------|----------|
| Memory | 2.80 (2.30) | 2.70 (1.96) | 2.78 (1.83) | 0.087 (2,307) | 0.917 |
| Organisation | 2.70 (2.07) | 2.35 (2.07) | 2.64 (1.91) | 0.896 (2,280) | 0.410 |
| Time | 3.06 (2.18) | 2.46 (2.43) | 3.08 (1.62) | 2.89 (2,277) | 0.057 |
| Stress | 3.15 (2.29) | 3.05 (2.35) | 3.26 (1.88) | 0.263 (2,363) | 0.769 |
| Understanding ND | 3.23 (2.81) | 3.39 (2.65) | 4.02 (2.56) | 1.616 (2,293) | 0.201 |
| Concentration | 3.09 (2.13) | 2.96 (2.14) | 2.76 (2.21) | 0.457 (2,301) | 0.634 |

Table 4. Mean improvement scores across the three cohorts

are reported for neurodivergent people (Das *et al.*, 2021), which would point to lower executive function-related difficulties within the remote environment from 2020. However, benefits of remote and hybrid working may not have been realised in 2020, because they were offset by the stress and novelty of the situation and the need to set up conducive environments. However, by 2021, it is more likely that remote workers had established routines and been supplied with adequate equipment, and therefore this is when we see the dip. It is certainly an unusual finding and one which requires further analysis within this cohort, comparing coaching topics chosen across a measure of satisfaction with one's work environment and the suitability of equipment therein.

No support was found for the selection of stress as a topic being increased during the pandemic. It was high in 2019 (higher than in previous studies, where only 67% of coachees selected this topic), and remained high across all cohorts with no significant differences. Again, this is of interest, possibly indicative of a much higher level of stress in the UK workforce. The variable "understanding neurodivergent strengths" did not remain constant across the cohorts and dipped significantly in the 2021 choice cohort. Again, applying abductive reasoning, we suggest this may be due to extraneous factors. Given the exponential increase in literature, social media and popular press concerning neurodiversity in the past three years, it is possible that coachees simply arrive knowing more about their likely strengths than they would have prior to the pandemic, when they likely spent more time engaging in interesting online, video and written content. We offer this as a thread for further research. Understanding the impact of increased public access to online material for the client group would be useful for coaches, although it comes with a warning that not everything we read is accurate, and an opposing position would be that it encourages aspirations that are not achievable or social comparisons that damage self-esteem.

Hypothesis 2: The magnitude of improvement for all measures will remain constant when compared between the forced-remote and pre-pandemic conditions.

Support was found for hypothesis two in that there were no significant differences between the cohorts in terms of the magnitude of the effect. Though there were trends, these did not reach significance, and, given the need to adjust *p*-values for multiple measures, it is unlikely that larger sample sizes would have addressed the issue and so we can reasonably discount the risk of type II error. We conclude that for neurodivergent coachees, the delivery method of coaching via face-to-face or remote sessions does not make a significant difference to the impact of the coaching in this sample. For the purposes of this study, we can recommend to practitioners that remote coaching is not a lesser form of coaching, is likely to get similar results to face-to-face and that letting the coachee choose is sufficient. Yet, we are still unclear as to the mechanisms influencing this status quo, potentially a dynamic tension between damage to the coaching alliance and improvements in the demands of logistical planning. As the world settles into a more hybrid work style, we recommend further research to create a causal framework of positive and negative influences on coaching success for this client group, who are more vulnerable to social miscommunication and more easily burdened by logistical planning. This study has contributed to the question of "what" happens when the rules of coaching change, but not the "why".

It is also important to recognise that in the immediate aftermath of the pandemic, there will be a time of instability where we experience significant changes to working practices, and neurodiverse individuals in particular will need time to adjust. We call for further research comparing remote and face-to-face coaching during a more stable period when the ripple effect of the pandemic will not mask the effects of a different context.

Limitations

As previously mentioned, there are numerous unmeasured and uncontrolled variables in this observational sample, for example job complexity and learner effects (such as motivation and

pre-existing self-efficacy). There will therefore be some variability in our data, which could have affected results (Jones *et al.*, 2018). Additionally, we were unable to align demographic data per participant, only per cohort, and therefore we could not assess for differences in gender, race and neurotype which might have provided more insight. Yet, these types of limits are well known in practitioner-based studies, and we counter that *in situ* research is necessary for ecological validity of the field at large, and thus contribute to the wider extant literature on coaching psychology. We do not over-analyse these results or attempt to draw firm conclusions, but position them as a single interesting, applied study, with a substantial sample size and strong longitudinal design, from which we can seek further research directions.

Contribution to theory

As shown in the introduction, neurodiversity in general, and neurodiversity coaching specifically, is a fragmented field, drawing insight that currently relies on several loose, single threads combining into a “best guess”, rather than a body of evidence expanding any unifying theories. However, our results can be used to guide the direction of theoretical enquiry to support future work. Hypothesis one, from which we found a significant decrease in uptake of coaching related to executive functions deficits, and our abductive reasoning that this is due to changes in environmental demands, point us towards person-environment fit (Lewin, 1936) and its many iterations that have followed, such as person-environment-role fit and job crafting (Tims and Bakker, 2010). Theories of fit predict that performance is dependent on the extent of the match between personal profile (cognition, personality, ability), the environment (in this case sensory, provision of tools, sociability) and the demands of the role itself. Using fit theories as an underlying explanatory framework for neurodiversity support at work contextualises coaching as a method by which the coach and coachee formulate and adjust behaviours, strategies, use of assistive tools and technology to reach optimum performance. Relating to hypothesis two, we conclude that coaching is an effective intervention for supporting disabled adults in this sample, and resilient to variations in both delivering mechanisms and destabilising macro-context. But what changed to improve these ratings, the coachee themselves or their context?

Conceptual work by Shoukry and Cox (2018) asserts the bidirectional influencing potential of coaching towards changing the coachee and the coachee’s environment. Using their analysis (*ibid*) of sensitivity to power and agency, coaching practitioners should exercise caution concerning facilitating conformity for coachees. Indeed, the Equality Act (2010) in the UK places responsibility for change on the part of the employer, and the environment. In line with the concept of the “coaching triad” (O’Broin and Palmer, 2007) where the employer is included as a stakeholder in coaching direction and outcome, fit theories could adopt a consideration of upward influencing by co-opting the role of the manager/employer as central to progress in neurodiversity coaching. The outcome for coaching would then be to influence the employer by negotiating reasonable adjustments to environment, tools and role but without necessitating the employee to perform as less disabled, or “normal”. We hope this is useful in opening avenues of enquiry for further studies on the mechanism of change when improving outcomes for neurodivergent coachees, congruent to the principles of disability legislation.

Contribution to practice

As a single paper with limited control for bias in the design, we must not overstate the findings; however, we can suggest that remote coaching is a reasonable choice for coaching practitioners, whilst calling for replication and further, quasi-experimental designs. We also propose that practitioners consider our suggestions concerning theories of fit and the dynamic interplay between the person, their role and their environment as a core function of neurodiversity coaching.

Based on the qualitative literature from the introduction rather than our results, we would encourage coaching practitioners to develop strategies for building rapport with neurodivergent coachees, acknowledging that there may be strong preferences around phone versus video, messaging apps versus email and generally a need for flexibility. We would also encourage practitioners to consider the logistical burden of arranging appointments and sticking to time, with a population for whom these are the typical presenting complaints, and it is beholden upon us to be accommodating where we can, for example by sending reminders. This contributes to the education and development of coaches who would like to incorporate neurodiversity awareness into their own practice or specifically coach neurodiverse individuals. As stated previously, prior to the pandemic, A2W-style coaching had exclusively been delivered in face-to-face settings. The findings of this study support the offering of remote or a blended format of coaching to reduce the demand on executive functions and increased efficiency for A2W, a state-funded delivery.

Conclusion

As the fields of coaching psychology and neurodiversity mature, there remains a need for well-designed primary evaluative research. This applied study using convenience data provides insight into further directions for coaching psychologists and indicates a need to understand the scope of coaching for neurodivergent people. Coaching may be a secondary or tertiary response to career limits for neurominorities; primary interventions at the organisational, HR policy level such as flexible hours, hybrid locations, provision of technology and sensory compatible spaces may offer more in terms of facilitating success. While this paper adds weight to the accumulating evidence that coaching “works”, it might be time to ask a broader question: If environmental context is the problem, should we be advocating coaching as the answer? In line with fit theories, we may wish to consider coaching as a method to increase self-advocacy in asserting the need for adaptations to the location and flow of work, the methods of communication and the deployment of technology. In disability support, coaching forms the intervention vehicle rather than the mechanism of change.

References

- Adamou, M., Id, S.L.J., Fullen, T., Galab, N., Abbott, K. and Yasmeeen, S. (2021), “Remote assessment in adults with Autism or ADHD: a service user satisfaction survey”, *PLoS ONE*, Vol. 16 No. 3, pp. 1-14, doi: [10.1371/journal.pone.0249237](https://doi.org/10.1371/journal.pone.0249237).
- Ando, M., Takeda, T. and Kumagai, K. (2021), “A qualitative study of impacts of the COVID-19 pandemic on lives in adults with attention deficit hyperactive disorder in Japan”, *International Journal of Environmental Research and Public Health*, Vol. 18 No. 4, pp. 1-10.
- Astle, D.E. and Fletcher-Watson, S. (2020), “Beyond the “core deficit hypothesis” in developmental disorders”, *Current Directions in Psychological Science*, Vol. 29 No. 5, pp. 431-437, doi: [10.17863/CAM.52138](https://doi.org/10.17863/CAM.52138).
- Astle, Duncan E., Bathelt, J., CALM team and Holmes, J. (2019), “Remapping the cognitive and neural profiles of children who struggle at school”, *Developmental Science*, Vol. 22 No. 1, pp. 1-17, doi: [10.1111/desc.12747](https://doi.org/10.1111/desc.12747).
- Bailenson, J.N. (2021), “Nonverbal overload: a theoretical argument for the causes of Zoom fatigue”, *Technology, Mind, and Behavior*, Vol. 2 No. 1, pp. 1-6, doi: [10.1037/tmb0000030](https://doi.org/10.1037/tmb0000030).
- BDA (2021), “The Impact of Covid on the dyslexic community”, Issue April, available at: <https://cdn.bdadyslexia.org.uk/uploads/documents/Impact-of-Covid-on-Dyslexic-Community.pdf?v=1632142248>.

- Berry, R.M., Ashby, J.S., Gnilka, P.B. and Matheny, K.B. (2011), "A comparison of face-to-face and distance coaching practices: coaches' perceptions of the role of the working alliance in problem resolution", *Consulting Psychology Journal: Practice and Research*, Vol. 63 No. 4, pp. 243-253, doi: [10.1037/a0026735](https://doi.org/10.1037/a0026735).
- Bohannon, L.S., Herbert, A.M., Pelz, J.B. and Rantanen, E.M. (2013), "Eye contact and video-mediated communication: a review", *Displays*, Vol. 34 No. 2, pp. 177-185, doi: [10.1016/j.displa.2012.10.009](https://doi.org/10.1016/j.displa.2012.10.009).
- Chapman, R. (2020), "Defining neurodiversity for research and practice", in Rosqvist, H.B., Chown, N. and Stenning, A. (Eds), *Neurodiversity Studies: A New Critical Paradigm*, Routledge, Taylor & Francis, London, pp. 218-220.
- CJJI (2021), "Neurodiversity in the criminal justice system: a review of evidence", available at: <https://www.justiceinspectorates.gov.uk/cjji/wp-content/uploads/sites/2/2021/07/Neurodiversity-evidence-review-web-2021.pdf>.
- Corrie, S. and Kovacs, L. (2020), "Does coaching psychology need the concept of anti-fragility?", *The Coaching Psychologist*, Vol. 17 No. 2, pp. 97-113, doi: [10.1002/9781119656913.ch6](https://doi.org/10.1002/9781119656913.ch6).
- Das, M., Tang, J., Ringland, K.E. and Piper, A.M. (2021), "Towards accessible remote work: understanding work-from-home practices of neurodivergent professionals", *Proceedings of the ACM on Human-Computer Interaction*, Vol. 5, pp. 1-30 (CSCW1), doi: [10.1145/3449282](https://doi.org/10.1145/3449282).
- Deniers, C. (2019), "Experiences of receiving career coaching via Skype: an interpretative phenomenological analysis", *International Journal of Evidence Based Coaching and Mentoring*, Vol. 17 No. 1, pp. 72-81, doi: [10.24384/r4j8-hm94](https://doi.org/10.24384/r4j8-hm94).
- Doyle, N. (2020), "Neurodiversity at Work: a biopsychosocial model and the impact on working adults", *British Medical Bulletin*, Vol. 135 No. 1, pp. 108-125, doi: [10.1093/bmb/ldaa021](https://doi.org/10.1093/bmb/ldaa021).
- Doyle, N. (2021), "Neurodiversity in Higher Education: support for neurodiverse individuals and professionals", in Fung, L.K. (Ed.), *Neurodiversity: From Phenomenology to Neurobiology and Enhancing Technologies*, American Psychiatric Publishing, Washington, DC.
- Doyle, N. and McDowall, A. (2015), "Is coaching an effective adjustment for dyslexic adults?", *Coaching: An International Journal of Theory and Practice*, Vol. 8 No. 2, pp. 154-168, doi: [10.1080/17521882.2015.1065894](https://doi.org/10.1080/17521882.2015.1065894).
- Doyle, N.E. and McDowall, A. (2019), "Context matters: a systematic review of coaching as a disability accommodation", *PLoS One*, Vol. 14 No. 8, pp. 1-30, doi: [10.1371/journal.pone.0199408](https://doi.org/10.1371/journal.pone.0199408).
- Doyle, N.E., McDowall, A., Randall, R. and Knight, K. (2022), "Does it work ? Using a Meta-Impact score to examine global effects in quasi-experimental intervention studies", *PLoS One*, Vol. 17 No. 3, pp. 1-21, doi: [10.1371/journal.pone.0265312](https://doi.org/10.1371/journal.pone.0265312).
- Fung, L.K. (Ed.) (2021), in , *Neurodiversity from Phenomenology to Neurobiology and Enhancing Technologies*, American Psychiatric Publishing, Washington, DC.
- Garratt, M., Whitney, L. and McDowall, A. (2022), "Reflections on video-mediated coaching and a research agenda for Coaching Psychology", *The Coaching Psychologist*, Vol. 18 No. 1, pp. 47-51.
- Gifford, G. (2011), *Access to Work: Official Statistics*, DWP, London, available at: <http://research.dwp.gov.uk/asd/workingage/atw/atw0711.pdf>.
- Grant, D. (2009), "The psychological assessment of neurodiversity", in Pollak, D. (Ed.), *Neurodiversity in Higher Education*, Wiley-Blackwell, Chichester, pp. 33-62.
- Henderson, A. and Palmer, S. (2021), "Desperately seeking. . . a theory of the coaching relationship", *International Journal of Coaching Psychology*, Vol. 2 No. 3, pp. 1-5, available at: https://www.researchgate.net/publication/348444516_Desperately_seeking_a_theory_of_the_coaching_relationship.
- Hollingdale, J., Adamo, N. and Tierney, K. (2021), "Impact of COVID-19 for people living and working with ADHD: a brief review of the literature", *AIMS Public Health*, Vol. 8 No. 4, pp. 581-597, doi: [10.3934/publichealth.2021047](https://doi.org/10.3934/publichealth.2021047).

-
- Ihori, D. and Olvera, P. (2015), "Discrepancies, responses, and patterns: selecting a method of assessment for specific learning disabilities", *Contemporary School Psychology*, Vol. 19, pp. 1-11, doi: [10.1007/s40688-014-0042-6](https://doi.org/10.1007/s40688-014-0042-6).
- Jensen, J., Lindgren, M., Andersson, K., Ingvar, D.H. and Levander, S. (2000), "Cognitive intervention in unemployed individuals with reading and writing disabilities", *Applied Neuropsychology*, Vol. 7 No. 4, pp. 223-236, doi: [10.1207/S15324826AN0704_4](https://doi.org/10.1207/S15324826AN0704_4).
- Jones, R.J., Woods, S.A. and Guillaume, Y.R.F. (2016), "The effectiveness of workplace coaching: a meta-analysis of learning and performance outcomes from coaching", *Journal of Occupational and Organizational Psychology*, Vol. 89 No. 2, pp. 249-277, doi: [10.1111/joop.12119](https://doi.org/10.1111/joop.12119).
- Jones, R.J., Woods, S.A. and Zhou, Y. (2018), "Boundary conditions of workplace coaching outcomes", *Journal of Managerial Psychology*, Vol. 33 Nos 7-8, pp. 475-496, doi: [10.1108/JMP-11-2017-0390](https://doi.org/10.1108/JMP-11-2017-0390).
- Kirby, A., Edwards, L. and Sugden, D. (2011), "Emerging adulthood and developmental Co-ordination disorder", *Journal of Adult Development*, Vol. 18 No. 3, pp. 107-113, doi: [10.1007/s10804-011-9123-1](https://doi.org/10.1007/s10804-011-9123-1).
- Koi, P. (2021), "Genetics on the neurodiversity spectrum: genetic, phenotypic and endophenotypic continua in autism and ADHD", *Studies in History and Philosophy of Science Part A*, Vol. 89, pp. 52-62, doi: [10.1016/j.shpsa.2021.07.006](https://doi.org/10.1016/j.shpsa.2021.07.006).
- Lawley, J. and Linder-Pelz, S. (2016), "Evidence of competency: exploring coach, coachee and expert evaluations of coaching", *Coaching: An International Journal of Theory and Practice*, Vol. 9 No. 2, pp. 110-128, doi: [10.1080/17521882.2016.1186706](https://doi.org/10.1080/17521882.2016.1186706).
- LeFevre-vy, R., Melson-Silimon, A. and Carter, N.T. (2022), "Neurodiversity in the workplace: considering neuroatypicality as a form of diversity", *Industrial & Organizational Psychology*, No. March, pp. 1-48.
- Lewin, K. (1936), *Principles of Topographical Psychology*, McGraw-Hill, New York.
- Lorenz, T., Frischling, C., Cuadros, R. and Heinitz, K. (2016), "Autism and overcoming job barriers: comparing job-related barriers and possible solutions in and outside of autism-specific employment", *PLoS One*, Vol. 11 No. 1, pp. 1-20, doi: [10.1371/journal.pone.0147040](https://doi.org/10.1371/journal.pone.0147040).
- McDowall, A. and Butterworth, L. (2014), "How does a strengths-based group coaching intervention work?", *Coaching: An International Journal of Theory, Research and Practice*, Vol. 7 No. 2, pp. 152-163.
- McDowall, A., Freeman, K. and Marshall, S. (2014), "Is FeedForward the way forward? A comparison of the effects of FeedForward coaching and Feedback", *International Coaching Psychology Review*, Vol. 9 No. 2, pp. 135-146.
- McGonagle, A.K., Beatty, J.E. and Joffe, R. (2014), "Coaching for workers with chronic illness: evaluating an intervention", *Journal of Occupational Health Psychology*, Vol. 19 No. 3, pp. 385-398, doi: [10.1037/a0036601](https://doi.org/10.1037/a0036601).
- McLoughlin, D. and Leather, C. (2013), *The Dyslexic Adult: Interventions and Outcomes-An Evidence-Based Approach*, John Wiley & Sons, Chichester.
- Melvill, D., Stevens, C. and Vaid, L. (2015), *Access to Work Cost Benefit Analysis*, Centre for Economic and Social Inclusion, London.
- O'Broin, A. and Palmer, S. (2007), "Re-appraising the coach-client relationship: the unassuming change agent in coaching", in Palmer, S. and Whybrow, A. (Eds), *Handbook of Coaching Psychology*, Routledge, London.
- Oomen, D., Nijhof, A.D. and Wiersema, J.R. (2021), "The psychological impact of the COVID-19 pandemic on adults with autism: a survey study across three countries", *Molecular Autism*, Vol. 12 No. 1, pp. 1-22, doi: [10.1186/s13229-021-00424-y](https://doi.org/10.1186/s13229-021-00424-y).
- Palmer, E.R. and Stern, J.S. (2015), "Employment in tourette Syndrome", *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 86 No. 9, pp. 16-24, doi: [10.1136/jnnp-2015-311750.41](https://doi.org/10.1136/jnnp-2015-311750.41).

- Parker, D.R. and Boutelle, K. (2009), "Executive function coaching for college students with learning disabilities and ADHD: a new approach for fostering self-determination", *Learning Disabilities Research & Practice*, Vol. 24 No. 4, pp. 204-215.
- Parry, J., Young, Z., Bevan, S., Veliziotis, M., Baruch, Y., Beigi, M., Bajorek, Z., Rochards, S. and Tochia, C. (2022), "Work after lockdown : no going back What we have learned working from home through the COVID-19 pandemic (issue March)".
- Perrett, J.J. and Mundfrom, D.J. (2010), "Bonferroni procedure", in Salkind, N.J. (Ed.), *Encyclopedia of Research Design*, Sage Publications, Thousand Oaks, CA, pp. 98-101.
- Pollack, D. (Ed.) (2009), in , *Neurodiversity in Higher Education: Positive Responses to Specific Learning Differences*, Wiley-Blackwell, Chichester.
- Shaw, S.C.K., Hennessy, L.R. and Anderson, J.L. (2022), "The learning experiences of dyslexic medical students during the COVID - 19 pandemic: a phenomenological study", *Advances in Health Sciences Education*, Vol. 27 No. 1, pp. 107-124, doi: [10.1007/s10459-021-10074-7](https://doi.org/10.1007/s10459-021-10074-7).
- Shoukry, H. and Cox, E. (2018), "Coaching as a social process", *Management Learning*, Vol. 49 No. 4, pp. 413-428.
- Singer, J. (1998), *Odd People in: The Birth of Community Amongst People on the "Autistic Spectrum": A Personal Exploration of a New Social Movement based on Neurological Diversity*, University of Technology, Sydney.
- Siugzdaite, R., Bathelt, J., Holmes, J. and Astle, D.E. (2020), "Transdiagnostic brain mapping in developmental disorders", *Current Biology*, Vol. 30 No. 7, pp. 1245-1257, e4, doi: [10.1016/j.cub.2020.01.078](https://doi.org/10.1016/j.cub.2020.01.078).
- Smith, T. and Kirby, A. (2021), *Neurodiversity at Work (First)*, Kogan Page.
- Snowling, M.J., Adams, J.W., Bowyer-Crane, C. and Tobin, V.A. (2000), "Levels of literacy among juvenile offenders: the incidence of specific reading difficulties", *Criminal Behaviour and Mental Health*, Vol. 10 No. 4, pp. 229-241, doi: [10.1002/cbm.362](https://doi.org/10.1002/cbm.362).
- Taleb, N.N. (2012), *Antifragile: Things that Gain from Disorder*, Random House, New York, Vol. 3.
- Tims, M. and Bakker, A.B. (2010), "Job crafting: towards a new model of individual job redesign", *SA Journal of Industrial Psychology*, Vol. 36 No. 2, pp. 1-9, doi: [10.4102/sajip.v36i2.841](https://doi.org/10.4102/sajip.v36i2.841).
- Weinberg, A. and Doyle, N. (2017), "Psychology at work: improving wellbeing and productivity in the workplace", in Coulthard, L.M. (Ed.), *First*, British Psychological Society, Leicester.
- Williams, H. and Palmer, S. (2020), "Coaching during the COVID-19 pandemic: application of the CLARITY solution-focused cognitive behavioural coaching model", *International Journal of Coaching Psychology*, Vol. 1 No. 2, pp. 1-11, available at: www.nationalwellbeingsservice.com/journals.
- Young, S., González, R.A., Fridman, M., Hodgkins, P., Kim, K. and Gudjonsson, G.H. (2018), "The economic consequences of attention-deficit hyperactivity disorder in the Scottish prison system", *BMC Psychiatry*, Vol. 18, pp. 1-11, doi: [10.1186/s12888-018-1792-x](https://doi.org/10.1186/s12888-018-1792-x).

Corresponding author

Nancy Doyle can be contacted at: n.doyle@bbk.ac.uk

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com