Autism and Employment in the Performing Arts: Celebrating Creativity and Improving Outcomes

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Declaration

I, Eleanor Buckley, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis. The study that forms the basis of Chapter 2 has been published in *PLOS ONE* (Buckley et al., 2021b). The study that forms the basis of Chapter 4 has been published in the *Journal of Autism and Developmental Disorders* (Buckley et al., 2021a). The study that forms the basis of Chapter 5 has been submitted to the *Journal of Autism and Developmental Disorders* for review (Buckley, Pellicano, & Remington; submitted for review). I am the principal author for the two published studies and the one under review, and was predominantly responsible for the conceptualisation, methodology, project administration, data collection, formal analysis, writing and editing of all drafts, with the support of my supervisors, Dr Anna Remington and Professor Liz Pellicano.

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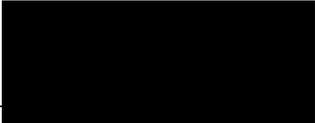
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Abstract

This research sought for the first time to identify the extent to which autistic people, and those with high levels of autistic traits, are pursuing careers in the performing arts, and to examine the experiences and support needs of this population. In Chapter 2, I determined that there are significant relationships between autistic traits, occupational self-efficacy, quality of life, mental health, and need for support in performing arts professionals, as well as qualitatively analysed professionals' experiences of accessing support in the industry. I showed that there a significant minority of autistic professionals in the performing arts who may have unmet support needs. In Chapter 3, I found similar significant relationships between autistic traits, educational self-efficacy, quality of life, mental health, and need for support in the performing arts student population. Additionally, I compared their experiences to students studying other subjects and found very few differences, suggesting that performing arts education is not a uniquely challenging environment compared to other higher education courses. In Chapter 4, I analysed, in-depth, the support needs and views of autistic performing arts professionals on working in the industry, and the attitudes and levels of autism knowledge of performing arts employers. Some autistic professionals had access to support, but the majority felt that there was not enough available and highlighted many ways in which they could be better supported. Performing arts employers varied in their experiences of working with autistic people, many had limited knowledge about autism-specific support or relied on other professionals to provide it. In Chapter 5, I tested the feasibility and acceptability of professional mentoring as a form of employment-based support for autistic performing arts professionals. I found it to be an

acceptable and workable method of support, with many participants reporting

increased occupational self-confidence. Finally, in Chapter 6, I summarise the main

findings from the empirical studies presented in this thesis. I discuss the

contributions the studies have made towards our understanding of the experiences

and support needs of autistic performing arts professionals. I describe the limitations

of my research, and I outline the implications and possible future directions for this

research.

Impact Statement

There are several ways in which the work presented within this thesis could, or already has, generated impact.

First, the results from my studies highlight the unmet support needs of autistic performing arts professionals and students, and I provide suggestions for how these needs can be addressed. This research was funded and supported by the Royal Academy of Dramatic Art (RADA) and Equity, the union for those working in the performing arts. Having these close links to performing arts institutions will allow me to share my research with those in the industry and allow for my evidence-based suggestions to be implemented by those within the field.

Second, the mentoring programme trialled in Chapter 4 offers a blueprint for a way to support autistic performing arts professionals that has been shown to be both feasible and acceptable as a method of employment-based support.

Third, the bespoke performing arts occupational and educational self-efficacy scales I developed for this research are/will both be published and free for other researchers to use.

The first step to realising these impacts is promoting and disseminating this research. I have started this work by presenting the findings for Chapter 2 and 4 in subsequent poster presentations at the International Society for Autism Research Annual Meeting (INSAR) in 2018 and 2019 and given an oral presentation on the results from Chapter 4 at the 12th International Congress of Autism Europe in 2019. I have published the results included in Chapters 2 and 4 in peer-reviewed journals (Buckley et al., 2021a, 2021b), I have submitted the results from Chapter 5 for peer-review, and intend to also submit the findings from Chapter 3 for publication. I have

presented the findings from Chapters 2 and 3 to members of Equity and will be communicating the findings to the Royal Academy of Dramatic Art (RADA) as well. These institutions can use this research to better understand and design appropriate supports for the autistic performing arts professionals and students that they care for.

Acknowledgements

I would first like to thank my supervisors Anna and Liz, it has been an absolute privilege to be supervised by you both. I am grateful and proud to have been part of the Centre for Research in Autism and Education (CRAE). Being a member of CRAE has had a significant influence on how I approach research and taught me values that I will carry with me throughout my professional and personal life.

I would also like to thank all of my colleagues past and present at CRAE and UCL. Completing this thesis during the COVID-19 pandemic has reinforced the value of sharing office space and being able to catch up with colleagues, and I hope we will be able to reunite soon. Particular thanks to Ali, who has been so generous with her time, spoken so openly about her lived experience which has often helped me to consider things in new light, and also specifically supported the mentoring scheme with her expertise.

Thank you to my funders, the Economic and Social Research Council (ESRC) and RADA-in-Business who supported this research through a CASE PhD Studentship.

To my friends and family, thank you for your unwavering support. From shared writing days with my fellow PhD students, to being checked up on, brought snacks, and encouraged by so many I feel incredibly grateful to have had you all alongside me on this journey. In particular, thank you Adam for being consistently by my side throughout this process, your support has been invaluable.

Finally, the biggest thanks are owed to all of my participants, without the time and effort you gave, this research would not exist. I very much hope that I have been

able to capture the experiences you shared with me and that this research will be

able to play some small part in improving outcomes for autistic professionals in the

performing arts.

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Chapter 1

General introduction

This thesis aims to examine the extent to which autistic people are pursuing careers in the performing arts in the UK, and to report and analyse the experiences and support needs of this population. Specifically, I will show that autistic people are pursuing higher education courses, and subsequently careers, in the performing arts. I also examine the relationship between autistic traits and self-efficacy, quality of life, mental health, and need for support. Furthermore, it will analyse, in-depth, the views and support needs of autistic performing arts professionals and the attitudes and levels of autism knowledge of performing arts employers. Finally, it will report on the feasibility and acceptability of professional mentoring as a form of employment-based support for autistic performing arts professionals.

In the following chapter, I will consider how autism is currently conceptualised and diagnosed, review the literature on autism and employment, and set out the studies that form this thesis.

An introduction to autism

What is autism?

Autism (Autism Spectrum Disorder) is a condition characterised by enduring difficulties in social communication and social interaction, alongside a range of repetitive, rigid, and inflexible behaviours, both of these social and non-social behaviours must be present to warrant an autism diagnosis (American Psychiatric

Association, 2013; WHO, 2018). Difficulties in the social domain means autistic people may not respond typically to social interaction, such as not engaging in sustained back-and-forth conversation or picking up on social cues. Autistic people can display atypical eye contact, facial expressions, and body language, and can find it difficult to understand others' social behaviours. Autistic people can also struggle with developing, maintaining and understanding relationships which can range from friendships to relationships, and to more formal interactions such as with colleagues in the workplace. Difficulties "sharing in imaginative play" is also part of the diagnostic criteria within the DSM-5 (one of the main diagnostic manuals), and this difficulty with imagination has potentially contributed to the long-standing assumptions that autism may be associated with limited creative expression (Remington, 2015). There are several non-social behavioural characteristics that must also be present in order to receive an autism diagnosis. These are defined as rigid and repetitive behaviours, such as repeating motor movements or speech, having highly focused and intense interests, and having an inflexible adherence to routine. This can mean autistic people experience significant difficulty when having to respond to change in these routines or when encountering unpredictable situations. It is also estimated that approximately three quarters of autistic people may also experience sensory processing differences (McCormick et al., 2016), meaning that they may be hyper- or hypo-sensitive to varying environmental stimuli such as light, noise, and smell. Exposure to overwhelming environmental stimuli can be extremely distressing. Dealing with highly challenging situations can lead to 'meltdowns' or 'shutdowns'. A meltdown is defined as an involuntary physical and emotional reaction to a situation from which there is no perceived escape, this can result in aggressive or intensely distressed behaviour (Bedrossian, 2015).

Shutdowns are when the autistic person experiences a deterioration in function, freezing, mobility and speech issues, and can appear in a catatonic-like state (Shah, 2019).

Autism is a developmental condition, where behaviours like these must be present in early childhood, but for some these symptoms do not fully manifest until social demands exceed their capacities (American Psychiatric Association, 2013; WHO, 2018). It is important to note that many autistic people learn compensatory strategies for these challenges across their life course and so may 'mask' their autistic behaviours, especially in non-autistic environments (Hull et al., 2017).

The history of autism as a diagnosis

Autism was first formally conceptualised by a Swiss Psychiatrist, Eugen Bleuler (1911), who used the term to describe particular symptoms of schizophrenia. Bleuler used the term 'autism' to denote a schizophrenic person's 'inner life' and characterised autistic thinking as fantasising and hallucinating in order to avoid an unsatisfying reality (Evans, 2013). In the 1940's, two important papers were published that identified autism as a separate condition, both focusing on children. First to publish was Leo Kanner, a psychiatrist based in America, who wrote about 11 children that he had seen in his clinic who displayed a preference for focusing on non-social stimuli such as objects, had a need for sameness, and exhibited resistance to (unexpected) change. Kanner used the term "infantile autism" to describe these symptoms and his paper in 1943 is regarded as seminal (Baron-Cohen, 2015; Kanner, 1943). A few months later Hans Asperger, an Austrian paediatrician, published an article describing children in his own clinic that exhibited noticeably similar behaviour to that noted by Kanner (Asperger, 1944). He titled the article "Autistic psychopathy in childhood". Although his paper was published slightly

after Kanner's, some have suggested that Asperger may have in fact noticed and conceptualised autism as a distinct condition long before Kanner, and Kanner learnt of and copied his work, and scooped him on publication (Silberman, 2015). The two clinicians differed in their thoughts concerning the rarity of autism and who may receive a diagnosis, with Asperger believing that autism was a relatively common condition that could be present in people with and without intellectual disability and functional language, even using the term "absent-minded professors" to describe some of the children he had observed. Whereas Kanner believed it to be a much rarer condition and his descriptions focused on children with minimal or no expressive language. They also differed in their assertions around what caused autism, with Kanner incorrectly, and damagingly, surmising that autism may be caused by poor mothering, whereas Asperger believed autism had a neurological cause (Asperger, 1944; Kanner, 1949).

Kanner's suggestions that poor parenting may have played a role in why children developed autism laid the foundations for the Refrigerator Mother Hypothesis put forward by Bettelheim (1959) which led to decades of misunderstanding and blame, and contributed to the normalisation of separating children from their parents (Evans, 2013). The Refrigerator Mother Hypothesis was shown to be inaccurate as research on autism developed across the 1960s and 1970s and revealed that autism has biological underpinnings and is rooted in brain development. The third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM III), published in 1980, established autism as a distinct condition, facilitating diagnoses to be made (Spectrum, 2018). The work of Lorna Wing, among others, was highly influential in finding the commonalities, namely difficulties with social interaction, communication, and imagination, between differing descriptions of

autism (Wing, 1981). This growing body of research contributed to the definition of autism in the DSM-IV, released in 1994, and revised in 2000, which described the autism spectrum as containing several conditions, namely, autistic disorder, Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified (PDD-NOS). In particular, Asperger's Disorder would be diagnosed when the main 'triad of impairments' of difficulties with social interaction, social communication, and restricted, repetitive, and stereotyped patterns of behaviour were present but without significant cognitive or language delay, and autistic disorder would be diagnosed if one/both were also present (American Psychiatric Association, 1994). Ultimately, research showed that the differing conditions could not be reliably distinguished or appeared to constitute discrete groups (Grzadzinski et al., 2013; Lord et al., 2012). Consequently, our understanding has changed again with these conditions being integrated under the umbrella term Autism Spectrum Disorder (ASD) in the latest versions of diagnostic manuals (Zeldovich, 2017).

Diagnosing autism today

There are currently two diagnostic manuals predominantly used worldwide to diagnose autism: the eleventh edition of the International Classification of Diseases (ICD-11) and the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). The ICD-11 is produced by the World Health Organization and the DSM-5 by the American Psychiatric Association (American Psychiatric Association, 2013; WHO, 2018). In the UK, clinicians predominantly use the ICD to diagnose autism, rather than the DSM (NHS Website, 2018). The ICD-11 and the DSM-5 contain similar instructions and criteria for diagnosis of autism, both listing difficulties with social interaction and communication, as well as rigid and repetitive

behaviours, alongside specifying that symptoms must at least partially manifest in the early developmental period. The two manuals differ in that the DSM-5 additionally acknowledges the possibility that some autistic people experience hyper or hypo-sensory processing, a symptom frequently reported by autistic people (Marco et al., 2011; Robertson & Simmons, 2015). Whereas the ICD-11 contains more detailed instructions to differentiate between autistic people with and without co-occurring intellectual disability and/or impairment or absence of functional language.

Prevalence

Research suggests that the estimated global prevalence of autism is 1% of the population, meaning around 700,000 people in the UK (Baird et al., 2006; Brugha et al., 2012; Rydzewska et al., 2018; B. Taylor et al., 2013), although recent research suggests that prevalence in UK school pupils is between 2-3% (McConkey, 2020). Males are currently three times as likely to be diagnosed with autism than females (Loomes et al., 2017).

Autism is diagnosed through clinical interview and observation, with no reliable objective biological tests, and while the majority receive their diagnosis in childhood, increasing numbers of adults are also being assessed and diagnosed (Brett et al., 2016; Happé et al., 2016; Mukaetova-Ladinska et al., 2012; Povey & Mills, 2011). As autistic people age, they will often report having learnt skills and coping mechanisms to compensate for difficulties that they've experienced growing up. Many will socially camouflage to varying extents, which is the conscious or unconscious masking of autistic behaviours or traits that may then make someone appear non-autistic (Hull et al., 2017; Lai et al., 2017; Livingston & Happé, 2017). Camouflaging, differing cultural and gendered conceptions of autism and disability,

and the changing clinical diagnostic criteria for autism over time mean that many older autistic adults, autistic women and non-binary people, and those from ethnic minorities, may have been mis-diagnosed or missed out on a diagnosis altogether (Gould, 2017; Hussein et al., 2019; Kirkovski et al., 2013; Lai & Baron-Cohen, 2015; Linton et al., 2014). Alongside these factors, getting a diagnosis can be a lengthy and complicated process due to lengthy waiting lists for adult diagnostic services in the UK (Unigwe et al., 2017), meaning that prevalence estimates for autism may be lower than the true number of autistic people in the population.

Co-occurring conditions

In addition to the challenges often associated with being autistic, 70% of autistic people are estimated to have an additional condition (NICE, 2011, 2012). For example, many autistic people may be neurodivergent in several ways. Neurodivergence is a term used to describe people with atypical neurodevelopment, and includes those with Attention Deficit Hyperactivity Disorder (ADHD), dyslexia, and dyspraxia, alongside autism (Russell & Pavelka, 2013). ADHD is one of the most common co-occurring neurodevelopmental conditions with autism, it is estimated that 30%-80% of the autistic population also have ADHD (Rommelse et al., 2010; Simonoff et al., 2008).

Around 30% of autistic people have additional intellectual disability (ID), defined as a score two standard deviations or greater below the population mean on a standardised IQ test (Christensen, 2018). Although there is a higher prevalence of ID co-occurring with autism than for those who are neurotypical - those with typical neurodevelopment - the intellectual abilities of autistic people vary from profound ID to extraordinary ability (Charman et al., 2010). In this thesis I shall predominantly focus on the experiences of autistic people with no co-occurring ID, whom I will refer

to as being 'cognitively able', although a minority of individuals with ID are included in my research as well and will be clearly identified.

It is estimated that around 70% of autistic people have a mental health condition, and that 40% have two or more (Buck et al., 2014; Croen et al., 2015; Griffiths et al., 2019; Joshi et al., 2013; Roy et al., 2015; Russell & Pavelka, 2013; Simonoff et al., 2008), with anxiety and depression being the most common (Lever & Geurts, 2016; Simonoff et al., 2008; Strang et al., 2012). Autistic people also report having lower quality of life than the general population (Ayres et al., 2018; Mason et al., 2018).

Disorder, disability, difference and language used

Autism has always been described in the diagnostic manuals as a disorder and this medical model focuses on impairment. There have been several scholars and the wider autistic community who challenge this deficit-based approach. Sociologist, Judy Singer, coined the term 'neurodiversity' in 1999, which she used to help conceptualise having neurodevelopmental conditions, such as autism, as natural cognitive variation that required acceptance and accommodation, not treatment (Silberman, 2015; Singer, 1999). There are increasing calls to consider autism as a disability, or even simply a difference, rather than a disorder (Baron-Cohen, 2017; Kapp et al., 2013). The neurodiversity paradigm has become more widely accepted and those who ascribe to it are more likely to view autism as a positive identity that needs no cure (Kapp et al., 2013). Despite these evolving conceptions of autism in society, it is still diagnosed today as a disorder, a term which is often understood to identify something that needs treating, and a substantial amount of research still focuses on causation, correction and cure (Baron-Cohen, 2017; Pellicano et al., 2013). This is in contrast to the desires of the autism

communities who would prefer the focus of research to prioritise management of practical, social, and emotional issues concerned with the day-to-day lives of autistic people and those who care or work with them (Pellicano et al., 2014).

Another area of contentious debate around the language used to describe autism is whether people who have received diagnoses of autism should be referred to as 'autistic' or as a 'person with autism' or using other terms such as 'on the spectrum'. While there is no single way of describing autism that is universally accepted by autistic people and the communities that surround them, the majority of autistic people themselves prefer identity-first language and to be referred to as autistic rather than having autism (Kenny et al., 2016), and so the language in this thesis will reflect these preferences.

Autistic adults in society

Pursuing employment

Many autistic people wish to go on to higher education and employment and lead independent lives, but research suggests that autistic people have the lowest employment rates of all disability groups (Howlin et al., 2005, 2013). Despite reporting a strong desire to work (Chen et al., 2015; Nouf-Latif et al., 2019), autistic people both struggle to find and maintain employment (Kamio et al., 2013; van Heijst & Geurts, 2015). In the UK, autistic adults are estimated to have very low employment rates. The National Autistic Society (2016) found that only 16% of autistic adults are estimated to be in full-time paid work and 32% of autistic adults are in any kind of paid work, and the Office for National Statistics (2021) recently found that only 22% of autistic adults were reporting being in any kind of employment. These figures may be an underestimation due to autistic adults who do

not disclose or who have not been diagnosed (Romualdez et al., 2021). Even when accounting for possible underestimation, these figures for autistic people in employment are still in stark contrast to 47-52% of other disability groups, and 80-81% of the non-disabled population in the UK who are in paid work (National Autistic Society, 2016; Office for National Statistics, 2021).

Experiences of employment

Employment plays an important role in individual well-being, but for many autistic people it can be difficult to gain and maintain employment. Autistic people, alongside having high rates of unemployment, are also more likely to be underemployed (in jobs that underutilise their knowledge, skills, and experience) and malemployed (in jobs that they are unsuited for) than the general population (Baldwin et al., 2014). Many autistic people work in positions below their qualifications or skill level, working reduced hours and receiving lower rates of pay than their co-workers in comparative positions (Howlin et al., 2005; Roux et al., 2013).

The first challenge autistic people face when accessing employment is the recruitment and interview process. This requires social presentation skills and impression management, skills which autistic people can often find difficult and can place them at a disadvantage compared to neurotypical candidates (Chen et al., 2015; Hendricks, 2010; Lorenz et al., 2016; Maras et al., 2020).

Autistic adults who are currently, or have been, employed report multiple challenges in their workplaces. Autism is a condition characterised by difficulties in social communication and social interaction, and these differences in communication style to neurotypical people can lead to workplace difficulties with co-workers or

supervisors (Burt et al., 1991; Hurlbutt & Chalmers, 2004; Remington & Pellicano, 2018).

Autistic employees can also struggle with non-social aspects of jobs, such as tolerating unpredictable situations, adapting when last-minute changes occur, or adjusting to new job settings (Hurlbutt & Chalmers, 2004; López & Keenan, 2014; Ruef & Turnbull, 2002). With it being estimated that approximately three quarters of autistic people may also experience sensory processing differences (McCormick et al., 2016), the workplace can also contain overwhelming environmental stimuli for many that are difficult to tolerate, especially for those who are hypersensitive to things like light and sound (Bury et al., 2020; Marco et al., 2011).

Together, these challenges may contribute to autistic people having negative work attitudes and non-normative behaviours in the workplace (Hedley et al., 2021; Rehfeldt & Chambers, 2003). Over time, such negative experiences may contribute to shorter job tenure and uneven work history, which can then negatively affect future job prospects and reduce quality of life (Carr, 2014).

Many of the challenges autistic adults face in the workplace relate to interactions with, or attitudes of, employers (Baldwin, Costley, & Warren, 2014; Hurlbutt & Chalmers, 2004; López & Keenan, 2014; Unger, 2002). Knowledge and attitudes of neurotypical employees (or employers) towards autistic colleagues have been highlighted as critical factors to the successful employment of autistic workers (Annabi & Locke, 2019). These factors form part of the adapted Organizational Interventions Mitigating Individual Barriers (OIMIB) framework, originally created by Annabi and Lebovitz (2018), to address barriers that women face in the Information Technology (IT) industry. Annabi and Locke (2019) applied the OIMIB theoretical framework to interpret autism employment research and its impact in the IT industry

and beyond, by focusing on individual, intervention, and organisational levels and how these interrelate to barriers faced by autistic people in employment. Ultimately it is employers who can often generate and enforce changes to the working environment, that can make a crucial difference to autistic employees.

It is important to also remember that research suggests that autistic employees tend to be reliable, trustworthy and conscientious, and they often complete work to a high standard (Hagner & Cooney, 2005; Scott et al., 2017). Investing in adapting the working environment to support and retains autistic employees isn't just an inclusive approach, it also benefits businesses financially to maintain a neurodiverse workforce.

Support needed for employment

Effective support can help address the challenges outlined above. Autistic people can particularly require support when transitioning from education to employment and then frequently report wanting support in order to maintain employment as well (Howlin et al., 2005; Taylor & Seltzer, 2011). Unfortunately, this desired support and workplace adjustments are not always made available to them (e.g., mentoring arrangements, sensory adjustments, adjustment to the timetables and tasks) (Hurlbutt & Chalmers, 2004; López & Keenan, 2014; Ruef & Turnbull, 2002).

While there have been some higher-education focused support programmes (see p.32 for details; Lucas & James, 2018; Siew et al., 2017; Thompson et al., 2018), there is a scarcity of experimental studies that have examined the effectiveness of employment-based support for autistic adults (Gelbar et al., 2014).

The support that is most commonly offered to autistic workers focuses on adapting to the workplace, through methods such as on-the-job training,

explanations about workplace culture, and task simplification (Khalifa et al., 2020; Scott et al., 2018). Access to job coaches and employment specialists can also be useful as they can provide environmental assessments of workplaces, make practical recommendations for changes to support the autistic employee, and provide wider autism training to surrounding colleagues and employers (Reid et al., 2010). All of these adaptations fall under the umbrella of supported employment, which includes individualised job placements, support in applying for work, and assistance within the work environment. Supported employment for autistic adults has led to improved work-based self-confidence and self-reported quality of life, alongside increasing employment rates (García-Villamisar et al., 2002; Hendricks & Wehman, 2009; Howlin et al., 2005). The most successful outcomes are seen when the autistic person themselves plays a role in decision-making regarding the nature of the support they receive (Remington & Pellicano, 2018).

Experiences of higher education

For many who aim to enter employment, a higher education degree is required and there are increasing numbers of autistic school leavers interested in pursuing higher education (Camarena & Sarigiani, 2009; Sarrett, 2018; Wei et al., 2016). Yet, estimates from the United Kingdom suggest that fewer than 25% of autistic school leavers go on to further or higher education (Office for National Statistics, 2009). Such estimates are in contrast to the general population, where 43% of adults under the age of 30 in England were in higher education at that point in time (The National Archives, 2011). For those autistic people who attend higher education, as in employment, there can be many challenges to overcome, including difficulties dealing with social interactions, course structure and curriculum demands (Beardon et al., 2009). Autistic students can find the transition to university life

challenging, and without adequate support they can struggle with both academic and social aspects, which can lead to them not completing their university courses (Cage et al., 2020). A study that carried out interviews and focus groups with autistic students attending a British university found that they reported challenges with social inclusion, communication, management of academic demands, anxiety, depression, and low self-esteem (Martin, 2012). With inherent differences in social communication and interaction to neurotypical people, autistic students can struggle to establish social networks at university, which lead to increased loneliness and isolation (Lei, Brosnan, et al., 2020). These difficulties can also affect their ability to participate in group work and live successfully in group accommodation (Adreon & Durocher, 2007; Lambe et al., 2019; Lei, Calley, et al., 2020; Lei et al., 2019). There are also non-social challenges such as difficulty with adapting to last minute room changes or changes to teaching staff, alongside dealing with sensitivity to sensory stimuli, such as flickering lights, or the noise of others typing on computer keyboards

(Beardon et al., 2009; Cai & Richdale, 2016; Gelbar et al., 2014; Van Hees et al., 2015; VanBergeijk et al., 2008; White et al., 2011). All of these challenges can lead to reduced class attendance and concentration, as well as increase difficulty with social interaction.

Case studies of autistic students in higher education have also revealed that these students may be at particular risk of anxiety, loneliness, and depression, alongside suicidal ideation and attempts due to poor university adaptation and that they require both academic and non-academic supports (Gelbar et al., 2014; Jackson et al., 2018; Jobe & Williams White, 2007; Madriaga & Goodley, 2010).

For many students, struggling to adapt to university life and financial stress can drive higher incidence of mental conditions than the general population. Having

a disability can also contribute to these struggles (Stallman, 2010; Verger et al., 2009). The majority of the autistic population are estimated to have mental health conditions (Lever & Geurts, 2016; Roy et al., 2015; Simonoff et al., 2008), with anxiety and depression being most prevalent (Strang et al., 2012). Students who are both autistic and experiencing mental health conditions may therefore face significant challenges in accessing their higher education.

Support needed for higher education

Support from higher education institutes can help to address and mitigate many of the challenges described above. Data collected from 99 UK universities revealed that the most common types of support provided for autistic students were consistent accommodation arrangements (92%), face-to-face time with staff (91%), and provision of academic supports (90%), alongside other types of support such as transitional support and staff training (Chown et al., 2018). There have also been several higher education focused-support programmes that have examined the effects of mentorship on autistic students. Lucas and James (2018) reported on the experiences of eight autistic students at a UK university who had received mentoring from specialist mentors. They found that the autistic students felt that receiving the mentoring had helped them improve their academic skills, their social skills and well-being, alongside increasing their confidence in relation to their studies. They identified that the quality of the relationship between mentor and mentee was understood to be critical to the effectiveness of the support. Other mentoring programmes have found similar results, with autistic students reporting that receiving mentorship helped them to develop their social skills, lowered general communication apprehension, and increased their autonomy (Ames et al., 2016; Siew et al., 2017; Thompson et al., 2018)

Although the methods of support discussed appear to be effective when tested and have been made available to some students, in reality the provision of support autistic students are able to access in higher education can often be inappropriate, inconsistent or lacking (Pugliese & White, 2014; VanBergeijk et al., 2008; White et al., 2011). Well-meaning disability support staff at universities can offer help, but do not always have a clear understanding of the specific needs of autistic students, which can result in inappropriate support (Knott & Taylor, 2014). Both autistic students and their family members, when asked to evaluate the support they had received from their higher education institutes, felt that it often focused on purely academic needs or social ones, but rarely covered both areas sufficiently (Fabri et al., 2014). For example, some autistic students receive help for studying but nothing to address challenges that do not directly relate to their learning. On the other hand, some students who receive coaching or mentoring that focused on their autism described how their mentors did not always understand their academic work or how their department worked which hindered the specificity and effectiveness of the support (Fabri et al., 2014). The heterogeneity of autism and the needs of each student, as well as autistic people's reservations about disclosing their diagnostic status to institutions can mean universities struggle to provide support for the specific challenges each student may face (Van Hees et al., 2015).

When autistic students were interviewed and asked to identify support that would be potentially helpful to them, the students described how important it was to take a personalised approach to support, alongside wanting academic accommodations, and coaching in education, student life and daily living (Van Hees et al., 2015). Adopting a person-centred approach and allowing the autistic person themselves to identify their needs, as in employment, appears to be the way to most

successfully support autistic students (Fabri et al., 2014; Remington & Pellicano, 2018).

How those with high levels of autistic traits may face similar challenges

In addition to those who have received, or qualify for, a formal diagnosis of autism, there are also suggestions that certain behavioural characteristics extend into the general population (Constantino & Todd, 2003; Hoekstra et al., 2007). Observations like these, were first made by Kanner (1943), who noted that a number of parents of autistic children were "serious minded, perfectionistic individuals, with an intense interest in abstract ideas" and seemed uninterested in developing relationships with others. Then Folstein & Rutter (1977) went on to propose that genetic links to autism may be present in the relatives of autistic people, and so these relatives may also express behavioural traits of autism, to a milder extent. This was conceptualised as the Broad Autism Phenotype (BAP), with numerous studies confirming elevated rates of social, communication, personality, and cognitive characteristics seen in parents, siblings and extended family members of autistic people (Pisula et al., 2015; Sucksmith et al., 2011).

Autistic traits can be behavioural traits such as social imperviousness, being direct in conversation, having an affinity for solitude, and difficulty with displaying emotions (Gernsbacher et al., 2017), and they are seen at varying levels across the population, with higher levels typically seen in those with clinical diagnoses of autism (Ruzich et al., 2015). Whilst autistic traits represent a continuous dimension across the general population, autism is a categorical diagnosis and the relationship between the two is unclear (Brosnan, 2020). On measures of autistic traits such as the Autism Quotient (AQ; Baron-Cohen et al., 2001) and the shortened version (AQ10; Allison et al., 2012), as well as dimensional assessments there have been

differences in performance between those with clinical diagnoses of autism, and those without. Those who are self-reporting autism, without a diagnosis, report comparable social difficulties but fewer restricted and repetitive behaviour to those with diagnoses (Brosnan, 2020). There are also several studies that have shown scoring highly on the AQ and above threshold for clinical significance is not consistently predictable of receiving a formal autism diagnosis (Bishop & Seltzer, 2012; Conner et al., 2019; Sizoo et al., 2015).

Although there may be some differences in areas of difficulty for those who have been clinically diagnosed with autism compared to those who with high levels of autistic traits, there are also many commonalities. For example, higher (albeit subclinical) autistic traits in individuals (without a formal autism diagnosis) are related to difficulties such as poorer social cognition and social skills (Sasson et al., 2013) and cognitive and behavioural inflexibility (Wainer et al., 2011).

Examining the relationship between autistic traits and other factors can be useful, both to specifically understand the profiles and difficulties of those with elevated levels of autistic traits (but without diagnoses) but also to further our understanding of autism. It is important to bear in mind that as discussed above (on p.23), there may be many autistic adults who have not yet received a clinical diagnosis of autism for a variety of reasons (Gould, 2017; Hussein et al., 2019; Kirkovski et al., 2013; Lai & Baron-Cohen, 2015; Linton et al., 2014; Unigwe et al., 2017). Including measures of autistic traits, alongside asking participants about clinical diagnoses, means that we are potentially capturing more of the autistic population in research, than when we only include those who have been able to obtain clinical diagnoses. Studying autistic traits also means that we can run correlational analyses to look at their relationship to other measures, which is often

statistically more powerful than between group analyses (used to compare those with and without a diagnosis). Examining the experiences of those with elevated levels of autistic traits can offer valuable insight into this population, but also help further understanding about how similar challenges faced by autistic people and those with high levels of traits can be mitigated with the right support (Landry & Chouinard, 2016).

Autism and the performing arts

The performing arts industry

The performing arts are defined by the Merriam-Webster (2021) dictionary as "types of art (such as music, dance, or drama) that are performed for an audience", but it has been discussed as to whether this definition should extend to any human activity that occurs in front of an audience, at least some of the time (Manchester, 2009). The performing arts is a broad industry, with a multitude of professions contained within it, and it is estimated that there are 296,000 people working in the performing arts in the UK (Planit, 2020). There are also many employed members of the performing arts industry who do not directly take part in performances, but work behind the scenes or are involved in the administration, production, or management of artistic productions. There has been very little research on the employment experiences of those who work in the performing arts, but the industry both in the UK and abroad, is anecdotally acknowledged to contain a high incidence of poor mental health which may be driven by poor and unstable working conditions (ArtsMinds, 2017; Eynde et al., 2016).

Pursuing a career in the performing arts and how this may impact mental health, quality of life, and support

As noted above, the performing arts is a wide and varied profession but, typically, artists are self-employed and require a broad range of areas beyond their own specialism in order to forge a successful career. Small business and project management skills, including administration, financial management, time management, networking, grant and application writing, arts advocacy and self-promotion, are therefore highlighted as particularly essential to sustaining a career in the performing arts (Bennett, 2009). These skills place considerable demand on people's executive functions, including flexibility, planning and organisation, and on social communication – two areas in which autistic people often have particular difficulties (American Psychiatric Association, 2013; Wallace et al., 2016).

While autistic people may encounter these challenges in every type of career, they may be exacerbated in the performing arts, an industry dominated by short-term contracts, with high reliance on networking and social interaction. It is estimated that around one quarter of performing arts graduates work as freelancers, in comparison to around 5% of the general graduate population (Planit, 2020). Being employed in a project-based system, with frequent bidding for work, inherently involves a high level of uncertainty, and may undermine the ability to achieve the sense of routine with which many autistic people feel comfortable. Furthermore, applying for and attending job interviews and auditions necessary to secure the next project are scenarios that require high levels of social interaction and communication, which autistic people can struggle with (American Psychiatric Association, 2013; Menger, 2006; VanBergeijk et al., 2008). Nevertheless, a recent employment survey for autistic adults revealed that 11% of respondents hoped to work in the arts or acting, demonstrating a clear desire for at least some of the autistic population to pursue careers within this field (National Autistic Society, 2016).

Are there autistic people pursuing performing arts careers?

In research, creativity is not something that has been traditionally associated with autism. Creativity is generally agreed upon in the literature to contain two key elements: originality and effectiveness (Runco & Jaeger, 2012). Kanner (1949) described autism as being characterised by "an obsessive desire for the preservation of sameness" and this vein of thinking is still present in a key diagnostic criterion for autism – rigid and repetitive behaviours and interests – as well as difficulties with shared imaginative play (American Psychiatric Association, 2013). The ability to imagine has also been linked to creative output, but this is not solely in the sense of play and social interaction, but more broadly understood to be involved in the creation of new concepts (Li et al., 2007; Liang & Lin, 2015).

These traits, alongside research suggesting that autistic people tend to exhibit less flexibility and fluency on creative tasks compared with neurotypical people (Craig & Baron-Cohen, 1999; Liu et al., 2011; Turner, 1999), suggest that creativity and out-of-the-box thinking might be challenging for autistic people. This assumption may lead many to think that there are very few autistic people working in the performing arts. Though there has been little systematic investigation into the relationship between autistic traits and creativity (Abu-Akel et al., 2020), recent work showing that autistic people excel at producing original output on creative tasks (Best et al., 2015; Kasirer & Mashal, 2014; Liu et al., 2011) has prompted researchers to rethink these traditional views. Autistic people and neurotypical people with elevated levels of autistic traits appear to consistently display high levels of originality on creative and divergent thinking tasks compared to non-autistic people and those with lower levels of autistic traits. The ability to generate novel

ideas is an important facet of creative problem solving and may be an adaptive advantage associated with autistic traits (Best et al., 2015; Pennisi et al., 2021).

Others, too, have recognised that, in practice, there are autistic people with great creative abilities, working across all fields (de Schipper et al., 2016; Fitzgerald, 2004; Lyons & Fitzgerald, 2013). One of many career paths associated with creative talent is that of the performing arts, and "being artistic" has been recognised by worldwide autism experts as a strength of autistic adults (de Schipper et al., 2016). Although prevailing stereotypes suggest that autistic people prefer solitary, computer-based jobs, we know, at least anecdotally, that autistic people are employed in many different areas, including creative disciplines like the performing arts.

The performing arts is a broad industry which contains a variety of roles both related to performance and to more technical aspects of production, performance itself is naturally aligned with creative approaches, but many roles within the industry require degrees of innovation (Bilton & Leary, 2002; Serrat, 2017). To my knowledge, there is no research that has specifically examined how creativity relates to different roles within the arts, but one can imagine that in performance and in the technical staging of production from lighting design, to writing scripts, to directing there is potential for originality and innovation and so this is a trait that will be potentially favoured in all roles.

The National Autistic Society's employment survey (2016) reported that 11% of their 2,080 autistic respondents stated that they hope to work in the arts or pursue acting careers. Cognitively able autistic adults are pursuing careers in a variety of disciplines, including many where university-level education is a desirable, and

sometimes even necessary, attribute. Increasing numbers of people pursuing careers in the arts are enrolling onto higher education courses as a means of learning practical skills (Bennett, 2009a). As such, there are likely to be autistic students also studying performing arts courses.

There are many examples of high-profile autistic performing artists, including actors such as Dan Aykroyd, Anthony Hopkins, Paddy Considine and Daryl Hannah, musicians such as Gary Numan, Matt Savage and Derek Paravacini, the opera singer Sophia Grech, and the dancer Philip Martin-Nielson, to name but a few (BBC News, 2011; Ewing, 2013; Grech, 2020; Lewis, 2014; Mackrell, 2015; Rainey, 2018; Varga, 2019; Willingham, 2020; Wylie, 2018). Despite many anecdotal reports, however, no existing research, at least to our knowledge, has examined the experiences of autistic individuals working in the performing arts field.

Summary and outline of thesis

Little is known about autistic people's experiences pursuing careers in the performing arts, but it is likely that they may be facing similar challenges to those seen in other industries. Many autistic people wish to pursue higher education and employment, and although estimated numbers of people doing this are low, there are still a significant minority pursuing these paths. Once autistic people reach higher education or employment, research suggests that they will encounter a number of challenges both associated with the core characteristics seen in autism, namely difficulties in social communication and interaction and struggling to tolerate unpredictable or changing environments, but also the attitudes and knowledge about autism held by their employers, educators, and colleagues. For example, if an employer's autism knowledge is low this can be a significant barrier to an autistic

person accessing employment and gaining access to the support they may require. The challenges that autistic people face in employment and higher education may also extend down to those with subclinical levels of autistic traits.

In Chapter 2, I examine the relationship between autistic traits, occupational self-efficacy, quality of life, mental health, and need for support in performing arts professionals, as well as looking at performing arts professionals' experiences of accessing support in the industry.

In Chapter 3, I look at whether there are similar relationships between autistic traits, educational self-efficacy, quality of life, mental health, and need for support in the performing arts student population. Additionally, I will compare their experiences to students studying other subjects, in order to test whether students are encountering unique challenges in performing arts education.

In Chapter 4, I analyse, in-depth, the support needs and views of autistic performing arts professionals on working in the industry, and the attitudes and levels of autism knowledge of performing arts employers.

In Chapter 5, I report on the feasibility and acceptability of professional mentoring as a form of employment-based support for autistic performing arts professionals.

Finally, in Chapter 6, I summarise the main findings from the empirical studies presented in this thesis. I then go on to discuss the contributions the studies have made towards our understanding of the experiences and support needs of autistic performing arts professionals. I describe the limitations of my research, and I outline the implications and possible future directions for this area of research.

Chapter 2

Higher levels of autistic traits associated with lower levels of self-efficacy and wellbeing for performing arts professionals

Note: The study that forms the basis of this chapter has been published in *PLOS ONE* (Buckley et al., 2021b). The method and results sections have been reproduced here, and the introduction and discussion are reproduced in part, with edits.

Introduction

Chapter 1 showed that the existing literature paints a picture of an autistic population and those with elevated autistic traits who may have additional needs but have been thus far overlooked – especially within creative disciplines, such as the performing arts. It is anecdotally acknowledged that working in the arts is associated with high levels of mental health conditions and the nature of the industry, with short-term contracts and a high reliance on networking and social interaction, may be particularly strenuous for autistic people and those with elevated levels of traits to navigate (American Psychiatric Association, 2013; Menger, 2006; VanBergeijk et al., 2008). These potential challenges may mean that the autistic population pursuing careers in the arts may have unmet support needs. Yet, the paucity of research in this area means that the extent and nature of these needs, and what career-specific

support this population may desire is virtually unknown. In the study presented within this chapter, I will address this by examining the relationships between autistic traits and other factors, alongside investigating performing arts professionals' experiences of accessing support.

Two specific areas will be considered: self-efficacy and wellbeing. In neurotypical adults, self-efficacy – one's belief in one's ability to succeed (Bandura, 1977) – has found to be positively correlated with self-reported quality of life, and inversely related to severity of mental health traits (Luszczynska et al., 2005). Self-efficacy is also positively associated with work-related outcomes such as job performance, job satisfaction, and academic performance (Judge & Bono, 2001).

With autistic adults facing potential challenges in the workplace, it stands to reason that they may be feeling less confident than their neurotypical peers in their ability to complete tasks related to these environments. They may also be facing actual difficulties completing work-related tasks, receiving less verbal encouragement than neurotypical peers which therefore can lead to the belief that they cannot perform tasks well. Cognitively able autistic adults have been shown to have significantly lower self-efficacy in both general and occupational self-efficacy than neurotypical adults (Lorenz & Heinitz, 2014). Furthermore, self-efficacy has been shown to be better in workplaces that provide individualised support for autistic employees' specific needs, but nevertheless remains significantly lower than that of neurotypical individuals (Lorenz et al., 2016).

Approximately 70-80% of autistic children and adults also experience mental health problems (Lever & Geurts, 2016; Roy et al., 2015; Simonoff et al., 2008), with anxiety and depression being the most common (Strang et al., 2012). These figures in the autistic population are in stark contrast to estimates of 17% of the adult

population in England who meet criteria for a mental health condition at any one time (McManus et al., 2016). Alongside poorer mental health, autistic adults also typically report poorer quality of life than that of neurotypical people (Kamio et al., 2013; Kamp-Becker et al., 2010) and autistic traits have been found to be inversely correlated with quality of life (Pisula et al., 2015). Individuals with co-occurring autism and ADHD are more likely to have a poorer quality of life than individuals with only one of these conditions (Leitner, 2014), and also have lower general self-efficacy (Newark et al., 2016) and encounter greater difficulties with everyday functioning than autistic people without ADHD (Rao & Landa, 2014). For this reason, I have included an ADHD trait measure and recorded ADHD diagnoses in participants in order to examine the potential influence of ADHD traits on self-efficacy and quality of life.

The current study

The specific aims of this study were threefold. First, I sought to record the experiences of autistic individuals and those with elevated autistic traits pursuing careers and seeking career-based support in the performing arts. Second, I examined the relationship between level of autistic traits and occupational self-efficacy, quality of life, and mental health in performing arts professionals. There is already an established relationship between autism and these variables, and the present study investigated whether these extended to sub-clinical levels of autistic traits. Third, I investigated the relationship between individuals' level of autistic traits and their support needs.

To address these aims, an online questionnaire was completed by adults who worked in the performing arts. I predicted that individuals with higher levels of autistic traits would have lower self-efficacy, poorer mental health, lower quality of life, and

would be more likely to have needed and to desire occupational support than those with lower levels of autistic traits.

Method

Participants

A large number (n = 1,427) of performing arts professionals based in the United Kingdom (UK) completed an online questionnaire powered by Qualtrics (Qualtrics, 2019). Demographic information is shown in Table 1. Of the performing arts professionals, there was a nearly even gender split with slightly more female participants (55%) and the majority of respondents reported to be of White ethnic background (89%). Professionals reported having worked in the performing arts for an average of 10 years (ranging from under 1 year to over 20 years; see Table 1). Participants were recruited through convenience sampling methods, whereby the online questionnaire was advertised through targeted emails to performing arts groups including members of the UK performing arts union, Equity, promotion on social media, and word of mouth.

Table 1

Performing arts professionals' characteristics

Characteristic	Performing arts professionals N = 1,427
Age	
Mean, years (SD)	43.9 (15.0)
Median, years	42
Range	18-89
18-19, years	1 (<1%)
20-29, years	293 (21%)
30-39, years	349 (24%)
40-49, years	262 (18%)

50-59, years	258 (18%)
60-69, years	188 (13%)
70-79, years	63 (4%)
80-89, years	9 (<1%)
Prefer not to say	4 (<1%)
Gender	
Female	784 (55%)
Male	622 (44%)
Non-binary or other	12 (1%)
Prefer not to say	9 (1%)
Ethnicity	
White	1,270 (89%)
Black	41 (3%)
Asian	16 (1%)
Any other ethnic group	83 (6%)
Prefer not to say	17 (1%)
Highest level of education completed or in progressα	
No schooling completed	8 (1%)
GCSEs	46 (3%)
BTECs	22 (2%)
A Levels or IB	71 (5%)
Trade, technical, or vocational training	152 (11%)
Undergraduate degree	644 (45%)
Postgraduate degree	342 (24%)
Other	136 (10%)
Prefer not to say	6 (<1%)
Length of time working in the performing arts	
Under 1 year	55 (4%)
1-5 years	229 (16%)
6-9 years	166 (12%)
Over 10 years	973 (68%)
Prefer not to say	4 (<1%)

Notes. GCSE stands for General Certificate of Secondary Education, BTEC stands

for Business and Technology Education Council diploma, A Level stands for

Advanced Level, IB stands for International Baccalaureate.

Measures

The online questionnaire contained six sections, which took approximately 25-

30 minutes to complete.

1. Part 1 of the questionnaire began with a series of demographic items, including

   participant age, gender, ethnicity, and highest level of education. Participants

were then asked to identify whether they were currently working in the performing arts.

2. Part 2 of the questionnaire contained a bespoke scale to measure occupational self-efficacy for performing arts professionals. The bespoke scale was designed to address the unique demands of performing arts career (Bennett, 2009a). It was based on Bandura (Bandura, 2006) but was adapted specifically to target professionals' perceived confidence when performing activities associated with their performing arts careers. The scale specifically focuses on participants' perceived confidence to complete tasks, rather than a broader interpretation of self-efficacy as originally defined by Bandura (1977). An initial focus group was held with 6 performing arts professionals to help identify appropriate items to be included on the scale. Following Bandura (Bandura, 2006), the self-efficacy scale contained 24 items where participants could respond to each item with a score ranging from 0 ("not at all confident") to 10 ("extremely confident"). Items used in the scales included, among others, "Interview / audition for roles", "Fully understand all instructions given to me", and "Get a colleague or peer to help me if I have difficulty interacting with others at my workplace". Participants could select 'not applicable' to individual items on the self-efficacy scale which were not relevant to their careers. Scores from all items completed were averaged to yield a mean self-efficacy score. Higher scores reflected greater occupational self-efficacy. The scale showed excellent internal consistency (Cronbach's alpha = .94) [see S1 Supplementary Materials for the full scale, and analysis concerning the reliability of the scale for participants with missing values].

3. Part 3 of the questionnaire contained three closed questions about support in relation to professionals' workplaces: Question 1: "Have you ever needed extra

support for your performing arts career but did not receive it?"; Question 2: "Have you ever received extra support for your performing arts career?"; Question 3: "Would you like extra support for your performing arts career?". Participants could answer "yes", "no", or "I do not wish to answer this question" to each question. Participants were then asked to provide details about the support needed, received or desired in an open comment box.

4. Part 4 of the questionnaire asked participants to provide details regarding whether they had received clinical diagnoses of autism, mental health conditions/neurological conditions, and/or a specific learning difficulty (e.g., dyslexia). If participants reported that they had any condition that was contained within those categories, they were then asked, "Do you feel that your condition(s) impacts on different aspects of your career? If yes, please go into detail here" and an open comment box was available for participants to provide details.

5. Part 5 of the questionnaire contained several established psychological measures to examine traits related to various neurological conditions and current levels of wellbeing.

The Subthreshold Autism Trait Questionnaire (SATQ; Kanne et al., 2012)) was created to assess a broad range of subthreshold traits of autism in a general population. Unlike the Autism Quotient (AQ; Baron-Cohen et al., 2001)) which was designed to highlight presentation of symptoms that are characteristic of Asperger Syndrome, the SATQ provides a measure of a broader range of autistic traits (Kanne et al., 2012; Nishiyama et al., 2014). The SATQ has 24 items, and has good internal consistency and reliability (Cronbach's alpha coefficient = .73, test-retest reliability = .79; Kanne et al., 2012); in the present study, Cronbach's alpha coefficient = .83). The SATQ asks participants to respond to statements such as "I sometimes take

things too literally, such as missing the point of a joke or having trouble understanding sarcasm" with a 4-point scale ranging from "false, not at all true" (score of 0) to "very true" (score of 4). High scores on the SATQ reflect high levels of autistic traits. There is currently no cut-off point for this scale associated with receiving an autism diagnosis.

The Patient Health Questionnaire depression scale (PHQ-8; Kroenke & Spitzer, 2002) is an 8-item questionnaire, which assesses traits of depression. It asks participants to rate how often in the past two weeks they have had particular feelings or acted in a certain way, for example, "feeling down, depressed, or hopeless" and "trouble concentrating on things, such as reading the newspaper or watching television" on a 4-point scale ranging from "not at all" (score of 0) to "nearly every day" (score of 3). Higher scores reflect greater severity of depression. The PHQ-8 cut-off point (scores of 10 or greater) has a sensitivity of 88% and a specificity of 88% for detecting major depression (Kroenke & Spitzer, 2002), good internal consistency (Cronbach's alpha coefficient = .89; Kroenke et al., 2001a) and, regardless of diagnostic status, scores above cut-off point typically represent clinically-significant depression (Kroenke et al., 2001b).

The Generalised Anxiety Disorder scale (GAD-7; Spitzer et al., 2006) assesses traits of anxiety and asks participants how often over the past two weeks have they been bothered by feelings such as "feeling nervous, anxious, or on edge" and "becoming easily annoyed or irritable". Participants respond to seven questionnaire items with a 4-point scale ranging from "not at all" (score of 0) to "nearly every day" (score of 3), higher scores reflect greater severity of anxiety. The cut-off point for the GAD-7 (scores of 10 or greater) has a sensitivity of 89% and

specificity of 82% for detecting generalized anxiety disorder and good internal consistency (Cronbach's alpha coefficient = .89; Spitzer et al., 2006).

The World Health Organization Adult ADHD Self-Report Scale (ASRS; Kessler et al., 2005) was used to assess traits of ADHD. Participants were asked to respond to 6 questionnaire items (e.g., "How often do you have difficulty getting things in order when you have to do a task that requires organization?") using a Likert scale ranging from "never" (score of 0) to "very often" (score of 4). Higher scores reflect higher ADHD symptom severity. The ASRS screener (Kessler et al., 2005) was scored in line with the recommendations of (Ustun et al., 2017) to be consistent with criteria for ADHD described in the DSM-5. The screener with updated scoring has a sensitivity of 80% and specificity of 90% for identifying people who have a diagnosis of ADHD (Ustun et al., 2017) and good internal consistency (Cronbach's alpha coefficient = .95; Brevik et al., 2020).

The World Health Organization abbreviated version of the WHOQOL-100 quality of life assessment (The Whoqol Group, 1998). The WHOQOL-BREF contains 26 items (e.g., "how satisfied are you with your ability to perform your daily living activities?"), which measure four domains of quality of life (physical, psychological, social, environment). The WHOQOL-BREF contains several sections that are all scored differently. Overall, higher scores on the four domains of the WHOQOL-BREF reflect greater quality of life within those specific domains. The WHOQOL-BREF has been shown to be comparable to the WHOQOL-100 in having excellent ability in discriminating between ill and well respondents, good internal consistency (Cronbach's alpha coefficients for the four domains: Physical = .87; Psychological = .74; Social = .55; Environment = .74) and high test-retest reliability across all four domains (Skevington et al., 2004).

6. Finally, in Part 6, participants could opt to make any extra remarks about their career or thoughts about the questionnaire in one final open comment box.

Procedure

Ethical approval was obtained from UCL Research Ethics Committee. The online questionnaire was anonymous. Given that I was particularly interested in relationships between measures, only respondents who completed all six parts of the questionnaire were included in analysis.

Data Analysis

Quantitative analyses. First, correlational analyses were performed to investigate the extent and nature of any relationships between levels of autistic traits (indexed by SATQ scores) and variables such as self-efficacy, quality of life, and severity of mental health conditions. Not all variables were normally distributed; we therefore used Spearman's rank correlation coefficients for such variables.

Next, to investigate the relationship between individuals' autistic traits and their perceived need for support, the professionals were divided into quartiles based on their SATQ scores. The data from the upper and lower quartiles were then compared in an extreme-groups analysis (EGA) to enable me to examine whether those with higher levels of autistic traits were more likely to have needed, received, or desired support than those with lower levels of autistic traits. All analyses were performed using IBM SPSS version 22 software (IBM, 2013).

A p-value of 0.05 was set, and due to the high number of comparisons the Holm-Bonferroni method was used to calculate adjusted alpha levels for each set of analyses to control the family-wise error rate (Holm, 1979).

Qualitative analyses. To understand the views and experiences of performing arts professionals with regard to the support that they have received and

their perceived support needs, participants' open-ended responses were analysed using thematic analysis, as detailed by (Braun & Clarke, 2006). The transcripts were analysed from an inductive (bottom-up) perspective where themes were created within a 'contextualist' method of critical realism (Willig, 1999). I carried out the thematic analysis with my principal supervisor and we approached the analysis from the perspective of psychology researchers who have not worked in the performing arts and do not identify as autistic, and so analysed the data from the perspective of outside interpreters. Analyses were performed using NVivo version 11 software.

Results

Quantitative analyses

Neurodivergence. The first aim of this study was to understand the extent to which autistic individuals are pursuing careers in the performing arts. There were eleven professionals (1%) who reported a clinical diagnosis of autism. The overall average score on the Subthreshold Autistic Traits Questionnaire (SATQ) for professionals was 16.84 (SD = 8.86). These scores are lower than the population average of 23, taken from an American student population of 1,709 (Kanne et al., 2012). Nevertheless, 50 professionals (4%) scored more than 2 SD above the mean score on the SATQ, suggestive of elevated levels of autistic traits. Overall, few participants reported a clinical diagnosis of ADHD (1%, n = 9), and 3% (n = 41) of performing arts professionals scored above the ASRS threshold for ADHD (Ustun et al., 2017). The percentages from both the screener and the reported clinical diagnoses are consistent with prevalence estimates of between 1-7% of the European population having ADHD (Fayyad et al., 2007). I found that eight percent

(n = 112) of professionals reported a specific learning disability, of which 79 (71%) reported a diagnosis of dyslexia.

Quality of life. Quality of life scores for the professionals were within population norms (Skevington et al., 2004). WHOQOL-BREF domain scores for all participants ranged between 4 and 20: Physical: M = 15.9 (SD = 2.5), Psychological: M = 14.0 (SD = 3.0), Social: M = 13.4 (SD = 4.1), and Environment: M = 15.3 (SD = 2.9).

Mental health. I found that fifteen percent (n = 214) of professionals reported a clinical diagnosis of depression, but almost one third of the group (n = 434; 30%) of professionals scored above the PHQ-8 cut-off point, indicating clinically significant levels of depression. These percentages are much higher than the US population-based study of over 198,000 participants, which recorded prevalence of 8.6% scoring over the cut-off point for clinical levels of depression (Kroenke et al., 2009).

A similar picture was evident with respect to anxiety: 13% (n = 190) of performing arts professionals reported a clinical diagnosis of anxiety, but 26% (n = 372) scored above the GAD-7 cut-off point, indicative of clinically significant levels of anxiety. Again, these percentages are much higher than population norms: 5% scored over the cut-off point in a German population-based study of over 5,000 participants (Löwe et al., 2008).

Self-efficacy. Professionals experienced high self-efficacy with respect to their profession (see Table 2 for mean scores). Professionals were most confident at taking part in performances (M = 9.00, SD = 1.50) and least confident at networking to secure future opportunities (M = 5.60, SD = 2.70).

Table 2

Mean scores and standard deviations for items on the performing arts professionals'

occupational self-efficacy scale.

Self-efficacy item	M (SD)	Range
1. Fully understand what I am required to do to be proactive in my career	7.5 (2.1)	0 - 10
2. Motivate myself to work (e.g. apply for roles, rehearse)	7.5 (2.1)	0 - 10
3. Fully understand all instructions given to me	8.3 (1.8)	0 - 10
4. Structure my time to manage my workload	7.3 (2.2)	0 - 10
5. Keep to external deadlines	8.6 (1.6)	0 - 10
6. Concentrate when at work	8.6 (1.6)	0 - 10
7. Remember information presented at work or in books	8.0 (1.8)	0 - 10
8. Take good notes during instruction from others	8.0 (1.9)	0 - 10
9. Independently study or research	8.1 (1.9)	0 - 10
10. Complete classes or workshops that I have signed up for	8.6 (1.8)	0 - 10
11. Participate in group exercises	8.0 (2.1)	0 - 10
12. Work with others to achieve a joint goal	8.8 (1.5)	1 - 10
13. Share my ideas in group discussions	8.2 (1.9)	0 - 10
14. Lead or coordinate my peers / colleagues in group work	7.5 (2.2)	0 - 10
15. Interview / audition for roles	7.5 (2.3)	0 - 10
16. Prepare for performances (this includes technical work, rehearsals, etc. as applicable)	8.8 (1.5)	1 - 10
17. Take part in performances	9.0 (1.5)	0 - 10
18. Make phone calls to people I don't know (for work-based purposes, e.g. to hire equipment)	6.8 (2.8)	0 - 10
19. Socialize with others in my workplace	7.5 (2.3)	0 - 10
20. Ask for help with my work (if required) from a colleague or peer	7.4 (2.3)	0 - 10
21. Ask for help with my work (if required) from an employer or member of production team	7.6 (2.2)	0 - 10
22. Get a colleague or peer to help me if I have difficulty interacting with others at my workplace	6.0 (2.8)	0 - 10
23. Get an employer or member of my production team to help me if I have difficulty interacting with others at my workplace	5.7 (2.9)	0 - 10
24. Network to secure future opportunities	5.6 (2.7)	0 – 10
Total	7.8 (1.3)	3-10

Support. Almost one quarter (24%, n = 348) of professionals reported that they had received occupational support. More than one third (37%, n = 529) of professionals reported that they had needed but not received support in their careers, and just under one half of the sample (44%, n = 621) reported that they would like to receive support in the future.

The relationship between autistic traits and other variables. As shown in Table 3, there were significant correlations between all variables, all of which survived corrections for multiple comparisons using the Holm-Bonferroni method, apart from the correlation between the social domain of the WHOQOL-BREF and age (Holm, 1979). As expected, professionals with elevated levels of autistic traits (i.e., high SATQ scores) had lower perceived self-efficacy as well as lower quality of life (as indexed by scores on all four domains of the WHOQOL-BREF). I also found significant correlations between SATQ scores and scores on measures of co-occurring conditions. Higher levels of autistic traits were associated with elevated levels of anxiety (GAD-7 scores), depression (PHQ-8 scores) and ADHD symptomology (ASRS scores). I also show in Table 3 partial correlations between autistic traits, occupational self-efficacy, the four domains of the WHOQOL-BREF, PHQ-8, GAD-7, and ASRS scores adjusted for gender and age as covariates. I found significant correlations between all of the variables.

Table 3

*Correlation matrices for performing arts professionals' scores on occupational self-efficacy, SATQ, WHOQOL-BREF domains, PHQ-8, GAD-7, ASRS, age, and gender. Correlations presented in the lower diagonal are the raw correlations between variables, correlations presented in the upper diagonal of the table are partial correlations between variables adjusted for chronological age and gender. Numbers with two asterisks ** beside them indicate a significant result.*

		SATQ	Self-efficacy	WHOQOL physical domain	WHOQOL psychological domain	WHOQOL social domain	WHOQOL environment domain	PHQ-8	GAD-7	ASRS	Age
SATQ	r_s	1.00	-.395**	-.327**	-.394**	-.281**	-.288**	.387**	.326**	.295**	
	Sig.		<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	
Self-efficacy	r_s	-.414**	1.00	.340**	.437**	.326**	.351**	-.316**	-.264**	-.278**	
	Sig.	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001	
WHOQOL physical domain	r_s	-.324**	.333**	1.00	.593**	.434**	.584**	-.584**	-.471**	-.362**	
	Sig.	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001	
WHOQOL psychological domain	r_s	-.404**	.458**	.590**	1.00	.576**	.611**	-.700**	-.626**	-.434	
	Sig.	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	

WHOQOL social domain	r_s	-.298**	.329**	.434**	.562**	1.00	.508**	-.439**	-.390**	-.272**	
	Sig.	<.001	<.001	<.001	<.001		<.001	<.001	<.001	<.001	
WHOQOL environment domain	r_s	-.340**	.399**	.584**	.619**	.503**	1.00	-.501**	-.473**	-.383	
	Sig.	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	
PHQ-8	r_s	.387**	-.361**	-.586**	-.697**	-.437**	-.505**	1.00	.784**	.496**	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001		<.001	<.001	
GAD-7	r_s	.344**	-.324**	-.494**	-.640**	-.379**	-.488**	.783**	1.00	.485**	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001		<.001	
ASRS	r_s	.320**	-.319**	-.348**	-.416**	-.257**	-.386**	.484**	.482**	1.00	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		
Age	r_s	-.141**	.237**	.03	.209**	.056	.281**	-.281**	-.294**	-.291**	1.00
	Sig.	<.001	<.001	.19	<.001	.04	<.001	<.001	<.001	<.001	
Gender	r_s	.175**	.01	.02	.05	-.04	.04	-.072**	-.114**	-.055*	.161**
	Sig.	<.001	.73	.41	.05	.14	.14	.01	<.001	.04	<.001

Notes. *Measures included in the table are: The Subthreshold Autism Trait Questionnaire (SATQ; Kanne et al., 2012) measuring autistic traits. The World Health Organization abbreviated version of the WHOQOL-100 quality of life assessment (The WHOQOL-BREF; Skevington et al., 2004) measuring the 4 domains of quality of life (physical, psychological, social, and environment). The Patient Health Questionnaire depression scale (PHQ-8; Kroenke & Spitzer, 2002) measuring depression traits. The Generalised Anxiety Disorder scale (GAD-7; Spitzer et al., 2006) measuring anxiety traits. The World Health Organization Adult ADHD Self-Report Scale (ASRS; Kessler et al., 2005) measuring ADHD traits.*

The relationship between high and low autistic traits and support. I

hypothesized that those with higher levels of autistic traits were more likely to have

needed and desired support than those with lower levels of autistic traits.

Percentages in parentheses indicate the proportion of participants who responded

"yes" to each question item.

I began by comparing the frequency of individuals reporting having previously

received support in the high and low autistic traits groups (see analysis section of

method for details of group creation). As shown in Table 4, professionals in the high

autistic trait group were just as likely to have received support (24%) as those in the

low autistic traits group (22%). Members of the high autistic traits group were

significantly more likely, however, to report having needed support but not having

received it (40%) than members of the low autistic traits group (34%). Analyses also

revealed a significant group difference in terms of how many of them desired support

in the future: professionals with high autistic traits were more likely to desire support

in the future (49%) than those with low autistic traits (38%).

Next, I examined the frequency of individuals in the high and low autistic traits

groups scoring at clinically significant levels for depression, anxiety and ADHD traits.

Professionals in the high autistic traits group were significantly more likely to meet

clinically significant thresholds on all of the measures (PHQ-8, GAD-7, ASRS) in

comparison to the low autistic traits group (odds ratio for high autistic traits group

scoring at clinical significance on PHQ-8 = 8.16; odds ratio for high autistic traits

group scoring at clinical significance on GAD-7 = 4.73; odds ratio for high autistic

traits group scoring at clinical significance on ASRS = 4.69).

Table 4

Extreme Groups Analyses using upper and lower quartiles of the performing arts professionals' SATQ scores to compare 'high autistic traits' and 'low autistic traits' groups.

	Pearson Chi Square Value	Degrees of freedom	Significance	Effect size (Cramer's V)
Received support	0.79	1	.374	.034
Needed support	4.73	1	.030	.084
Desire future support	11.48	1	.001	.131
Scoring ≥ clinical significance on PHQ-8	130.29	1	<.001	.427
Scoring ≥ clinical significance on GAD-7	72.44	1	<.001	.319
Scoring ≥ clinical significance on ASRS	9.19	1	.002	.113

Qualitative Analyses

In total, 759 professionals (53%) responded to the open question asking about whether they had previously needed, asked for, or would like support in their workplace setting. The aim of the qualitative analysis was to explore experiences of support across all performing arts professionals who completed the questionnaire. Not all support needs will be related to autistic traits or specific to autistic people, so I felt it was important to include a broad spectrum of experiences of support. Alongside analysing all of the survey participants' comments together, I also sought to identify themes that were unique to participants who were autistic. Examination of their views and experiences showed that they were consistent with the remaining questionnaire respondents, so, for the sake of brevity, the themes are therefore presented together. I identified six main themes from all participants, with one theme unique to the autistic group. These are presented below along with their subthemes,

which are italicised in the text (see Figure 1 for all themes and subthemes). All quotations are labelled with their participant number (abbreviated to 'ppt').
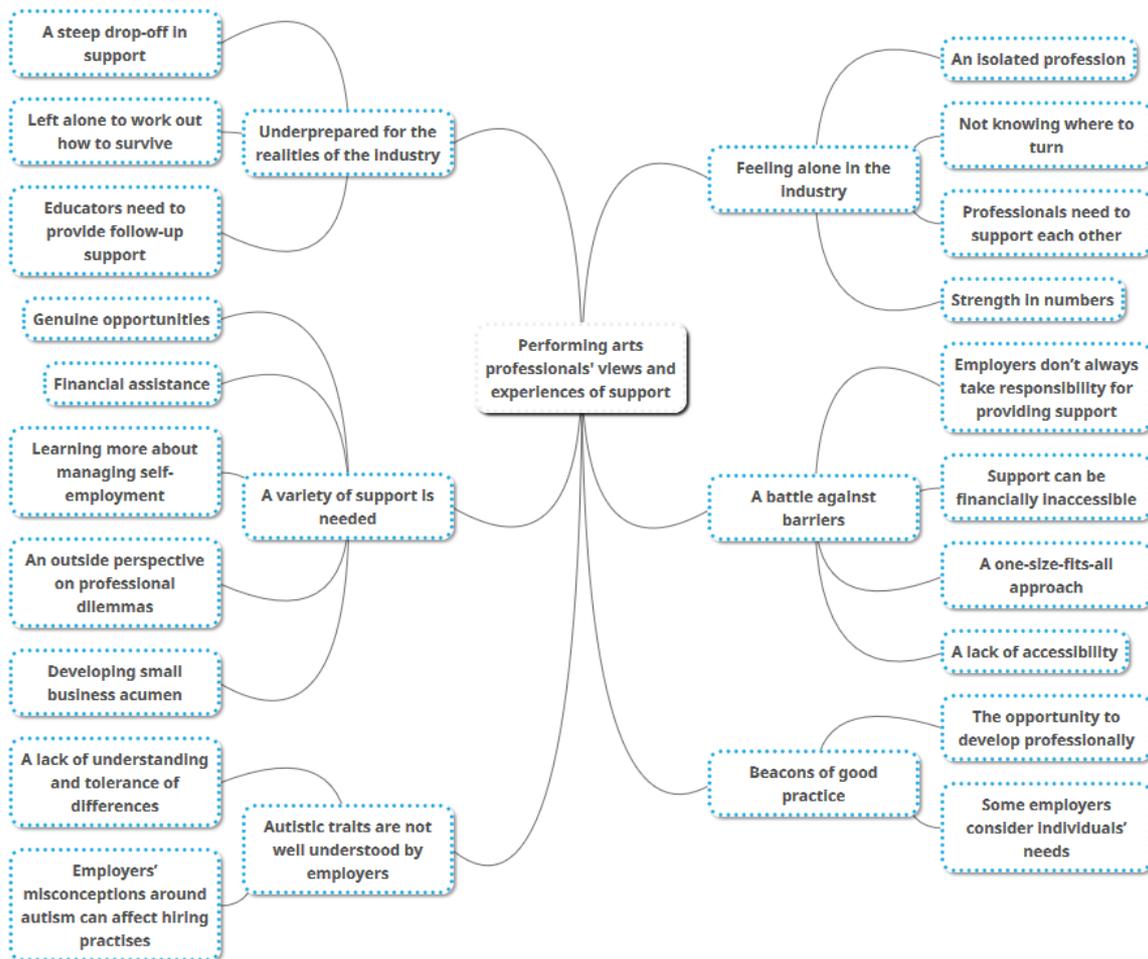
Figure 1. *The views of performing arts professionals on support received/desired and their self-identified support needs: themes and subthemes.*

Feeling alone in the industry. A recurrent sentiment expressed by participants was that there was no support available to them and that they were in an isolated profession: "The industry doesn't really offer support. You are on your own" [ppt 493]. Some participants also highlighted that they didn't know where to turn for support, if it did indeed exist: "Don't know who to ask or what support is available

really" [ppt 725]. Many professionals felt that they were disconnected from their peers in the profession and spoke of a desire for professionals to support each other through forming mutual support groups: "There should be more open networking events and support groups for people in the industry" [ppt 1196]. There was a sense that if support groups could be set up and professionals had spaces where they could come together outside of the workplace the strength in numbers would be of benefit to many: "Keeping a community together to be secure in the industry" [ppt 93].

Underprepared for the realities of the industry. Professionals frequently commented on how ill-equipped they felt for being alone in the working world after finishing training at a performing arts school. They spoke of the steep drop off in support from what they had received during their higher education to what they received in their professional lives: "It was shocking leaving drama school and going into the industry. It feels like all the support disappears once you graduate" [ppt 1224]. Many felt that had been left on their own to work out how to survive in the industry with no one to turn to for advice or support when challenges arose: "As soon as I left training I felt very alone in the industry and had to figure it all out as I go" [ppt 1395]. Professionals urged performing arts schools to provide follow-up support for recent graduates, to help ease them into careers in their chosen profession, and check on their progress and whether they needed support: "More personal support after graduating. Maybe a one-to-one to see how we progress with our careers after training" [ppt 1394].

A battle against barriers. Professionals described many barriers to accessing support in their workplaces. They spoke of feeling as if they just had to "get on with it" and that often support was not provided because employers don't

always take responsibility for providing support and that they should be able to cope with whatever they were dealing with. If not, then the fault and the ability to solve the problem was perceived to lie with the employee rather than the employer: "There seems to be an expectation of being very well, very positive and able to deal with anything thrown at you" [ppt 1183]. Financial constraints were highlighted as another barrier to support. Professionals stated that their workplaces were not always in a financial position to provide sufficient support. Moreover, professionals who were self-employed or between jobs also spoke of the financial hardship for many, and that accessing support was simply financially out-of-reach: "The only way to receive extra support is to pay for it and this is not always realistic when you are a self-employed/out of work actor" [ppt 1324]. Professionals touched on the idea of how their workplaces employed a one-size-fits-all approach to aspects of the profession, and they spoke of feeling penalized for having cognitive differences that meant they may need extra time to prepare for auditions, which employers were not recognizing: "I know a lot of actors are dyslexic and it's so difficult to learn lines for auditions in 1 or 2 days or sometimes just with an evening's notice, especially when working day jobs. I know that's the way the industry is, but I feel at a real disadvantage" [ppt 1349]. This sentiment around a lack of accessibility was echoed by many other participants who raised this concern: "My greatest issue with the industry though is the manner in which a lot of auditions are set up. You get no warning or notice" [ppt 589].

A variety of support is needed. Professionals described the spurious nature of some purported support, such as workshops. Workshops can be opportunities to hone skills specific to the profession and are also a source of potential networking and even future job opportunities. A recurring sentiment about these workshops from

participants was that often workshops did not truly offer genuine opportunities to learn new skills, but were rather held for the financial benefit of those hosting the workshop: "Increasingly, workshops with casting directors are just actors paying so that they can be seen, as opposed to learning new skills" [ppt 1324]. Professionals spoke of the financial hardship that can accompany a career in the performing arts, and so for many receiving financial assistance was a priority. This assistance would be to cover living expenses when unemployed ("Some kind of income protection insurance would have been helpful – all time taken off was unpaid, due to self-employment" [ppt 1183]), and also to help support work outside of traditional employment ("funding towards creative projects" [ppt 1292]). Professionals wanted sources of general advice, so that they could learn more about managing their self-employment and knowing what they were entitled to: "It would be great if there was some kind of helpline I could call to see what my rights and benefits are" [ppt 1179]. Many also hoped to find a source of individualized support and guidance, to help them further their careers and gain an outside perspective on professional dilemmas: "Free honest guidance about what's best for the next step in my career" [ppt 621]. More specifically, professionals spoke of wanting mentorship but were unsure of how to find this: "I would really like a mentor, and don't know how to get one" [ppt 750]. Another area where support was desired was in helping professionals developing small business acumen. They spoke of needing skills outside their area of expertise in order to manage their self-employment: "Creating and managing a website, keeping on top of accounts, self-promotion – these are things that do not come naturally" [ppt 357].

Beacons of good practice. Despite raising issues around the low quality and quantity of support available to professionals, some participants spoke of feeling well

supported when they had needed extra help. Some professionals felt that they had been given the opportunity to develop professionally, both through learning occupation-specific skills and receiving guidance and advice from others in the profession: "Supported my [theatre director] training and mentored me" [ppt 474]. Others spoke of being in a supportive workplace environment, where their individual needs were considered by their employers and they were able to seek extra support for physical or mental health concerns. Examples of support received were being able to take time out from work when needed and being offered in-house counselling: "I [did] receive great support from the opera company when I lost my voice. They let me take time out and then come back" [ppt 708].

Autistic traits are not well understood by employers. Autistic professionals described encountering a lack of understanding and tolerance of differences from others: "People sense I'm different and don't want to invest in me as readily" [ppt 1152]. Many were concerned about employers' misconceptions around autism and how this may affect their job applications and time in the workplace: "I feel Asperger's Syndrome is still not properly understood, at least at higher levels in the business and this can adversely affect people's perception of me when applying for work" [ppt 497].

Discussion

The results of this study have demonstrated for the first time that those who have higher levels of autistic traits and are pursuing careers in the performing arts may be especially vulnerable to lower occupational self-efficacy and higher rates of mental health issues than those with lower levels of autistic traits. These individuals are also more likely to desire employment-based support than individuals with lower

levels of autistic traits, indicating that this may be a population who needs sustained support.

The overall mental health of performing arts professionals in this sample is far lower than expected for the general population. In England, 17% of the adult population meet criteria for a mental health condition at any one time (McManus et al., 2016), with the majority suffering from depression or anxiety. Twice as many professionals scored above threshold for clinically significant levels of depression and anxiety on the screening tools as those reporting clinical diagnoses of these conditions. There is limited published research on the quality of life and mental health of the performing arts population, although it is anecdotally acknowledged that there is a high incidence of poor mental health in the arts (ArtsMinds, 2017; Eynde et al., 2016).

One potential explanation for the high rates of mental health issues in this group is the uncertainty surrounding employment. Long-term employment in the arts is rare, many employers engage in a project-based system of hiring, which leaves professionals constantly seeking new employment and often having to manage periods of unemployment (Menger, 2006). It is well-documented that unemployment is linked to poor mental health (Paul & Moser, 2009) and low quality of life (Kostrzewski et al., 2014), and therefore job instability in this population may be an important contributing factor to these results. Another, related explanation is the perceived lack of occupational support within careers in the performing arts. Many of the professionals' comments centred on feeling unsupported and isolated in their careers. These experiences of loneliness in their professional lives could well relate to their reported low quality of life and poor mental health (Victor & Yang, 2012).

A lack of job stability and the constant pressure to gain new employment are likely to be especially challenging for those with a diagnosis of autism or elevated autism traits. This might be particularly hard for autistic people to manage, due to difficulties dealing with uncertainty and communication with neurotypical others. There may be high anxiety around auditions, and they may be struggling with aspects of job interviews such as small talk. As expected, and consistent with existing work (Kamio et al., 2013; Kamp-Becker et al., 2010), performing arts professionals with higher levels of autistic traits were more likely to report poor quality of life across all domains than professionals with lower levels of autistic traits. Interestingly, out of the four domains of the WHOQOL-BREF, the social domain had the smallest correlation with autistic traits (measured by the SATQ). The social domain of the WHOQOL-BREF only has three items compared to the other domains which contain between six and eight items, it may that the social domain was not sensitive or specific enough to capture some of the social difficulties that may be associated with autistic traits. I also found that individuals with higher levels of autistic traits were significantly more likely also to have poorer mental health and ADHD symptomatology than those with lower levels of autistic traits. This is concerning, but perhaps unsurprising. Research suggests that a higher percentage of the autistic population have mental health and co-occurring psychiatric conditions than the general population (Hofvander et al., 2009; Lever & Geurts, 2016; McManus et al., 2016).

The results indicating that quality of life and mental health are poorer for those with higher levels of autistic traits than for those with lower levels of autistic traits could be due to many factors. One such factor may be participants' experiences of their workplace environments. It is well known that in the workplace, autistic people

often receive insufficient reasonable adjustments, poor mental health support, and report anxiety in relation to their working environment (Hurlbutt & Chalmers, 2004; López & Keenan, 2014; S. M. Robertson, 2009; Ruef & Turnbull, 2002). The comments made by formally diagnosed autistic professionals in this study described employers not being understanding or accommodating of autistic characteristics, with this lack of accommodation for behavioural differences perceived to be contributing to their lower quality of life and mental health. It may be important to encourage employers to learn more about autism and autistic traits, so that workplaces can be more accepting and accommodating of difference.

Consistent with my hypotheses, I found that performing arts professionals with higher levels of autistic traits have lower occupational self-efficacy, than those with lower levels of autistic traits. These findings reflect research that has found autistic people to have lower occupational and general self-efficacy than non-autistic people (Lorenz & Heinitz, 2014) and indicates that those with subclinical levels of autistic traits may also be experiencing challenges (Constantino & Todd, 2003; Hoekstra et al., 2007). Lower self-efficacy may be influenced by the reported lack of understanding from employers, who may not trust that disabled or neurodivergent employees can perform the job equally as well, which could mean less frequent opportunities to advance and build skills (Fraser et al., 2010; Graffam et al., 2002; Lengnick-Hall et al., 2008). Age was significantly positively associated with occupational self-efficacy and significantly inversely correlated with autistic traits, which may be explained by professionals developing more career-related skills and coping mechanisms as they age (Helles et al., 2015; M. J. Taylor et al., 2017).

Performing arts professionals with higher levels of autistic traits were more likely than those with low levels of autistic traits to report that they have previously

needed employment-based support and not received it, and they were also more

likely to desire support in the future for their career. The types of support that these

professionals want are similar to those desired by all of the professionals surveyed:

help with developing small business acumen, financial assistance, networks to

connect professionals together, sources of general advice, alongside more tailored

advice, such as mentoring. These skills and support needs are recognised aspects

of performing arts careers (Bennett, 2009), and future research should examine

types of support that may be particularly effective for those with elevated levels of

autistic traits. Given that there were also significant associations between autistic

traits, mental health symptomology and ADHD traits, future work must take into

consideration what other factors may be driving this need for support, as it may not

be autistic traits, but perhaps wider neurodivergence or mental health that drive this

need for support.

One strength of this study is that it is the first to use a large UK-based sample

of performing arts professionals to examine individuals' occupational confidence and

their perspectives on support available in the performing arts. It is also the first time

that the relationship between autistic traits and these factors has been examined in

this group. There are 296, 000 people who are estimated to work in the performing

arts in the UK (Planit, 2020), so respondents comprise less than 1% of that figure.

However, the study was advertised widely through social media and emails to a

diverse network of performing arts groups and individuals and the proportions of

many of the demographic variables measured are similar to UK population

estimates. The distribution of genders and ethnicities of the participants in this study

are reflective of distributions recorded by UK census figures (UK census figures:

Office for National Statistics, 2011). It is estimated that autistic people form 1.1% of

the UK population (Brugha et al., 2009, 2012) in this study autistic people formed 1% of the professional sample. The figures of autistic professionals within this sample therefore reflect UK prevalence estimates.

In conclusion, the performing arts is a profession that requires workers to develop broad skills in business acumen, frequently manage self-employment, and consistently seek new work in a project-based hiring system. The unique demands of this industry mean that the majority of workers are under constant pressure and leave many desiring career-based support. These findings provide an initial investigation into autistic traits and their relationship with occupational self-efficacy, mental health, quality of life, and support needs for performing arts professionals. The results highlight that those with higher levels of autistic traits working in the performing arts may be particularly vulnerable to low occupational self-efficacy and wellbeing and are more likely to have needed and desire employment-based support. This research has contributed to understanding the experiences of performing arts professionals in the UK, and revealed the increased need for support in workers with elevated levels of autistic traits. Future research should further examine the specific support needs of this group, alongside investigating whether those with autism diagnoses are having similar experiences.

In the next chapter, I examine whether performing arts students are having similar experiences in higher education to those working professionally in the industry and whether the relationships between autistic traits, self-efficacy, and well-being in the performing arts student population are analogous to performing arts professionals.

Chapter 3

Higher Levels of Autistic Traits Associated with Lower Levels of Self-Efficacy and Wellbeing for Performing Arts Students

Introduction

The previous chapter showed that autistic adults and those with elevated levels of autistic traits are pursuing careers in the performing arts. Increasing numbers of people are enrolling onto performing arts higher education courses prior to pursuing careers in the arts (Bennett, 2009). As such, there are likely to be autistic students also studying performing arts courses, this chapter will investigate this group, alongside those with elevated autistic traits, and examine their experiences of higher education.

Many autistic people have aspirations to go university (Camarena & Sarigiani, 2009), but the attrition rate is high, and many do not complete the courses they enrol on (Glennon, 2001; VanBergeijk et al., 2008). Autistic students often struggle with the changes to routine and living circumstances attending university can bring about, as well as experiencing social isolation and anxiety (Howlin et al., 2004; Jobe & Williams White, 2007; Lei, Ashwin, et al., 2020). Studies that have examined autistic students' university experiences more closely have revealed that they frequently report difficulties centred on social interactions, managing the academic and structural demands of their course, and coping with independent living, and it is

trying to balance these competing demands that can often prove overwhelming (Beardon et al., 2009; Lambe et al., 2019; Van Hees et al., 2015; White et al., 2011). Many autistic students also report poor mental health, with social anxiety, depression, and low self-esteem being the most common difficulties (Lei, Brosnan, et al., 2020; Martin, 2012).

Autistic students typically face many challenges in accessing higher education, as described above, and experiencing more challenges than their neurotypical peers may be causing them to feel less confident about completing education-based tasks. There is a paucity of studies that have focused on the first-hand experience of autistic students in higher education (Gelbar et al., 2014) and only one has examined the self-efficacy of autistic students. In Shattuck et al.'s (2014) study examining autistic students' experiences of higher education, they included a brief self-efficacy measure incorporating both general and educational self-efficacy. It comprised three items which participants were asked to rate on a 3-point scale ranging from "not at all like me" to "very much like me". They found that the autistic students (n = 120) reported high levels of self-efficacy concerning (1) getting staff to listen to them and (2) getting information they need, with 72% of students answering "very much like me" to these items. They felt much less confident, however, about (3) handling most things that come their way, with only 41% reporting "very much like me". Given that self-efficacy has also been found to be consistently, positively associated with academic performance (Brady-Amoon & Fuertes, 2011; Cassidy & Eachus, 2000; Chemers et al., 2001; Lane et al., 2004), measuring self-efficacy can provide useful information and insight into how students are performing in their education.

Overall, the current evidence suggests that the autistic student population may have additional needs (Beardon et al., 2009; Gelbar et al., 2014; Jobe & Williams White, 2007; Madriaga & Goodley, 2010). With no research, to my knowledge, that specifically examines the experiences of those in performing arts education means that we do not yet know if performing arts education is a comparable setting where autistic students, and those with elevated levels of autistic traits, are having similar experiences to those on other courses. This study seeks to address this gap in the literature and examine the extent and nature of the support needs of this population.

The current study

The aims of this study were fourfold. First, I sought to understand the extent to which neurodivergent individuals, particularly those with autism diagnoses or elevated autistic traits, are pursuing education in the performing arts. Second, I examined the relationship between level of autistic traits and wellbeing, including educational self-efficacy, quality of life, and mental health in performing arts students. Third, I investigated the relationship between performing arts students' level of autistic traits and their perceived support needs. Fourth, I compared the educational self-efficacy and wellbeing of performing arts students to students within other disciplines, to determine whether there were any challenges specific to studying in the performing arts.

To address these aims, an online questionnaire was completed by adults who studied courses either in the performing arts or in other areas of higher education. I predicted that, similar to professionals working in the performing arts (Buckley et al., 2021b) individuals with higher levels of autistic traits would have lower educational self-efficacy, poorer mental health, lower quality of life, and would be more likely to

need and desire educational support than those with lower levels of autistic traits. I also predicted that students who study in the performing arts would have significantly higher mental health symptomology than those studying in other areas of higher education.

Method

Participants

Two-hundred-and-eighty performing arts students and 144 students studying other subjects based in the United Kingdom (UK) completed an online questionnaire powered by Qualtrics (2019). Demographic information is provided in Table 1 and further detail on the subjects studied by students is available in Table 2. The online questionnaire was advertised through targeted emails to performing arts schools, performing arts groups including student members of the UK performing arts union, Equity, promotion on social media, and word of mouth.

Table 5

Students' characteristics

Characteristic	Performing arts students N = 280	Students in other subjects N = 144
Age		
Mean, years (SD)	27.3 (10.8)	28.3 (11.2)
Median, years	23	25
Range	18 – 72	18 – 66
18-19, years	20 (7%)	21 (15%)
20-29, years	194 (69%)	81 (56%)
30-39, years	30 (11%)	23 (16%)
40-49, years	12 (4%)	6 (4%)
50-59, years	18 (6%)	8 (6%)
60-69, years	4 (1%)	4 (3%)
70-79, years	1 (<1%)	-
Prefer not to say	1 (<1%)	1 (<1%)
Gender		

Female	174 (62%)	107 (74%)
Male	96 (34%)	35 (24%)
Non-binary or other	9 (3%)	2 (1%)
Prefer not to say	1 (<1%)	-
Ethnicity		
White	239 (85%)	109 (76%)
Black	13 (5%)	2 (1%)
Asian	6 (2%)	14 (10%)
Any other ethnic group	18 (6%)	18 (13%)
Prefer not to say	4 (1%)	1 (<1%)
Level of current study		
Foundation degree	42 (15%)	2 (1%)
Undergraduate degree	127 (45%)	50 (35%)
Postgraduate degree	60 (21%)	81 (56%)
Short course	13 (5%)	-
Other	35 (13%)	6 (4%)
Prefer not to say	3 (1%)	5 (3%)
Year of study		
1st year	101 (36%)	58 (40%)
2nd year	89 (32%)	42 (29%)
3rd year	71 (25%)	29 (20%)
4th year	10 (4%)	13 (9%)
Prefer not to say	9 (3%)	2 (1%)

Table 6

Breakdown of degree subjects for students studying other subjects

	Student studying other subjects N = 144
Science and Maths	60
Arts and Humanities	33
Education	21
Other (e.g. Nursing, Physiotherapy)	11
Not stated	9
Business and Economics	6
Law	4

Measures

The questionnaire contained six sections, which took approximately 20 minutes to complete. Part 1 of the questionnaire began with a series of demographic items, including participant age, gender, ethnicity, level of current study, and year of study. Participants were then asked to identify whether they were currently studying in higher education, whether this was in the performing arts or another discipline, and which topic they studied.

Part 2 of the questionnaire contained a bespoke scale to measure educational self-efficacy for performing arts students. Following Bandura (2006), it specifically targeted students' perceived confidence when performing activities associated with their performing arts education (Bennett, 2009). An initial focus group was held with six performing arts professionals who had all studied performing arts in higher education to help identify appropriate items to be included on the scale. The resulting scale contained 24 items, including, for examples, "work with others to achieve a joint goal", "structure my time to manage my workload", and "get a teacher (or other member of staff) to help me if I have difficulty interacting with others at my educational institute". Participants were asked to respond to such items on a scale ranging from 0 ("not at all confident") to 10 ("extremely confident"). Scores from each item were averaged to yield a mean self-efficacy score. Higher scores reflected greater educational self-efficacy. Although all participants completed the full 24-item scale, for the purposes of comparison of educational self-efficacy between the 2 student groups we used a reduced 21-item scale in analysis. We removed 3 scale items specifically associated with performing arts education (items 15, 16, and 17) so that the scale was more broadly applicable to students studying a variety of topics

[see Supplementary Materials for the full scale]. The scale showed excellent internal consistency for both groups when using the full 24-item measure and the reduced 21-item measure (Cronbach's α for performing arts students for the 24 item measure = .94, for the 21-item measure = .93; Cronbach's α for students studying other subjects for the 24 item measure = .93, for the 21-item measure = .93).

Part 3 of the questionnaire contained three closed questions about support in relation to students' education settings, including (1) "Have you ever needed extra support for your current course but did not receive it?"; (2) "Have you ever received extra support for your current course?"; and (3) "Would you like extra support for your current course?". Participants could answer "yes", "no", or "I do not wish to answer this question" to each question. Participants were then asked to provide details about the support needed, had received or desired in an open comment box.

Part 4 of the questionnaire asked participants to provide details of any clinical diagnoses of autism, mental health conditions/neurological conditions, and/or a specific learning difficulty (e.g., dyslexia). If participants reported that they had any such conditions, they were then asked, "Do you feel that your condition(s) impacts on different aspects of your education? If yes, please go into detail here" and an open comment box was available for participants to provide details.

Part 5 of the questionnaire contained several established measures to examine psychological traits and current levels of wellbeing.

The Subthreshold Autism Trait Questionnaire (SATQ; Kanne, Wang, & Christ, 2012) assessed a broad range of subthreshold traits of autism in the general population. Unlike the Autism Quotient (AQ; Baron-Cohen, Wheelwright, Skinner, Martin, & Clubley, 2001), which was designed to highlight presentation of symptoms that are characteristic of Asperger Syndrome, the SATQ provides a measure of a

broader range of autistic traits (Kanne et al., 2012; Nishiyama et al., 2014). The SATQ has 24 items and asks participants to respond to statements such as "I sometimes take things too literally, such as missing the point of a joke or having trouble understanding sarcasm" with a 4-point scale ranging from "false, not at all true" (score of 0) to "very true" (score of 4). It has good internal consistency and reliability (Cronbach's α = .73, test-retest reliability = .79; Kanne et al., 2012; in the present samples α = .86). High scores on the SATQ reflect high levels of autistic traits.

The Patient Health Questionnaire depression scale (PHQ-8; Kroenke et al., 2009) is an 8-item questionnaire, which assesses traits of depression. It asks participants to rate how often in the past two weeks they have had particular feelings or acted in a certain way, for example, "feeling down, depressed, or hopeless" and "trouble concentrating on things, such as reading the newspaper or watching television" on a 4-point scale ranging from "not at all" (score of 0) to "nearly every day" (score of 3). Higher scores reflect greater severity of depression. The PHQ-8 cut-off point (scores of 10 or greater) has a sensitivity of 88% and a specificity of 88% for detecting major depression (Kroenke & Spitzer, 2002) and, regardless of diagnostic status, scores above cut-off point typically represent clinically-significant depression (Kroenke et al., 2001b).

The Generalised Anxiety Disorder scale (GAD-7; Spitzer, Kroenke, Williams, & Löwe, 2006) assesses traits of anxiety and asks participants how often over the past two weeks have they been bothered by feelings such as "feeling nervous, anxious, or on edge" and "becoming easily annoyed or irritable". Participants respond to seven items using a 4-point scale ranging from "not at all" (score of 0) to "nearly every day" (score of 3). Higher scores reflect greater severity of anxiety. The

cut-off point for the GAD-7 (scores of 10 or greater) has a sensitivity of 89% and specificity of 82% for detecting generalized anxiety disorder (Spitzer et al., 2006).

The World Health Organization Adult ADHD Self-Report Scale (ASRS; Kessler et al., 2005) was used to assess traits of ADHD. Participants were asked to respond to six items regarding the (e.g., "How often do you have difficulty getting things in order when you have to do a task that requires organization?") on a scale ranging from "never" (score of 0) to "very often" (score of 4). Higher scores reflect greater ADHD-related features. The ASRS screener (Kessler et al., 2005) was scored in line with the recommendations of Ustun et al. (2017) to be consistent with criteria for ADHD described in the DSM-5. The screener with updated scoring has a sensitivity of 80% and specificity of 90% for identifying people who have a diagnosis of ADHD (Ustun et al., 2017).

The World Health Organization abbreviated version of the WHOQOL-100 quality of life assessment (WHOQOL-BREF; The WHOQOL Group, 1998) was used to assess students' quality of life. It contains 26 items (e.g., "how satisfied are you with your ability to perform your daily living activities?"), which measure four domains of quality of life (physical, psychological, social, environment). Although each section is scored differently, overall, higher scores on the four domains of the WHOQOL-BREF reflect greater quality of life within those specific domains. The WHOQOL-BREF has been shown to be comparable to the WHOQOL-100 in having excellent ability in discriminating between ill and well respondents and high test-retest reliability across all four domains (Skevington et al., 2004).

Finally, in Part 6, participants could opt to make any extra remarks about their education or thoughts about the questionnaire in one final open comment box.

Procedure

Ethical approval was obtained from UCL Research Ethics Committee. The online questionnaire was anonymous. Given that I was particularly interested in relationships between measures, only respondents who completed all six parts of the questionnaire were included in analysis.

Data Analysis

Quantitative analyses. First, I report the rates of neurodivergence and mental health conditions across both the performing arts and students studying other subjects groups. Then correlational analyses were performed to investigate the extent and nature of any relationships between levels of autistic traits (indexed by SATQ scores) and wellbeing variables, including self-efficacy, quality of life, and severity of mental health conditions. Next, Mann-Whitney U comparisons were run to compare the two student groups' scores for educational self-efficacy on the reduced 21-item self-efficacy scale, autistic traits (SATQ), and well-being measures (WHOQOL-BREF, PHQ-8, GAD-7, and ASRS) and Chi-Square tests to compare rates of diagnoses of autism, ADHD, and learning disabilities. Finally, to investigate the relationship between individuals' autistic traits and their perceived need for support, both student groups were divided into quartiles based on their SATQ scores. The data from the upper and lower quartiles were then compared in an extreme-groups analysis (EGA) to enable me to examine whether those with higher levels of autistic traits were more likely to have needed, received, or desired support than those with lower levels of autistic traits. All analyses were performed using IBM SPSS version 22 software (IBM, 2013).

A p-value of 0.05 was set, and due to the high number of comparisons the Holm-Bonferroni method was used to calculate adjusted alpha levels for each set of analyses to control the family-wise error rate (Holm, 1979).

Qualitative analyses. Participants' open-ended responses were analysed using thematic analysis, as detailed by (Braun & Clarke, 2006), and I sought to understand the views and experiences of performing arts students with regard to the support that they have received and their perceived support needs. The transcripts were analysed from an inductive (bottom-up) perspective where themes were created within a 'contextualist' method of critical realism (Willig, 1999) focusing on the way individuals make meaning of their experiences alongside the influence of the broader social context. I, and my principal supervisor, carried out the thematic analysis and approached the analysis from the perspective of psychology researchers who have not studied in the performing arts and do not identify as autistic. Data were initially coded separately by group (performing ats students, students studying other subjects) with focus on the semantic content of the data, but after discussion the authors agreed that many of the codes were shared across the two groups and so the data from the two groups were combined, re-coding where necessary. The authors met together several times to discuss the themes and subthemes, checking that the themes incorporated the pattern of shared meanings across the entire data set.

Results

Sample Demographics

Both student groups had a majority of female participants (performing arts: 62%; other subjects: 74%) and the majority of respondents reported to be of white ethnic background (performing arts: 85%; other subjects: 76%). There was no significant difference in mean age between the two student groups, but there was a significant difference between gender distribution with a higher proportion of females in the students in the students studying other subjects group (χ^2 (2, N = 424) =

6.401, *p* = .041). There was a relatively even distribution of student respondents across different years of study (see Table 5). Students studying other subjects ranged in their choices of course from anthropology, to physics, to international business (see Table 6 for full breakdown).

Quantitative Analysis

Neurodivergence. The first aim of this study was to understand the extent to which autistic individuals, or those with elevated autistic traits, are pursuing education in the performing arts. I found similar levels of autism diagnoses and elevated autistic traits in the performing arts students (2.5% with an autism diagnosis; 4% scoring more than 2 SD above the SATQ mean) and the students studying other subjects (2.8% with an autism diagnosis; 3% scoring more than 2 SD above the SATQ mean). There were no group differences found in rates of autism diagnosis (χ^2 = 0.029, df = 1, p = .864), nor in mean SATQ scores (p = .834) between performing arts students (SATQ: M = 20.03, SD = 9.66) and students studying other subjects (SATQ: M = 20.29, SD = 11.18). There were slightly lower levels of ADHD diagnoses and ASRS scores at clinical significance in the performing arts students (3% with an ADHD diagnosis; 5% scoring at clinical significance) than in the students studying other subjects (5% with an ADHD diagnosis; 10% scoring at clinical significance), there were group differences found in rates of ADHD diagnosis (χ^2 = 9.237, df = 1, p = .002), but not in mean ASRS scores (p = .492) between the performing arts students (ASRS: M = 7.53, SD = 3.85) and the students studying other subjects (ASRS: M = 7.50, SD = 4.15). Fourteen percent (n = 39) of performing arts students reported a specific learning disability, of which 26 (67%) reported a diagnosis of dyslexia. Ten percent (n = 15) of students in other subjects reported a specific learning disability, of which 11 (73%) reported a diagnosis of dyslexia. There

were no group differences found in rates of specific learning disability (χ^2 = 1.055, df = 1, p = .304) between the student groups. See Table 7 for diagnoses and measure scores for both student groups.

Table 7

Diagnoses and measures scores for all participants

	Performing arts students N = 280	Students studying other subjects N = 144
Autism diagnosis, (% of sample)	7 (2.5%)	4 (2.8%)
> 2SD above SATQ mean, (% of sample)	11 (4%)	5 (3%)
ADHD diagnosis, (% of sample)	9 (3%)	15 (5%)
> ASRS cut-off, (% of sample)	15 (5%)	14 (10%)
Depression diagnosis, (% of sample)	54 (19%)	25 (17%)
> PHQ-8 cut-off, (% of sample)	122 (44%)	50 (35%)
Anxiety diagnosis, (% of sample)	61 (22%)	26 (18%)
> GAD-7 cut-off, (% of sample)	101 (36%)	49 (34%)

Quality of life. Quality of life scores for the two student groups are listed in Table 8 and were all within population norms (Skevington et al., 2004). Mann-Whitney U tests were used to compare the two groups' scores on the four quality of life domains, the groups only significantly differed on the environment domain of the WHOQOL-BREF (p <.001), with performing arts students scoring significantly lower than students studying other subjects.

Table 8

Mean WHOQOL-BREF scores for all participants.

	Performing arts students N = 280	Students in other subjects N = 144

Mean WHOQOL-BREF scores		
1. Physical domain (SD)	15.3 (2.7)	15.2 (2.8)
2. Psychological domain (SD)	13.2 (3.2)	13.5 (3.1)
3. Social domain (SD)	12.9 (4.0)	13.3 (4.0)
4. Environment domain (SD)	14.3 (3.0)	15.4 (2.7)

Mental health. Nineteen percent (n = 54) of performing arts students and 17% (n = 25) of students in other subjects reported a clinical diagnosis of depression, but 44% (n = 122) of performing arts students and 35% (n = 50) of students in other subjects scored above the PHQ-8 cut-off point, indicating clinically-significant levels of depression. These percentages are much higher than the US population-based study of over 198,000 participants, which recorded prevalence of 8.6% scoring over the cut-off point for clinical levels of depression (Kroenke et al., 2009), and 13.8% for undergraduate college students in the US (Eisenberg et al., 2007). There were no significant group differences found in rates of depression diagnosis (χ^2 = 0.232, df = 1, p = .629), nor in mean PHQ-8 scores between the two groups (p = .068).

A similar picture was evident with respect to anxiety: 22% (n = 61) of performing arts students and 18% (n = 26) of students in other subjects reported a clinical diagnosis of anxiety, but 36% (n = 101) of performing arts students and 34% (n=49) of students in other subjects scored above the GAD-7 cut-off point, indicative of clinically-significant levels of anxiety. Again, these percentages are much higher than population norms: 5% scored over the cut-off point in a German population-based study of over 5,000 participants (Löwe et al., 2008), although similar to results from a survey of Australian students with 17.5% scoring above cut-off (Farrer et al.,

2016). There were no significant group differences found in rates of anxiety diagnosis ($\chi^2 = 0.811$, df = 1, p = .368), nor in mean GAD-7 scores between the two groups (p = .223).

Self-efficacy. Students experienced high self-efficacy with respect to their education with performing arts students scoring significantly higher (p < .001) with a mean score of 7.70 (SD = 1.48) compared to 7.05 (SD = 1.64) for students studying other subjects (see Table 9 for all scores). Performing arts students were most confident at completing classes or workshops that they had signed up for (M = 9.2, SD = 1.3) and they were least confident at getting a teacher (or other member of staff) to help them if they are having difficulty interacting with others at their educational institute (M = 5.8, SD = 3.3). Students in other subjects were most confident at finishing their assignments / projects by their deadlines (M = 8.2, SD = 2.3) and like the performing arts students were least confident at getting a teacher (or other member of staff) to help them if they are having difficulty interacting with others at their educational institute (M = 4.6, SD = 3.2).

Table 9

Mean scores and standard deviations for items on the students' educational self-efficacy scale.

Self-efficacy item	Performing arts students	Performing arts students	Students studying other subjects	Students studying other subjects
	Mean score (SD)	Range	Mean Score (SD)	Range
1. Fully understand what I am required to do to pass my course	8.6 (1.8)	1 - 10	8.2 (1.9)	0 - 10

Item				
2. Fully understand all instructions given to me	7.9 (1.8)	0 - 10	7.8 (1.8)	3 - 10
3. Structure my time to manage my workload	7.2 (2.2)	1 - 10	6.8 (2.3)	0 - 10
4. Finish my assignments / projects by their deadlines	8.6 (1.9)	1 - 10	8.2 (2.3)	0 - 10
5. Concentrate in class	8.2 (1.7)	1 - 10	7.0 (2.3)	0 - 10
6. Remember information presented in class or textbooks	7.3 (1.9)	1 - 10	6.9 (2.0)	1 - 10
7. Take good notes during class	7.3 (2.3)	0 - 10	6.3 (2.7)	0 - 10
8. Independently study or research	7.9 (1.9)	1 - 10	7.8 (2.0)	1 - 10
9. Complete classes or workshops that I have signed up for	9.2 (1.3)	1 - 10	8.1 (2.2)	0 - 10
10. Participate in group exercises	8.8 (1.8)	0 - 10	7.3 (2.6)	0 - 10
11. Work with others to achieve a joint goal	8.9 (1.6)	1 - 10	7.6 (2.3)	0 - 10
12. Share my ideas in group discussions	7.9 (2.2)	0 - 10	7.3 (2.5)	0 - 10
13. Lead or coordinate my peers in group work	7.6 (2.4)	1 - 10	6.7 (2.8)	0 - 10
14. Give presentations	7.6 (2.3)	0 - 10	7.1 (2.8)	0 - 10
18. Make phone calls to people I don't know (for course-based purposes, e.g. to hire equipment)	6.9 (2.9)	0 - 10	6.6 (3.2)	0 - 10
19. Socialize with other class members or peers	7.6 (2.6)	0 - 10	7.0 (2.5)	0 - 10
20. Ask for help with my work (if required) from a classmate or peer	7.5 (2.4)	0 - 10	7.0 (2.6)	0 - 10
21. Ask for help with my work (if required) from a teacher or other member of staff	7.4 (2.5)	0 - 10	7.0 (2.4)	0 - 10
22. Get a classmate or peer to help me if I have difficulty interacting with others at my educational institute	6.3 (3.0)	0 - 10	5.1 (3.2)	0 - 10
23. Get a teacher (or other member of staff) to help me if I have difficulty interacting with others at my educational institute	5.8 (3.3)	0 - 10	4.6 (3.2)	0 - 10

24. Network to secure future opportunities	6.5 (2.7)	0 - 10	5.6 (2.9)	0 - 10
Total	7.8 (2.2)	6 - 9	6.9 (2.6)	5 - 8

Support. Around one third (36%, n = 102) of performing arts students and just under (28%, n = 41) of students in other subjects reported that they had received educational support. Just under one quarter (22%, n = 62) of performing arts students and (24%, n = 35) students in other subjects reported that they had needed but not received support for their education. And around one third of the performing arts students (33%, n = 93) and students in other subjects (30%, n = 43) reported that they would like to receive support in the future.

The relationship between autistic traits and other variables. My research also sought to examine individual differences between level of autistic traits (SATQ score) and participants' perceived educational self-efficacy, quality of life, mental health, and need for support. All variables were not normally distributed and could not be normalised through transformation; I therefore report Spearman's rank correlation coefficients.

As shown in Tables 10 and 11, there were significant correlations between all variables in both the performing arts and other subjects groups, all of which survived corrections for multiple comparisons using the Holm-Bonferroni method, apart from the correlations between age and the GAD-7, and age and the ASRS (Holm, 1979). As expected, students from both groups with elevated levels of autistic traits (i.e., high SATQ scores) had lower perceived educational self-efficacy as well as lower quality of life (as indexed by scores on all four domains of the WHOQOL-BREF). We also found significant correlations between SATQ scores and scores on measures of other psychological traits. In both groups higher levels of autistic traits were

associated with elevated levels of anxiety (GAD-7 scores), depression (PHQ-8 scores), and ADHD symptomology (ASRS scores).

Table 10

*Correlation matrices for performing arts students' scores on educational self-efficacy, SATQ, WHOQOL-BREF domains, PHQ-8, GAD-7, ASRS, age, and gender. Correlations presented in the lower diagonal are the raw correlations between variables, correlations presented in the upper diagonal of the table are partial correlations between variables adjusted for chronological age and gender. Numbers with two asterisks * beside them indicate a significant result.*

		SATQ	Self-efficacy	WHOQOL physical domain	WHOQOL psychological domain	WHOQOL social domain	WHOQOL environment domain	PHQ-8	GAD-7	ASRS	Age
SATQ	r_s	1.00	-.488**	-.389**	-.463**	-.239**	-.322**	.468**	.432**	.350**	
	Sig.		<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	
Self-efficacy	r_s	-.453**	1.00	.403**	.426**	.335**	.379**	-.379**	-.287**	-.286**	
	Sig.	<.001		<.001	<.001	<.001	<.001	<.001	<.001	<.001	
WHOQOL physical domain	r_s	-.353**	.410**	1.00	.626**	.445**	.561**	-.593**	-.467**	-.312**	
	Sig.	<.001	<.001		<.001	<.001	<.001	<.001	<.001	<.001	
WHOQOL psychological domain	r_s	-.461**	.426**	.613**	1.00	.588**	.608**	-.691**	-.621**	-.398**	
	Sig.	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	

WHOQOL social domain	r_s	-.233**	.347**	.413**	.553**	1.00	.469**	-.399**	-.331**	-.156**	
	Sig.	<.001	<.001	<.001	<.001		<.001	<.001	<.001	.009	
WHOQOL environment domain	r_s	-.363**	.396**	.533**	.588**	.436**	1.00	-.504**	-.548**	-.308**	
	Sig.	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	
PHQ-8	r_s	.470**	-.395**	-.579**	-.715**	-.382**	-.513**	1.00	.774**	.475**	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001		<.001	<.001	
GAD-7	r_s	.420**	-.299**	-.445**	-.635**	-.312**	-.553**	.754**	1.00	.469**	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001		<.001	
ASRS	r_s	.404**	-.317**	-.307**	-.445**	-.168**	-.359**	.514**	.533**	1.00	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		
Age	r_s	-.197**	.011	-.040	.064	-.047	.058	-.150**	-.161**	-.144**	1.00
	Sig.	.001	.852	.511	.284	.431	.337	.012	.007	.016	
Gender	r_s	.204**	-.038	-.041	-.062	-.073	-.110	.075	.054	.071	-.036
	Sig.	.001	.524	.493	.300	.225	.067	.210	.368	.236	.555

Table 11

Correlation matrices for students studying other subjects' scores on educational self-efficacy, SATQ, WHOQOL-BREF domains, PHQ-8, GAD-7, ASRS, age, and gender. Correlations presented in the lower diagonal are the raw correlations between variables, correlations presented in the upper diagonal of the table are partial correlations between variables adjusted for chronological age and gender. Numbers with two asterisks * beside them indicate a significant result.

		SATQ	Self-efficacy	WHOQOL physical domain	WHOQOL psychological domain	WHOQOL social domain	WHOQOL environment domain	PHQ-8	GAD-7	ASRS	Age
SATQ	r_s	1.00	-.489**	-.312**	-.328**	-.301	-.402**	.285**	.285**	.349**	
	Sig.		<.001	<.001	<.001	<.001	<.001	.001	.001	<.001	
Self-efficacy	r_s	-.488**	1.00	.487**	.463**	.257**	.417**	-.414	-.290	-.352	
	Sig.	<.001		<.001	<.001	.002	<.001	<.001	<.001	<.001	
WHOQOL physical domain	r_s	-.242**	.424**	1.00	.762**	.541**	.625**	-.703**	-.587**	-.591**	
	Sig.	.003	<.001		<.001	<.001	<.001	<.001	<.001	<.001	
WHOQOL psychological domain	r_s	-.346**	.476**	.773**	1.00	.600**	.631**	-.771**	-.628**	-.562**	
	Sig.	<.001	<.001	<.001		<.001	<.001	<.001	<.001	<.001	
WHOQOL social domain	r_s	-.255**	.251**	.526**	.538**	1.00	.580**	-.410**	-.356**	-.391**	
	Sig.	.002	.002	<.001	<.001		<.001	<.001	<.001	<.001	
WHOQOL environment domain	r_s	-.329**	.397**	.589**	.549**	.520**	1.00	-.549**	-.528**	-.479**	
	Sig.	<.001	<.001	<.001	<.001	<.001		<.001	<.001	<.001	
PHQ-8	r_s	.350**	-.419**	-.718**	-.775**	-.373**	-.500**	1.00	.811**	.587**	

GAD-7	Sig.	<.001	<.001	<.001	<.001	<.001	<.001		<.001	<.001	
	r_s	.305**	-.346**	-.597**	-.631**	-.324**	-.497**	.790**	1.00	.599**	
ASRS	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001		<.001	
	r_s	.330**	-.308**	-.573**	-.569**	-.374**	-.436**	.551**	.610**	1.00	
Age	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		
	r_s	-.197**	.042	.080	.153	-.015	-.075	-.196**	-.154	-.111	1.00
Gender	Sig.	.018	.621	.341	.067	.862	.372	.019	.066	.186	
	r_s	.034	-.020	-.048	-.006	.002	-.046	.015	-.084	.077	.009
	Sig.	.689	.811	.567	.946	.983	.584	.863	.315	.357	.913

The relationship between high and low autistic traits and support. To examine whether support needs differed between participants with high and low levels of autistic traits, I created 'high autistic traits' and 'low autistic traits' groups using the upper and lower quartiles of the SATQ data separately for performing arts students (n=140) and students studying other subjects (n=72). I hypothesized that those with high levels of autistic traits in each student group were more likely to have needed and desired support than those with low levels of autistic traits.

I began by comparing the frequency of individuals reporting having previously received support in the high and low autistic traits groups. Performing arts students with high levels of autistic traits were significantly more likely to have received support than performing arts students with low levels of autistic traits. In contrast, high and low autistic traits groups for students studying other subjects did not significantly differ in reporting that they had received support. Members of the high autistic traits performing arts student group were significantly more likely to report that they had needed support and not received it than those in the low autistic traits performing arts student group. For students studying other subjects there was no significant difference between high and low autistic traits groups for needing support and not having received it. I also found a significant group difference for performing arts students desiring support in the future: performing arts students with high autistic traits were more likely to desire support in the future than those with low autistic traits. Similarly to before, high and low autistic traits groups for students studying other subjects did not significantly differ on desiring support in the future.

Next, I examined the frequency of individuals in the high and low autistic traits groups scoring at clinically-significant levels for depression, anxiety and ADHD traits.

Both high autistic traits groups of performing arts students and students studying other subjects were significantly more likely to meet clinically-significant thresholds on all of the measures (PHQ-8, GAD-7, ASRS) in comparison to the low autistic traits performing arts and other subjects groups. See Table 12 for all Chi-Square analyses, odds ratios, and percentages of high and low autistic traits groups answering 'yes' to receiving/needing/wanting support questions or scoring above clinical thresholds on psychiatric measures.

Table 12

 *Extreme Groups Analysis (EGA) for autistic high and low traits groups for all participants. The odds ratio indicates how much more likely it is that a member of the high autistic traits group would answer "yes" compared to a member of the low autistic traits group to questions to having needed, received, or wanting support, or meet clinically significant thresholds (by scoring higher than cut-off) for depression, anxiety, and ADHD measures. Numbers with an asterisk * beside them indicate a significant result.*

	Chi-Square	Degrees of freedom	Significance	Odds ratio	% of high autistic traits group answering 'yes'/ >cut-off	% of low autistic traits group answering 'yes'/ >cut-off
Performing arts students Needed support	18.78	1	<.001*	6.91	41%	10%
Other subjects students Needed support	0.01	1	.945	1.06	25%	25%
Performing arts students Received support	4.59	1	.032*	2.13	47%	31%

Other subjects students Received support	2.62	1	.110	2.31	39%	22%
Performing arts students Would like support	6.88	1	.009*	2.56	49%	29%
Other subjects students Would like support	0.96	1	.327	0.6	22%	33%
Performing arts students > PHQ-8 cut-off	39.19	1	<.001*	10.49	79%	26%
Other subjects students > PHQ-8 cut-off	4.96	1	.026*	3.07	47%	22%
Performing arts students > GAD-7 cut-off	46.05	1	<.001*	13.76	74%	17%
Other subjects students > GAD-7 cut-off	8.67	1	.003*	4.67	53%	19%
Performing arts students > ASRS cut-off	18.65	1	<.001*	5.29	50%	16%
Other subjects students >ASRS cut-off	4.96	1	.026*	3.07	47%	22%

Qualitative Analysis

In total, 131 (47%) performing arts students and 64 (44%) students studying other subjects responded to the open question asking about whether they had previously needed, asked for, or would like support in their educational setting. I found students from both groups expressed similar experiences and views so the analysis was combined and themes for all participants are presented together. Alongside analysing all of the survey participants' comments together, I also sought to identify themes that may have been unique to participants who were autistic or who had particularly high levels of autistic traits (SATQ score > 2SD above the

mean; n = 16). I did not identify any themes unique to these participants, but we highlight their contributions in the text below.

Overall, I identified three main themes. These are presented below along with their subthemes, which are italicised in the text (see Figure 2 for all themes and subthemes). Quotations from performing arts students are labelled with "PA" and "O" for students studying other subjects.
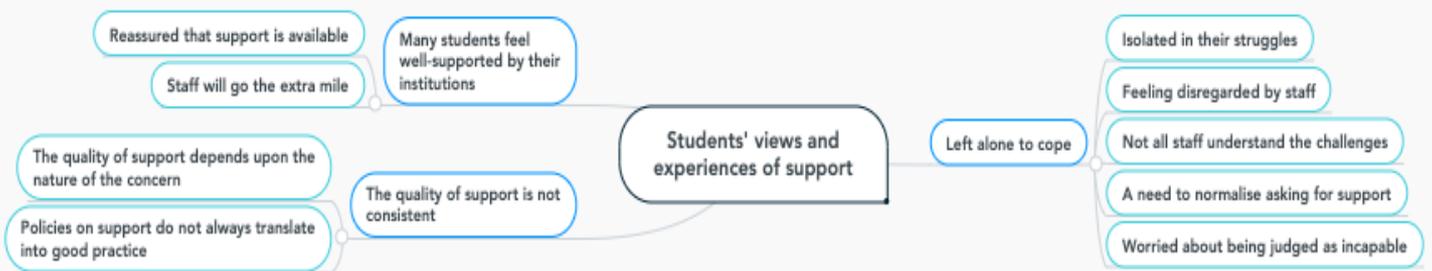
Figure 2. *The views of all students on support received/desired and their self-identified support needs: themes and subthemes.*

Many students feel well-supported by their institutions. There were many students from both the performing arts and other subjects who felt well-supported by their institutions. A common sentiment shared by many students was that they were reassured that support is available and could be provided if they asked for it: "When I need the support I know I simply have to ask for it and talk to the necessary people and I will be able to get it" [PA158]. Many of the students in both groups also spoke about how they had found particular members of staff had gone the extra mile for them, in terms of giving their time and providing consistently good support: "My tutor went to great lengths giving up his free time to help me improve my skills one on one and it made a massive difference" [O11].

Left alone to cope. That said, there were also students who did not report good levels of support and felt isolated in their struggles. A performing arts student with elevated autistic traits stated:

It was a difficult time at the beginning and it felt like no one checked to see if we were settling or coping with the course. The organisation is very bad, support there would have been appreciated or someone to acknowledge it was bad rather that it seem like I was the only one struggling [PA170].

A student studying other subjects commented on how they felt disregarded by staff when they reached out for help: "While I would like more interaction with professors, they ignore me and my requests" [O68]. Students also discussed how they felt staff lacked awareness around certain conditions and found that not all staff understand the challenges they faced: "The main issue is the lack of awareness of learning difficulties with tutors" [PA103]. Another student said, "dyspraxia and dyscalculia are not commonly known about but so many young people in the performing arts industry struggle with it. I believe many more tutors should have either training or a greater awareness for these conditions" [PA44]. Students also discussed how the conversations around mental health and asking for support were still not always out in the open and how they wished for more of these conversations to happen so that asking for support was normalised: "I think the course could be much more adept at helping with the mental health of students. Encouraging this to be a conversation from term 1 of first year" [PA142]. One performing arts student with elevated autistic traits spoke of their worries of being judged as incapable if they asked for the support they needed: "There have been times where I have felt I needed extra support due to mental health conditions, but felt unable to ask for it due to fear of being told I was not strong enough for such a competitive industry" [PA30].

The quality of support is not consistent. The lack of awareness from staff translated into students reporting that the quality of support depends upon on the nature of the concern, and that support specific to their conditions or identity did not sufficiently address all of their challenges. One autistic performing arts student reported, "I have received support with exams in the form of a separate room and extra time. However, my course leaders have not been able to offer support when it comes to my difficulty interacting with groups or with other students" [PA245]. One Black performing arts student commented on how they faced many more challenges than their white classmates and did not feel supported by their institution in studying in an environment where they were a minority: "The transition into Drama School can be difficult for BAME [Black, Asian, and Minority Ethnic]/working class students because we are launched into a completely middle-class environment where the social rules/ norms are extremely different. There is rarely any real support given and it is easy to feel disabled in comparison to your peers" [PA215]. Both performing art students and students studying other subjects reported that sometimes an institution's policies on support do not always translate into good practice: "Psych services were not very helpful as they are completely booked. Trying to receive help beyond medication is difficult next to studying and working, and that would be support that I could really use" [O119].

Discussion

The results of this study have demonstrated for the first time that autistic individuals, and those who have high levels of autistic traits, are pursuing performing arts education in the UK. There were few differences found between students studying the performing arts and other subjects, suggesting that the performing arts

is not a uniquely stressful environment in which to study. This highlights that students with elevated levels of autistic traits studying in any discipline may be especially vulnerable to lower educational self-efficacy and higher rates of mental health issues and are more likely to desire education-based support than individuals with lower levels of autistic traits.

There is a stereotype that autistic people do not excel at creative thinking, nor are likely to follow creative career paths. This likely comes from the diagnostic criteria for autism including rigid thinking and restricted interests, as well as research that has shown autistic people exhibiting less flexibility and fluency on creative tasks than neurotypical participants (American Psychiatric Association, 2013; Craig & Baron-Cohen, 1999; Liu et al., 2011; Turner, 1999). I have shown in this study that, contrary to this traditional view, autistic people are pursuing creative careers through studying at performing arts schools. This is further consolidated by my previous research that has shown autistic professionals working in creative roles and areas through pursuing and sustaining careers in the performing arts (Buckley et al., 2021a, 2021b).

The overall rates of mental health of performing arts students in this sample, as well as in students who study other subjects, is higher than expected based on general population estimates. In England, 17% of the adult population meet criteria for a mental health condition at any one time (McManus et al., 2016), with the majority experiencing depression or anxiety. Twice as many students, in both groups, scored above threshold for clinical levels of depression and anxiety on the screening tools as reported clinical diagnoses of these conditions. The higher levels of mental health difficulties seen in this study are closer to estimates seen in general student populations both in students studying in the UK (Jenkins et al., 2020) and

globally (Bitsika & Sharpley, 2012; Bruffaerts et al., 2018; Ibrahim et al., 2013), suggesting that poorer mental health may be a common phenomenon for those in higher education. Mental health conditions are also most likely to onset in people's early twenties, which is the typical time many are enrolled on higher education courses (Kessler et al., 2007), which may explain these high figures. Moreover, for many students, struggling to adapt to university life and financial stress can driver higher incidence of mental conditions, and having a disability can also contribute to these struggles (Stallman, 2010; Verger et al., 2009). There is limited published research on the quality of life and mental health of the performing arts population, and no study, to my knowledge, on performing arts education, although it is known that there is a high incidence of poor mental health for those working in the arts (ArtsMinds, 2017; Buckley et al., 2021b; Eynde et al., 2016).

Many students described a perceived lack of educational support and this may go some way in explaining the high rates of mental health issues in my sample. Many of the comments from my participants focused on feeling unsupported, isolated, and misunderstood in their education. These experiences of loneliness in their education can negatively influence students' overall academic experiences and the perceptions of stress (Stoliker & Lafreniere, 2015). This isolation can also be due to reluctance disclosing mental health problems or asking for support due to perceived stigma (Quinn et al., 2009). Recruitment for this study may have also created a biased sample due to those with unmet support or mental health needs being potentially more likely to take part in study than those without.

The challenges associated with studying in performing arts higher education are likely to be especially challenging for those with a diagnosis of autism or elevated autism traits. This might be particularly hard for autistic people to deal with due to

difficulties dealing with new situations and unexpected changes, relationships with others, and fear around disclosure of their diagnosis of autism or any mental health problems (Quinn et al., 2009; Van Hees et al., 2015). I found that there were no significant group differences in rates of autism diagnosis or elevated autistic traits between students studying other subjects and the performing arts students. We might expect to see higher levels of autistic traits in the students studying other subjects, with 77% of the students in this group studying non-arts and humanities subjects such as science, but this difference was not borne out in my results. This was perhaps due to the heterogeneity of degree subjects within this group or may be due to the performing arts group also containing students studying technical aspects of production as well as performance (Baron-Cohen et al., 2001). Students with higher levels of autistic traits from both subject groups were more likely to report poor quality of life across all domains than those with lower levels of autistic traits (Kamio et al., 2013; Kamp-Becker et al., 2010). I also found that individuals with higher levels of autistic traits in both groups were significantly more likely to have lower self-efficacy and poorer mental health than those with low levels of autistic traits. This is consistent with my research on performing arts professionals, where I had similar findings (Buckley et al., 2021b) and other research that has reported a higher percentage of the autistic population have mental health conditions than the general population (Hofvander et al., 2009; Lever & Geurts, 2016; McManus et al., 2016).

The results indicating that self-efficacy, quality of life, and mental health are poorer for those students with high levels of autistic traits than for those with low levels of autistic traits could be due to many factors. One such factor may be students' experiences of their educational environments. We know that many autistic

students in higher education are likely to face challenges in both accessing their university course and the social relationships they have with peers and staff, which can mean feeling isolated, anxious and/or depressed, and desiring support (Beardon et al., 2009; Gelbar et al., 2014; Jobe & Williams White, 2007; Madriaga & Goodley, 2010). The comments made by those with elevated levels of autistic traits in this study described educators as having inconsistent levels of knowledge and the ability to provide support concerning different needs, this lack of accommodation for some behavioural differences may be contributing to their lower quality of life and mental health. The students' lower educational self-efficacy also reflects research that has found autistic people to have lower occupational and general self-efficacy than non-autistic people (Lorenz & Heinitz, 2014) and indicates that those with subclinical levels of autistic traits may also be experiencing considerable challenges (Constantino & Todd, 2003; Hoekstra et al., 2007). The students' lower self-efficacy may be influenced by the reported lack of understanding from educators, who may not believe that disabled or neurodivergent students can perform at similar levels to their non-disabled peers and therefore treat them differently. Helping educators to learn more about autism and autistic traits, may improve the consistency and quality of support for students.

Performing arts students with higher levels of autistic traits were more likely than those with low levels of autistic traits to report that they have previously needed education-based support and not received it, and they were also more likely to desire support in the future for their education. Students with autism diagnoses or elevated autistic traits described their worry about being judged as incapable if they revealed their difficulties in order to ask for support and then also found that support was inconsistently implemented when they did seek it out. These fears of being judged

negatively are held by many autistic people (Davidson, 2010; Davidson & Henderson, 2010; Hull et al., 2017) and it is common for those with disabilities to be judged as less capable than those without (Colella & Varma, 1999; Nelissen et al., 2016; Vornholt et al., 2013) and for autistic people to experience more immediate negative reactions and less empathetic responses towards them than neurotypical others (Milton, 2012; Sasson et al., 2017).

The types of support that these students want are similar to those desired by all of the students surveyed: comprehensive support that address all of their needs and challenges, academic staff to have high and consistent levels of knowledge regarding specific challenges associated with disability, and a safe and secure environment where asking for support is comfortable and normalised. Future research should examine types of support that may be particularly effective for those with elevated levels of autistic traits. With the demonstrated significant associations between autistic traits, mental health symptomology and ADHD traits, future work must also take into consideration what other factors may be driving this need for support. It may be that this greater need for support stems from unmet disability needs or fear around disclosing conditions in order to receive support because of stigma.

There were only two significant differences found between the two student groups, educational self-efficacy and quality of life in the environment domain. The lower educational self-efficacy score for students studying other subjects is likely due to the educational self-efficacy scale being designed specifically for those in performing arts education. I aimed to mitigate this effect by removing 3 items that were specifically performing arts focused, but the scale may still be biased towards performing arts courses. The lower quality of life in the environment domain score for

the performing arts students may indicate lower standards of living conditions for performing arts students, although it may also be due to control group who were not matched evenly with the performing arts students, particularly on gender and level of study. It may well be that postgraduates are likely to experience better environmental quality of life than undergraduates, and so the high levels of postgraduates in the group of students from other subjects influenced the quality of life results. With the two student groups otherwise reporting similar levels of mental health symptomology and quality of life, alongside discussing similar experiences of accessing support, this is suggestive that performing arts courses are not causing any greater challenges to students than other higher education courses. Unlike the later workplace environment, where the performing arts does yield unique challenges (Buckley et al., 2021b), performing arts higher education courses may engender comparable pressures and structural similarities to other courses. Performing arts professionals who have previously trained at performing arts schools have reported that they felt ill-equipped for the working world after finishing training, and suggested that the schools could provide more support that helps students prepare for life after graduation, so this is an area where schools could focus on increasing their support (Buckley et al., 2021b).

One strength of this study is that it is the first to use a large UK-based sample of performing arts students to examine individuals' educational confidence and their perspectives on support available in the performing arts. It is also the first time that the relationship between autistic traits and these factors has been examined in this group.

In conclusion, these findings provide an initial investigation into autistic traits and their relationship with educational self-efficacy, mental health, quality of life, and

support needs for performing arts student. Furthermore, this study has highlighted

that there are a number of individuals who are autistic, or have high levels of autistic

traits training in the performing arts, and that this group are particularly vulnerable to

low educational self-efficacy and wellbeing, and are more likely to have needed and

desire education-based support. Future research should further examine the specific

support needs of this group.

Chapters 2 and 3 have provided a broad overview of the experiences of those

in performing arts workplaces and higher education and some initial information

regarding the experiences of autistic performing arts professionals and students, but

much more in-depth research is required to understand the support needs of these

populations. We don't yet know the types of support that would best suit these

populations, or the barriers that need to be overcome to access it. Chapter 4 aims to

address this, in part, by exploring and examining the experiences of autistic

performing arts professionals and investigating the specific occupational support

needs of this group. The next chapter also analyses the attitudes of performing arts

employers and the adjustments they are putting in place for autistic employees, as

they are an integral factor as to whether autistic people can access workplace

support (Annabi & Locke, 2019).

Chapter 4

"The real thing I struggle with is other people's perceptions": The experiences of autistic performing arts professionals and attitudes of performing arts employers in the UK

Note: The study that forms the basis of this chapter has been published in the *Journal of Autism and Developmental Disorders* (Buckley et al., 2021a). The method and results sections have been reproduced in full here, and the introduction and discussion are reproduced in part, with edits.

Introduction

The previous two chapters have shown that autistic people are pursuing careers and higher education in the performing arts, and that those who are autistic or who have elevated levels of autistic traits are more likely to desire support. An important next step is investigating in more depth the types of support that autistic professionals are seeking. This chapter will address this through focusing on the experiences of support, received and needed, by autistic performing arts professionals.

The adapted OIMIB framework provides a holistic framework to interpret autism employment research by focusing on individual, intervention, and organisational levels and how these interrelate to barriers faced by autistic people in employment (Annabi & Locke, 2019). The framework provides a multilevel theoretical lens through which to explore the complexity of issues around inclusion of marginalized workers, such as those who are autistic. The adapted OIMIB framework posits that autistic individuals experience barriers and opportunities differently based on a set of individual differences. These individual differences also influence how and whether autistic employees use autism employment programs and whether they deploy their own coping methods to mitigate their experience of barriers and opportunities in the workplace. It claims that autistic employees will experience fewer barriers when neurotypical colleagues are knowledgeable about autism and when they have positive attitudes towards autism. The existing research supports these claims: the majority of workplaces and employers do not appear currently to have adequate levels of awareness or support available to autistic employees (Baldwin, Costley, & Warren, 2014; Hurlbutt & Chalmers, 2004; López & Keenan, 2014; Unger, 2002), and my previous work established that there are autistic people working in the performing arts with unmet support needs (Buckley et al., 2021a). Therefore, I will examine the attitudes and adjustments being made by performing arts employers.

Following the adapted OIMIB framework (Annabi & Locke, 2019), a lack of employer knowledge about autism and how autistic people can be supported in the workplace may result in them not receiving the necessary workplace support. Employers play a crucial role in how accessible workplaces are for those with disabilities (Unger, 2002), but many employers do not understand the most effective

ways of working with disabled people (Rashid et al., 2017). Furthermore, while

employers often express favourable attitudes towards workers with disabilities when

asked (Kregel & Tomiyasu, 1994), this is not always reflected in their hiring practices

(Copeland, 2007; Unger, 2002). There is also the possibility that difficulties with

social communication and interaction further disadvantage autistic people compared

to other disability groups, as in one model of disability it was hypothesised that a

warm outgoing interpersonal style was associated with greater positive perceptions

of capability, being included by co-workers, better work performance reviews, and

more open attitudes of supervisors towards mentoring the autistic employee (Stone

& Colella, 1996). Therefore autistic people, who may have more difficulties with their

interpersonal work relationships, may be at an extra disadvantage which may go

some way in explaining the disparity in employment figures between autistic people

and other disability groups (National Autistic Society, 2016; Remington & Pellicano,

2018). For employers who do not currently work with disabled employees, this lack

of experience can result in negative beliefs around whether potential employees

would have the necessary knowledge, skills and abilities to perform needed jobs,

alongside fears concerning the cost of necessary accommodations and negative

customer reactions (Fraser et al., 2010; Graffam et al., 2002; Lengnick-Hall et al.,

2008). These attitudes and beliefs are often based on stereotypes rather than

experiences, and may be a significant barrier to employment for disabled – including

autistic – people (Ju et al., 2013).

Even when employers are willing to work with autistic employees, research

has shown that employers lack confidence providing appropriate workplace support

without the guidance of disability employment organisations or other external support

(Howlin et al., 2005; Remington & Pellicano, 2018; Scott et al., 2015). Autistic

employees can require on-going support such as a structured and task-adapted

environment (Scott et al., 2018) and a working environment that does not trigger

sensory hypersensitivities, such as aversions to particular lighting and/or sounds

(Marco et al., 2011). Yet employers often place the onus of responsibility on the

autistic employee, rather than the employer, to make these kinds of adjustments in

order to maintain employment and meet any productivity requirements (Scott et al.,

2018).

The current study

In my previous studies (Chapters 2 & 3) I examined the experiences of both

neurotypical and neurodivergent people, considering the impact of autistic traits and

neurodevelopmental conditions on those pursuing careers in the performing arts.

This study narrows the focus and looks specifically at the views and experiences of

autistic performing arts professionals, and then performing arts employers' views and

experiences of working with autistic people. My specific aims were twofold. First, I

sought to understand the views of autistic performing arts professionals and their

experiences of working with neurotypical colleagues and employers. I also examined

the extent and nature of any occupation-based support they received in their

workplaces and whether they perceived any such support to meet their needs.

Second, I also spoke with performing arts employers to understand their attitudes

and levels of knowledge about autism, how confident they were about working with

autistic people, and whether they knew how best to support them in the workplace.

Method

Participants

In total, 37 participants took part in this study: 18 autistic performing arts professionals (7 female, 9 male, 2 non-binary or other) and 19 performing arts employers (10 female, 9 male). There was a slightly higher proportion of autistic professionals who reported ethnicities that were non-white, were non-binary, or had an intellectual disability than UK population prevalence estimates (Government Equalities Office, 2018; UK census figures: Office for National Statistics, 2011). The performing arts employers were predominantly white and none had intellectual disability. Participants were recruited through convenience sampling methods, purposive targeting of autistic performing arts professionals and performing arts employers through the Royal Academy of Dramatic Art and promotion on social media. Demographic information can be found in Table 13.

Table 13

Participant characteristics.

	Autistic performing arts professionals N = 18	Performing arts employers N = 19
Age		
Mean (SD), years	32.6 (12.1)	44 (9.3)
Median, years	28.5	43.5
Range, years	19 – 61	31 – 58
Ethnicity		
White	15	18
Black	2	
Asian		1
Other	1	
Gender		
Female	7	10
Male	9	9
Non-binary or other	2	
Intellectual disability	3	

The autistic professionals had been working in the performing arts for varying lengths of time, ranging from under 1 year to over 20 years (median = 6). The majority interviewed were primarily working as performers, while some worked as production technicians. Most reported working in more than one type of performing arts role over the course of their careers, such as being both a performer and a member of production staff, or as a performer and a writer or theatre maker. They were UK-based at the time of interview, although some had worked both in the UK and abroad. All self-identified as autistic, with 17 reporting having received an independent clinical diagnosis of an autism spectrum condition according to DSM-IV or DSM-5 criteria (American Psychiatric Association, 1994, 2013)[1].

The performing arts employers had varied roles within the performing arts: there were directors, casting directors, artistic/creative directors, agents, and heads of production, technical, diversity, and access. A minority (n = 3) specifically worked with disabled performers or had roles that focused on supporting disabled performing arts employees. Systematic data were not collected on how long employers had worked within the performing arts, although many discussed careers that had spanned over 20 years. The employers were UK-based, although some had also worked abroad over the course of their careers.

Measures

Semi-structured interviews were conducted with all participants. Interviews were recorded with participants' prior consent and professionally transcribed

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[1] I included one individual who self-identified as autistic but had not yet received a formal diagnosis. Their inclusion was important because there are lengthy waiting lists for adult diagnostic services in the UK (Unigwe et al., 2017), and many older autistic adults, including autistic women and non-binary people may have been mis-diagnosed or missed out on a diagnosis altogether (Gould, 2017; Kirkovski et al., 2013; Lai & Baron-Cohen, 2015; Linton et al., 2014).

verbatim. In the interviews with autistic professionals, participants were asked open-ended questions about their likes and dislikes concerning their workplaces, and if they had ever asked for, needed, or would like support in relation to their working environments or careers. In the interviews with employers, participants were asked about their current knowledge of autism, whether they had any experience working with autistic people, and if they knew how or where to find support for either an autistic employee or themselves if needed. While some employers explicitly stated that they had worked with autistic people, many reported being unsure. All employers were asked to reflect on their experiences working with people that they had both explicitly known or suspected to be autistic, and also asked to consider how they might go about potentially working with autistic people in the future.

Data Analysis

Participants' open-ended responses were analysed using reflexive thematic analysis, as detailed by (Braun & Clarke, 2006, 2019). The transcripts were analysed from an inductive (bottom-up) perspective where themes were created within a 'contextualist' method of critical realism (Willig, 1999). I and my principal supervisor carried out the thematic analysis and approached the analysis from the perspectives of psychology researchers who do not identify as autistic, and therefore analysed the data from the perspective of outside interpreters.

Data were initially coded separately by group (autistic professionals, employers) with focus on the semantic content of the data but, after considerable discussion, the authors agreed that many codes were shared across the two groups and so we decided to look at all of the data together, re-coding where necessary. The analysis was reflexive, so the authors moved backwards and forwards between the data and analysis. The authors met together several times to discuss the themes

and subthemes, ensuring that the themes and their definitions encompassed the patterns of shared meanings across the entire data set and to resolve any inconsistencies.

Procedure

Ethics approval was obtained from UCL Research Ethics Committee. All participants provided written informed consent prior to participating in this study. Participants completed individual semi-structured interviews over the phone, on Skype, or in-person, either on University premises or in a location of their choosing. Interviews with autistic professionals ranged in length from 16 to 54 minutes (M = 36 minutes), and for employers 11 to 42 minutes (M = 23 minutes). To preserve anonymity of the participants involved all quotations are identified only by letters.

Results

I identified four themes. All themes and subthemes (italicised in the text), alongside example quotations, are listed in Table 14

Table 14

Themes for autistic performing arts professionals and performing arts employers.

Themes	Subthemes	Example Quotes
Autism can bring strengths	Scholars of human expression	"I had to learn to understand body language, behaviours, facial expressions that sort of thing, I had to study them and from doing that, I think it's made me in to a better actor." Pro R "I just sort of … really developed this catalogue, this encyclopedia of facial expressions and body language." Pro K
	A detail-oriented approach	"I possibly just generally pay a bit more attention to the detail than other people might." Pro L "There are characteristics of autism that seem really great for this kind of work, which is the attention to detail, and the determination to get things exactly right which is brilliant." Emp M
	High engagement with the work	"Once I get into a project I can just sit down and I will do it all day." Pro K "Hyper-focus is a bit beneficial for that, so I get really involved and I am like – yes so long hours don't particularly bother me." Pro J
	Seeing the world differently	"I think Asperger's lends itself to creative thinking, that you see the world a bit differently, and that is actually quite a useful talent for the arts!" Pro J "They're really creative" Emp C "Autistic people in acting, there's a boldness in trying things" Emp A
A challenging profession	The workplace can be overwhelming	"I will be the person that's likely to meltdown and loses it because I can't hold it in, or I get too stressed." Pro I "Walking into a new space she's never been to, she gets real sensory overload." Emp B

	"The lighting in some parts of the building can be a real barrier to autistic people. Sometimes, unfortunately, that's the only space that we can do certain things." Emp F
Auditions can cause extreme anxiety	"Auditions I hate. I do not do well with auditions." Pro O
	"Massive anxiety around auditions. And I do mean massive anxiety!" Pro I
Struggle adapting to last minute changes	"Things do change last minute, and I find that really difficult, I find that really stressful internally." Pro K
	"I understand that last minute changes to arrangements, which I am afraid does happen in this industry, can actually cause a bit of disquiet." Emp M
A need for clarity in communication	"The most difficult thing with dealing with people, is when they are sometimes a bit indirect with their language." Pro L
	"It is that point of why haven't they understood what is being asked, or just the processing I think." Emp K
Socializing at work can be taxing	"Even one interaction with one person in an hour sometimes can be exhausting." Pro I
	"They do their best to be very, very sociable, but it seems to obviously be a bit more of a struggle for them than for someone who isn't on the spectrum." Emp H
Miscommunications can happen	"I don't communicate as well as I should with people I kind of assume that people know what I'm talking about, when they have no idea." Pro G
	"Saying the wrong thing at the wrong time, needing certain information in a way." Emp C
Networking is challenging	"People will want to go out for drinks, I usually do because it is networking and you are supposed to, but I find that period really tough." Pro K
	"There is a lot of 'let's sit around and have a drink', so after a meeting I am a bit ahh! I am peopled out, but I feel like I have to do this so I will." Pro H

	Mediating the responses of non-autistic colleagues	"I think where the problem occurs is when the non-autistic people can't relate to the autistic people and then they start shouting and screaming or they start having little bitchy sessions or whatever and then it affects the whole dynamic...But it's never been the autistic people that have created that." Emp I
		"Occasionally I will just say something or do something that people find really weird, and I didn't realise it was weird! And there will be some social misunderstanding that I need to deal with." Pro J
	Peers in the industry are often scared to make a mistake	"Most casting directors who are concerned about that, are concerned about saying the wrong thing and embarrassing themselves probably… there is definitely a fear of how to speak to people, whether they can speak to people directly, and all sorts of things really." Emp M
		"People will be basically shitting themselves not quite knowing what to say or do and in practice you just say or do the normal range of things that you normally do but sometimes with a few extra pointers." Emp A
	The majority of problems can be overcome	"Never anything that was like a major obstacle, never anything that couldn't be very easily solved." Emp L
Not all want to disclose	Will I be judged negatively?	"Just concerned, that is before someone even meets me, they are going to see me as being needy." Pro K
		"The real barrier and the real thing I struggle with is just other people's perceptions, and other people's misconceptions." Pro H
	Pigeon-holed to autism-specific work	"Yes, I have Asperger's Syndrome, but you have to remember, it doesn't define who I am." Pro Q
		"I don't just want it to tie me down to just doing autism related work, or autism related theatre work. There is other stuff I am interested in." Pro B
	Out and proud	"I'm deliberately quite 'out' about it, because I don't have any problem with it." Pro I
	Employers aren't always being told	"I've never seen an actor's profile on Spotlight with a mention of autism. I don't know if it's something that is widely documented if an actor does have autism that they put it on their CV as someone with a disability would." Emp H

		"Actors don't disclose their disability and it's not a part of the show so you would never know. So, is that a good thing or a bad thing? I don't know, but it's not a visible thing." Emp B
	A desire to fit in	"It's a bit infantilising to have to ask for help sometimes." Emp A
		"They feel they can't say it because they feel they want to just pass as being normal or they feel like it's too awkward to ask or they're embarrassed or something." Emp B
	Support necessitates disclosure	"They just became more understanding.... I could be honest about the fact that something was a bit loud." Pro I
		"I'm not shy about coming forward and saying, "I'm autistic. This is what I need."" Pro M
		"In order to ask for help, you have to disclose." Pro P
A need for individualised support	It starts with a conversation	"It's very much what are you access needs, how can we best support you? Having an open and honest conversation and making sure there's a system in place." Emp B
		"It's about having that frank conversation and seeing how far that frank conversation goes." Emp F
	Greater understanding can be enough	"The only support I would want is for people to understand why I do certain things and don't judge me." Pro N
		"On set no, not extra support as such, just an understanding." Emp I
	Allowing different modes of working	"We have to make sure that he gets his script a good week in advance, so he's got proper preparation time." Emp G
		"The director was really aware of that and then would check in with me about light and sound levels in the room and how exercises were going and stuff." Pro K
		"It might be that hours are different, to avoid packed trains, which is something we're looking into, because it's not just about arriving. If you arrive and you're completely broken because your journey was impossible, then there's no point being at work." Emp F

Support from others	"A mentor would be amazing." Pro G
	"What you need is somebody to see you, who is not necessarily part of the company, somebody who goes, "Yes, I can see the difficulty you're having" and maybe you'd talk to." Pro P
	"We took the decision to employ a chaperone." Emp N
	"They discuss their support needs together with that person...they might say, you know, "My support needs are this, this and this. I would like you to work with me in this way." Emp B
	"I feel like internally we have a number of people who are very plugged into being... you know, it's their job to be up to date." Emp J
	"I would love it if there was a person to speak to about it." Emp H
No time for training	"Well, when are we going to have time to train, attend training?" Emp C
	"The kind of training that has got live people in it is not desired by the film industry, where of course you've got a lot of freelance people working so how can you get them because people get together on a project by project basis so how can you all get them in a room at one time? You can't." Emp A
	"You spend your life on Google, and training courses!" Emp E
Support can be inconsistent	"We will find our production in last minute places and often, certainly for the offices and studios, the cheapest places, some of them don't necessarily have the access requirements or the areas to relax." Emp N
	"The provision is very very patchy... they will say oh sure we can do that, and then unless you pursue it, nothing actually comes of it." Pro J
I will learn when it's relevant	"If I were to be in a position where I was working regularly with someone with autism then I'd make sure - or if any of my staff were in that position, when they have been in that position, I've made sure that they've had training." Emp D
	"I think online resources, with the best will in the world, people either pay lip service to them or they go looking for them when they need something as opposed to being trained pre-emptively." Emp N

A lack of confidence	"I don't feel that confident personally. If the situation arose, where without time to prepare, without time to receive any awareness training, where I was required to work with work extensively with someone with autism I'd probably be quite uncomfortable with that." Emp D	
	"I think a lot of what, me and casting directors would find daunting about learning more about this, is not wanting to get anything wrong, being able to examine your own insecurities, hesitations." Emp R	
Unaware of resources	"I do not know where to point any autistic employee if she felt or he felt that they needed more help." Emp F	
	"I wouldn't be able to point someone else in the direction of information outside of the organisation. I don't know if they're entitled to any kind of right to work support." Emp D	
The burden of advocacy	"I do wish they knew more, because you spend a lot of time and a lot of energy having to explain yourself, and that's really hard. Everybody else doesn't have to do that." Pro I	
	"Most of the time, people just don't really know what it means, they don't really know what to do with the information because they don't really know how [autism] affects you." Pro R	
An openness to learn more	"I would like to know more about that and also if there's a way of engaging with autistic actors certainly a lot more than I have done." Emp H	
	"It would be wonderful to know how I can make my rehearsal process and my rehearsal rooms and my auditions and meeting actors and things more accessible so that I can meet the best people working whether they are autistic or not." Emp L	

Autism can bring strengths. The autistic professionals were keen to emphasise that although being autistic could be associated with some challenges in the workplace, their autistic characteristics were also a source of strength, and that some of their traits seemed particularly well-suited to their performing arts work. For example, some professionals described being scholars of human expression: "I had to learn to understand body language, behaviours, facial expressions that sort of thing. I had to study them and from doing that, I think it's made me into a better actor" [Pro R]. Many discussed their high engagement with their work, and how they could become engrossed with a particular task and maintain focus for longer than their non-autistic colleagues: "Hyper-focus is a bit beneficial for that, so I get really involved – yes, so long hours don't particularly bother me" [Pro J]. Often, a detail-oriented approach accompanied this high level of focus: "I possibly just generally pay a bit more attention to the detail than other people might" [Pro L]. These traits were also noticed by employers: "There are characteristics of autism that seem really great for this kind of work, which is the attention to detail, and the determination to get things exactly right, which is brilliant" [Emp M]. Both groups felt that viewing the world through an autistic lens led to a unique perspective. One professional explained: "I think Asperger's lends itself to creative thinking that you see the world a bit differently, and that is actually quite a useful talent for the arts!" [Pro J]. This sentiment was echoed by employers: "Autistic people in acting, there's a boldness in trying things" [Emp A].

A challenging profession. Both professionals and employers identified several aspects of performing arts work that could be challenging for autistic professionals. Many professionals spoke of sometimes finding that the workplace

can be overwhelming: "I will be the person that's likely to meltdown and loses it because I can't hold it in, or I get too stressed" [Pro I]. The employers acknowledged how autistic professionals might find the sensory environment at work particularly challenging: "The lighting in some parts of the building can be a real barrier to autistic people. Sometimes, unfortunately, that's the only space that we can do certain things" [Emp F].

Professionals also described how auditions can cause extreme anxiety: "Auditions I hate. I do not do well with auditions" [Pro O]. Employers recognised that autistic professionals may struggle adapting to last-minutes changes involved in a lot of performing arts work: "I understand that last-minute changes to arrangements, which I am afraid does happen in this industry, can actually cause a bit of disquiet" [Emp M]. Professionals confirmed this: "Things do change last minute, and I find that really difficult, I find that really stressful internally" [Pro K]. Some professionals struggled with understanding instructions from colleagues or other staff and had a need for clarity in communication: "The most difficult thing with dealing with people, is when they are sometimes a bit indirect with their language" [Pro L]. Employers also picked up on these difficulties: "It is that point of why haven't they understood what is being asked, or just the processing I think" [Emp K].

Both employers and professionals recognised that a great deal of challenges for autistic performing arts professionals were often rooted in their social interactions with others. Professionals spoke of how occasional miscommunications can happen: "I don't communicate as well as I should with people. I kind of assume that people know what I'm talking about, when they have no idea" [Pro G] and how the expectation of socialising at work can be taxing: "Even one interaction with one person in an hour sometimes can be exhausting" [Pro I]. Some employers also

noticed these difficulties in the workplace: "They do their best to be very, very sociable, but it seems to obviously be a bit more of a struggle for them than for someone who isn't on the spectrum" [Emp H]. Many professionals described difficulties with navigating the expectation that they would also socialise with colleagues outside of work to network, and how managing energy levels for networking is challenging: "People will want to go out for drinks. I usually do because it is networking and you are supposed to, but I find that period really tough" [Pro K].

Some of the employers who had experience working with autistic employees described one unanticipated challenge around mediating the responses of non-autistic colleagues to their autistic employee(s): "I think where the problem occurs is when the non-autistic people can't relate to the autistic people and then they [non-autistic people] start shouting and screaming or they start having little bitchy sessions or whatever and then it affects the whole dynamic. But it's never been the autistic people that have created that" [Emp I]. Alongside having to manage the responses of colleagues already working alongside autistic employees, employers also commented that their peers in the industry are often scared to make mistakes and seem apprehensive about the prospect of working with autistic people: "Most casting directors who are concerned about that, are concerned about saying the wrong thing and embarrassing themselves probably… there is definitely a fear of how to speak to people, whether they can speak to people directly, and all sorts of things really" [Emp M]. While acknowledging that there were challenges when working with autistic employees, employers were also keen to emphasise that the majority of problems can be overcome: "[There was] never anything that was like a major obstacle, that couldn't be very easily solved" [Emp L].

Not all want to disclose. Many professionals reflected on whether disclosing being autistic to their employers or colleagues would bring more advantages or disadvantages. In particular, some worried about whether they would be judged negatively by their colleagues or employers if they revealed that they were autistic: "The real barrier and the real thing I struggle with is just other people's perceptions, and other people's misconceptions" [Pro H]. Some professionals were also concerned that if they revealed they were autistic to potential employers or their agents, this disclosure would place them at risk of being pigeon-holed into autism-specific work and perhaps limit their hiring opportunities: "I don't just want it to tie me down to just doing autism-related work, or autism-related theatre work. There is other stuff I am interested in" [Pro B]. In line with this view, many employers spoke of not being aware of whether they had encountered anyone autistic and not being told about diagnoses: "I've never seen an actor's [online casting] profile with a mention of autism. I don't know if it's something that is widely documented if an actor does have autism that they put it on their CV as someone with a disability would" [Emp H]. They suggested that this was probably due to people not disclosing their autism rather than the possibility that they were not working with anyone autistic. Some employers reflected on why people may not be disclosing and surmised that this may be due to a desire to fit in with non-autistic colleagues and be considered in the same light as other members of staff: "They feel they can't say it because they feel they want to just pass as being normal or they feel like it's too awkward to ask or they're embarrassed or something" [Emp B]. Conversely, there were a minority of professionals who were happy to be consistently 'out' about being autistic: "I'm deliberately quite 'out' about it, because I don't have any problem with it" [Pro I]. Many professionals recognised that in order to receive support it was often

necessary to disclose their diagnosis to their employer: "I'm not shy about coming forward and saying, "I'm autistic. This is what I need" [Pro M], and a few found that this not only led to workplace accommodations but also colleagues who recognised and were more empathetic to their needs: "They just became more understanding. I could be honest about the fact that something was a bit loud" [Pro I].

A need for individualised support. Employers recognised that every autistic person with whom they may work will have a unique set of characteristics and needs, and therefore described the individualised approach that they had previously provided or could potentially offer. The majority, however, were not fully confident about what this might look like in practice. Some advocated for starting with a conversation with the individual who may need support: "It's about having that frank conversation and seeing how far that frank conversation goes" [Emp F]. They also suggested that in some cases all that is required in the way of support is greater understanding, consideration and awareness: "On set no, not extra support as such, just an understanding" [Emp I]. This sentiment was echoed by professionals: "The only support I would want is for people to understand why I do certain things and don't judge me" [Pro N]. Some employers spoke of allowing different modes of working for employees who needed it, from providing quiet spaces for employees, to ensuring that autistic actors received their scripts a week in advance of shooting to allow proper preparation time, and allowing them come into work at different times where possible: "It might be that hours are different, to avoid packed trains, which is something we're looking into, because it's not just about arriving. If you arrive and you're completely broken because your journey was impossible, then there's no point being at work" [Emp F].

Both employers and professionals spoke about the varied ways that support from others could be useful. Some employers were able to offer their autistic employees onsite support from a support-worker. This meant that there was someone for the autistic employees to speak directly with about any issues they were having, and also, who could advocate for their needs to the rest of the company: "They discuss their support needs together with that person. They might say, you know, 'My support needs are this, this and this. I would like you to work with me in this way'" [Emp B]. When professionals were asked about the support they'd like to see more of, their answers often centred around wanting someone to consult, such as a mentor, about any work-based difficulties and how to progress their careers: "What you need is somebody to see you, who is not necessarily part of the company, somebody who goes, 'Yes, I can see the difficulty you're having' and maybe you'd talk to" [Pro P]. For some professionals, it was important that a potential mentor should also be autistic. Similarly, many employers also spoke about their desire to consult with someone who could support them with making disability accommodations within their company. Some employers felt that they already had someone in a role within their organisation who could respond to the potential support needs of an autistic employee: "I feel like internally we have a number of people who are very plugged into being... you know, it's their job to be up to date" [Emp J], while others expressed a desire for such a person: "I would love it if there was a person to speak to about it" [Emp H]. What was common across employers, however, was that there was a tendency to rely upon someone else within the workplace to have the requisite knowledge and to implement that support, rather than be that person themselves.

In contrast to the examples of support given by the employers in this study, the majority of the autistic professionals felt that the employers they had encountered across their careers did not have adequate knowledge about autism and considered what that meant for them in the context of the workplace. They communicated their fatigue over the burden of advocating for themselves: "I do wish they knew more, because you spend a lot of time and a lot of energy having to explain yourself, and that's really hard. Everybody else doesn't have to do that" [Pro I]. Many employers were aware that they could improve their knowledge of autism and did speak of an openness to learning more and a desire to improve: "It would be wonderful to know how I can make my rehearsal process and my rehearsal rooms and my auditions and meeting actors and things more accessible so that I can meet the best people working" [Emp L]. Some of the employers, however, were not confident that with their current levels of knowledge they could presently provide adequate support: "I don't feel that confident personally. If the situation arose, where without time to prepare, without time to receive any awareness training, where I was required to work extensively with someone with autism I'd probably be quite uncomfortable with that" [Emp D]. The majority of employers were unaware of any resources available to autistic professionals outside of what their own organisations could provide: "I do not know where to point any autistic employee if she felt or he felt that they needed more help" [Emp F]. Some of the employers were keen to provide appropriate support for autistic employees if, and when, they had them. Rather than pre-emptive training, some employers wanted to respond as and when they felt it was relevant: "If I were to be in a position where I was working regularly with someone with autism then I'd make sure – or if any of my staff were in that position, when they have been in that position – I've made sure that they've had training" [Emp D]. While many employers

indicated a desire to learn more about supporting autistic members of staff, they emphasised that educational resources needed to be easily accessible and not overly time-consuming. This was due to the time commitment involved in attending training, the coordination, and the financial constraints of potentially paying to train not only themselves, but large numbers of staff, who may be only working for the company for short periods of time: "The kind of training that has got live people in it is not desired by the film industry, where of course you've got a lot of freelance people working so how can you get them because people get together on a project by project basis so how can you all get them in a room at one time? You can't" [Emp A]. Alongside, the impermanence of staff in their employ, the location of where work would take place could change as well. With changing locations, employers commented on the difficulty of maintaining access requirements: "We will find our production in last-minute places and often, certainly for the offices and studios, the cheapest places, some of them don't necessarily have the access requirements or the areas to relax" [Emp N]. Some professionals expressed their frustration at how promised support could be inconsistently implemented, which could suggest a lack of recognition from employers of how vital the consistency of support can be to some autistic professionals: "The provision is very, very patchy... they will say 'oh sure we can do that', and then unless you pursue it, nothing actually comes of it" [Pro J].

Discussion

This study examined the employment experiences of autistic performing arts professionals and performing arts employers in the UK. Importantly, members from both groups recognised key areas of challenge for autistic professionals and also the strengths that autistic professionals can bring to this field. Many autistic

professionals reported that there was inadequate employment-based support, and these claims were corroborated by the low levels of knowledge that many of the employers themselves reported regarding autism and appropriate methods of support. These findings support the key claims within the adapted OIMIB framework (Annabi & Locke, 2019) of the critical relationship between the levels of knowledge that neurotypical colleagues or employers have around autism and the amount of barriers that autistic people face in employment.

The autistic professionals and the employers were keen to emphasise how autistic characteristics can be advantageous in the workplace with both groups highlighting autistic strengths, such as paying attention to detail, notably high levels of focus, and taking often uniquely creative approaches to tasks. These are traits that have been recognised as skills that autistic people can bring to the workplace (Baron-Cohen et al., 2009; de Schipper et al., 2016; Hagner & Cooney, 2005; Ham et al., 2014; Scott et al., 2018). One talent that proved particularly useful for autistic performers was the reported encyclopaedic knowledge of facial expressions and body language that they had built up from studying other people over the course of their lives. This phenomenon reflects findings that autistic people process faces and emotional expressions in a more extrinsic way than neurotypical people (Harms et al., 2010) and often use masking or compensatory strategies for "putting on my best normal" (Hull et al., 2017), which the professionals were able to harness for their performance work. It is also suggestive of a perhaps more systematic way of learning to recognise and reproduce emotional expressions rather than using inherent cognitive empathy and theory of mind to do this (Baron-Cohen, 2002, 2006).

Autistic professionals and employers also recognised, however, how challenging working in the performing arts can be for autistic people. Many of the

challenges identified by both groups centred on aspects of social communication and interaction. The social challenges may be exacerbated in this particular industry, in which workers are often employed on a project-based system, which means professionals are constantly having to seek new employment and undergo numerous auditions/interviews to maintain employment (Menger, 2006). This may be particularly burdensome to autistic professionals as they report high anxiety around auditions and may struggle with aspects of job interviews such as small talk (VanBergeijk et al., 2008). Like the autistic participants in this study, others have reported that social and collegial relationships at work can be one of the most challenging aspects of work (Baldwin et al., 2014). Many of the employers interviewed herein also remarked on this issue. Previous research has found social difficulties with colleagues and supervisors can hinder job performance and can even lead to job termination (Bolman, 2008; Hendricks, 2010; Hurlbutt & Chalmers, 2002, 2004).

Alongside the difficulties with social communication and interaction, many of the autistic professionals spoke of feeling anxious generally when at work, and some described feeling extreme anxiety in response to auditions. These findings reflect existing research showing the high prevalence of co-occurring mental health conditions (especially anxiety) in autistic people (Lever & Geurts, 2016; Simonoff et al., 2008; Strang et al., 2012) and the high levels of stress and anxiety that autistic people report in the workplace (Hurlbutt & Chalmers, 2004). It also echoes my own research, which found that performing arts professionals with elevated autistic traits are more likely to report clinically-significant levels of mental health issues (Buckley et al., 2021b). Many autistic people can be hypersensitive to certain everyday sensory stimuli, such as light and sound (Marco et al., 2011), which can make being

in certain environments challenging. Struggling to cope with sensory stimuli in the workplace can cause anxiety, alongside difficulties with social communication and interactions, unpredictable situations, or when last-minute changes occur (Burt et al., 1991; Hurlbutt & Chalmers, 2004; Remington & Pellicano, 2018). Again, these issues may be intensified within the performing arts workplace. The physical setting can often change both within and between jobs, such as filming in a variety of locations for a project, which means that access requirements may not always be consistently met for autistic employees, such as sensory needs. Employees are typically expected to be able swiftly to adapt to new working environments, which can also present challenges for autistic people (Dipeolu et al., 2015), who often have difficulties with executive function, especially cognitive flexibility (Powell et al., 2017; Wallace et al., 2016).

One less anticipated challenge for some of the employers was having to mediate the negative responses of non-autistic colleagues to their autistic employee(s). These negative attitudes displayed by colleagues towards their autistic co-workers are highlighted as one of the barriers to successful employment described in the adapted OIMIB framework (Annabi & Locke, 2019). Neurotypical adults can struggle to interpret correctly the behaviour (Sheppard et al., 2016) and facial expressions (Brewer et al., 2016) of autistic people, and are more reluctant to interact with them compared to other neurotypical people, based on first impressions (Sasson et al., 2017). This behaviour noticed by employers is reflective of Milton's (2012) 'double empathy' problem, where neurotypical people do not behave in an empathetic way towards autistic people, as they would to neurotypical others.

Alongside identifying the many challenges they face in the workplace, the autistic professionals also provided many suggestions for how they could be

supported to overcome these challenges. For instance, the professionals suggested support in the form of assistance with social situations, access to quiet spaces at work, and for some, simply for colleagues to have a greater understanding of autism and tolerance of behavioural differences. Employers can offer adjustments in management style such as ensuring instructions are precise, that information is communicated in a way that suits the individual employee, and by creating a work environment where people feel comfortable to opt in or out of socialisation with minimal consequence. The autistic professionals spoke about the expectation and importance of networking as a way to further their careers, which is acknowledged as a crucial aspect of career progression in the arts (Bennett, 2009), and how challenging this could be. One way that autistic professionals could be supported with networking is through mentorship from those with more established careers and experience in the industry, and this is a type of support professionals in this study identified as desirable. Mentoring can be an effective form of support for autistic people in employment (Dawkins et al., 2016; Dipeolu et al., 2015; Nicholas et al., 2018), although the feasibility and effectiveness of mentoring has never been specifically tested for those working in the performing arts field. The performing arts professionals in this study wanted mentors who could offer guidance on career progression, give feedback on applications for grants, and recognise and help them manage workplace difficulties.

The autistic professionals were able to pinpoint precisely the support they needed. Yet, the vast majority of them reported that they had received little, if any, of this support, and when it was received it was inconsistent across different workplaces. My previous work showed that performing arts professionals with high levels of autistic traits are more likely than those with low levels of autistic traits to

need and want more support in relation to their work (Buckley et al., 2021b). Other studies outside the field of the performing arts have also demonstrated that the majority of autistic workers report receiving no workplace adjustments to support them (Baldwin et al., 2014; Beardon & Edmonds, 2007; López & Keenan, 2014), despite wanting to receive such support in their current and future workplaces (Baldwin et al., 2014). For those that had received some support, it had been both difficult to find or inconsistently implemented. This finding is consistent with research that suggests that even when workplaces adopt formal disability policies, these are often not followed by changes in practice (Hoque & Noon, 2004).

One plausible reason why professionals reported a lack of support in their workplaces may be due to not disclosing their diagnoses, and with autism often being a hidden disability, employers may not realise that they have autistic employees who require support (Johnson & Joshi, 2016; J. Sarrett, 2017). There were several reasons for autistic professionals' apprehension around disclosure, primarily the concern that non-autistic colleagues would judge them negatively if they found out they were autistic, which is a belief held by many autistic people (Davidson, 2010; Davidson & Henderson, 2010; Hull et al., 2017). Research suggests that it is common for disabled people to be judged as less capable in a work context than non-disabled people (Colella & Varma, 1999; Nelissen et al., 2016; Vornholt et al., 2013), and autistic people experience more immediate, negative reactions towards them than non-autistic others (Sasson et al., 2017). The potential negative reactions of non-autistic colleagues and employers to disclosure of autism is a justified concern for autistic people.

Some of the autistic performing arts professionals had had positive experiences with disclosure and found colleagues had become more understanding

of their differences post-disclosure. This finding supports previous research showing that when an autism diagnosis is disclosed, neurotypical people form first impressions and perceive behaviours more positively than when an autism diagnosis is not disclosed (Brosnan & Mills, 2016; Sasson & Morrison, 2019). Some of the autistic professionals emphasised that they saw disclosure as a necessary step to gain support, which is a sentiment echoed by other autistic people (Huws & Jones, 2008). Non-disclosure may be one key barrier to support. One way in which autistic professionals could be supported with this is through guidance, mentorship, and legal advice regarding disclosure to employers. Ideally this support would be developed, co-produced, and evaluated for its effectiveness in collaboration with autistic people to ensure that resulting research and practice will be relevant and specific to their needs (Fletcher-Watson et al., 2019; Milton et al., 2017).

The employers had widely varying experience regarding working with autistic people, from some having never knowingly worked with an autistic person, to others who work with autistic performing arts professionals on a regular basis. Nevertheless, the majority of employers revealed that they did not feel as if they knew enough about working with autistic people or the ways in which autistic employees could be supported, both internally and externally to their workplaces. This finding reflects previous research that has found that employers do not possess a great deal of information about working with disabled people (Rashid et al., 2017) and a lack of autism knowledge is highlighted as another key barrier to successful employment in the adapted OIMIB framework (Annabi & Locke, 2019).

Many of the employers were dependent on others for knowledge on what support might be needed and how it would be implemented. This lack of confidence and desire to use external support is consistent with previous research, which has

found that employers are reluctant to provide workplace support without the guidance of disability employment organizations (Howlin et al., 2005), and that employers feel that they need to rely on external support to best support their autistic employees (Scott et al., 2015).

Employers had mixed views regarding what type of resources would be appropriate to help them learn more about supporting autistic people in the workplace. Some cited the lack of time they felt they had to attend training courses and wanted resources they could engage with when they needed to, such as an online repository of information. Others wanted a specially trained consultant to talk with and to be able to ask questions to someone as they came up. Providing a safe and non-judgmental environment for employers to learn more seems to be an important aspect of how we can improve knowledge, support, and perhaps even increased employment for autistic people. Employers will benefit from resources and training that are informative, practical, and can be easily accessed and implemented (Rashid et al., 2017; Unger & Kregel, 2003). It will also be important to co-design and co-produce any support with both employers and autistic professionals in the performing arts to ensure that training and resources are relevant to their workplaces and tailored to people's individual needs.

In conclusion, these findings are novel in that they provide the first understanding of the experiences of autistic performing arts professionals in the UK and the attitudes and support offered by UK-based performing arts employers to autistic employees. The autistic performing arts professionals reported an overall lack of support from their employers. They suggested that they could be supported through mentorship, greater accessibility and support in the workplace, and increased understanding and acceptance of autism from their colleagues and

employers. The performing arts employers, whilst demonstrating open attitudes towards employing and supporting autistic people, did not unanimously feel confident in being able to currently provide that support. Future research is needed to test the feasibility and effectiveness of types of support for autistic performing arts professionals, alongside improving the knowledge and confidence of performing arts employers.

Chapter 5 will take this next step, by testing the feasibility and acceptability of a professional mentoring programme as a type of employment-based support for autistic performing arts professionals.

Chapter 5

"Knowing that I'm not necessarily alone in my struggles": Testing the feasibility and acceptability of a mentoring programme for autistic performing arts professionals in the UK.

Note: The study that forms the basis of this chapter has been submitted to the *Journal of Autism and Developmental Disorders* for review (Buckley, Pellicano, & Remington; submitted for review). The method and results sections have been reproduced in full here, and the introduction and discussion are reproduced in part, with edits.

Introduction

The previous chapter demonstrated that autistic people working in the performing arts are facing a multitude of challenges in their workplaces, alongside reporting that there is a paucity of career-based support. Many participants in the previous study felt that having professional mentorship would be beneficial, particularly to help with networking, troubleshooting workplace concerns, giving feedback on grant applications and guidance on career progression.

Employment-focused mentoring for autistic adults is often suggested by researchers as a potentially effective strategy for support. While there have been some higher-education focused programmes (Lucas & James, 2018; Siew et al., 2017; Thompson et al., 2018), there is a scarcity of experimental studies that have examined programmes for employment-based support (Gelbar et al., 2014). In one of the few existing studies, mentoring was trialled as a form of employment-based support for autistic adults from a range of backgrounds, as part of a broader curriculum that also included several hours per week of skill-building sessions and workplace exposure (Nicholas et al., 2018). The autistic mentees who took part (n = 14) reported an increase in skill acquisition, but there were no quantitative measures recorded and no specific outcomes were linked to the mentoring aspect of the programme (Nicholas et al., 2018). Another pilot study on a mentoring programme for autistic mentees (n = 12) examined changes in self-reported wellbeing using the Personal Wellbeing Index (Cummins et al., 2003) and analysed semi-structured interviews that took place with the mentees and mentors after the programme had finished (Martin et al., 2017). The authors reported increases in mentees' satisfaction with what they were achieving in life and satisfaction with life as a whole, following program completion. Benefits were also reported by both mentees and mentors: the mentees felt that the mentoring was helpful in enabling them to progress toward self-identified goals, while the mentors also felt that they had met their own goals for taking part in the programme and reported gains in their self-confidence and knowledge around supporting autistic mentees. When the employment outcomes of autistic peoples who were receiving funded mentoring across England from various organisations were examined, Cameron and Townend (2021) found that nearly half of the 90 autistic adults who were supported by specialist mentors found paid

employment, suggesting that mentoring is helpful in supporting autistic people to find employment.

This preliminary research is encouraging – but it has not examined mentorship for autistic performing arts professionals specifically. This study addresses this gap in the literature. I also focused on an outcome measure that has not hitherto been examined in the existing literature, namely occupational self-efficacy. Previous work with neurotypical adults suggests that mentoring positively influences self-efficacy (Feldman et al., 2010; Jnah et al., 2015; St-Jean & Mathieu, 2015), and self-efficacy is linked to workplace success and well-being (Bandura, 1977; Judge & Bono, 2001; Luszczynska et al., 2005). Cognitively able autistic adults have been shown to have significantly lower self-efficacy in both general and occupational self-efficacy than neurotypical adults (Lorenz & Heinitz, 2014). Furthermore, self-efficacy has been shown to be better in workplaces that provide individualised support for autistic employees' specific needs, in comparison to those that do not (Lorenz et al., 2016). Self-efficacy is also an important predictor of quality of life (Luszczynska et al., 2005; Nota et al., 2007; Shoji et al., 2015; W. J. Taylor et al., 2006; Vauth et al., 2007), which has been repeatedly shown to be poorer in autistic adults than in neurotypical people (Kamio et al., 2013; Kamp-Becker et al., 2010). Therefore, when designing employment-based support, targeting self-efficacy may be a way both to improve career success and also positively affect quality of life in a population who often report difficulties in this area.

The current study

Here, I assess the feasibility and acceptability of a 12-week mentoring programme aiming to improve the occupational self-efficacy of autistic performing arts professionals. My aims were threefold. Specifically, I sought to determine

whether (1) our mentoring programme could be implemented successfully, (2) whether it was acceptable to participants, and (3) whether the proposed primary (occupational self-efficacy) and secondary (quality of life) outcome measures were sufficiently sensitive to capture change over the short period between pre- and post-mentoring programme. Quantitative (questionnaire-based) and qualitative (interview-based) methods were used to address these aims.

Method

Design

The research was designed in accordance with the CONSORT 2010 Statement (Schulz et al., 2010). I conducted a two-armed randomised controlled trial to test the feasibility and acceptability of a professional performing arts mentoring programme where we compared the outcomes of one group who received mentoring to a waitlist control group.

Participants

In total, 26 participants took part in this study: 15 mentees (five female, seven male, three non-binary or other) and 11 mentors (six female, five male). Table 15 shows demographic information for mentees and mentors.

Table 15

Characteristics of mentees and mentors.

	Modification group mentees n = 8	Waitlist control group mentees n = 7	Mentors n = 11
Age Mean (SD), years	34 (12)	31 (7)	41 (13.3)

Median, years	31	28	37
Range, years	19-54	24-42	27-63
Gender			
Female (including transgender female)	3	2	6
Male (including transgender male)	4	3	5
Non-binary or other	1	2	-
Ethnicity			
White	6	7	11
Black	1	-	-
Mixed	1	-	-
Self-identified as autistic (incl those undergoing autism assessment at time of study)	2	1	-
Clinical autism diagnosis	6	6	3
Co-occurring conditions			
Anxiety	4	5	N/A
ADHD	-	-	N/A
BPD	-	1	N/A
Depression	5	4	N/A
Dyslexia	1	-	N/A
Dyspraxia	1	-	N/A
OCD	1	1	N/A
Median years in performing arts (range)	5 (1-20)	4 (1-12)	10 (6-35)

For mentees, the inclusion criteria were that they needed to: (1) be over 18; (2) self-identify as autistic; (3) be working or trying to work (full-time, part-time, or casual positions) in the performing arts; and (4) be based in the UK at the time of participation. All 15 mentees self-identified as autistic, with 12 having received an independent clinical diagnosis of an autism spectrum condition according to DSM-IV or DSM-5 criteria (American Psychiatric Association, 1994, 2013). Two reported they were in the process of obtaining a diagnosis (and who later went on to receive their autism diagnoses after completion of the study), and one self-identified without a formal diagnosis. I included individuals who self-identified as autistic but had not yet received a formal diagnosis because there are lengthy waiting lists for adult diagnostic services in the UK (Unigwe et al., 2017), and many older autistic adults, including autistic women and non-binary people, may have been mis-diagnosed or

missed out on a diagnosis altogether (Gould, 2017; Kirkovski et al., 2013; Lai & Baron-Cohen, 2015; Linton et al., 2014). Eleven of the mentees had received diagnoses of one or more co-occurring conditions including anxiety (n = 9) and depression (n = 9). The mentees had been involved in the performing arts for varying lengths of time, ranging from under one year to 20 years, with a median of four years' experience. They were working, or interested in working, in different roles within the performing arts such as performing, writing, directing, and stage-managing. None of the mentees received other mentorship whilst taking part in the programme but four mentees (two in the modification group and two in the control group) reported receiving other types of support, such as financial, across their time in the mentoring programme.

For mentors, the inclusion criteria required them to: (1) be over 18 years old; (2) have worked in the performing arts for a minimum of five years, indicative of sustained careers in the industry; and (3) be based in the UK at the time of participation. The mentors had varied roles within the performing arts, with many working in several roles across their careers, such as theatre company directors, actors, dancers, writers, etc. They also had been working in the performing arts for varying lengths of time, ranging from six to 35 years, with a median of 10 years' experience. Three of the mentors had themselves received clinical diagnoses of autism. Different mentors were used for the majority of mentees, but some of the mentors worked both with modification group mentees and waitlist control group mentees. Ahead of being matched with a mentor, mentees were asked to report on which career-related topics they would like to receive mentorship. These topics included but were not limited to: applying and preparing for jobs/auditions; managing workplace relationships; applying for funding and writing about your work; networking

and building professional partnerships; devising/developing new works; self-promotion and raising your professional profile; self-organizing and time-management; and advocating for access needs. Mentors were then selected for the programme and matched (by the first author) with mentees based on the overlap of their skillsets and expertise with mentees' desired mentoring topics.

Recruitment

Between September 2018 and November 2018, mentees and mentors were recruited through word-of-mouth and online advertisement using social media, email, and performing arts websites from across the UK. Mentors were asked to apply with their curriculum vitae and to provide information concerning their areas of expertise and topics they felt able to advise on in a mentorship role. Twenty-three mentors submitted applications. Eleven mentors were selected based on their skillsets matching the self-reported needs of at least one mentee, three of these mentors also had clinical diagnoses of autism. Each mentee in the modification group (n = 8) was mentored by a different mentor. Three mentors who had worked with the modification group also went on to mentor control group mentees (n = 7). In the control group, one mentor mentored two mentees, all other mentors worked with one mentee. Five of the mentees were mentored by autistic mentors, three in the modification group and two in the waitlist control group, the remaining ten mentees were mentored by non-autistic mentors. Mentors were compensated for their time at industry rates.

Mentoring programme

The programme was developed to test the feasibility and acceptability of a professional mentoring service for autistic people who work in the performing arts. The programme itself aimed to improve occupational self-efficacy in autistic

performing arts professionals. The programme consisted of mentees and mentors meeting remotely over video/audio/text-based chat or phone for a one-hour mentoring session once every two weeks for 10 weeks, completing six sessions in total. The mentees and mentors were encouraged to keep in contact between sessions, over email, in order to schedule further mentoring sessions and follow up on discussions. The participants were asked not to schedule any extra sessions, to limit communication to email outside of sessions, and not to physically meet while taking part in the programme. The content of the mentoring sessions was decided between each mentor and their mentee but was focused on career-based topics (as listed in the Participants section).

Prior to commencing the programme, all mentors attended mandatory autism and the workplace training co-designed and co-led by the myself and an autistic colleague with an arts background. The training comprised teaching the mentors about characteristics of autism and how these might contribute to challenges and strengths in the workplace, detailed instruction concerning the structure and aims of the programme, possible strategies to use when supporting autistic people through mentorship, a chance to ask questions about any aspect of the programme and details on how to access support for themselves or their mentees whilst taking part in the programme. Waitlist-control group participants began by continuing with their usual working lives and any other support they were accessing. Approximately four weeks after the modification group completed their programme, the control group then received the same mentoring of six sessions across 10 weeks. Figure 3 shows the flow of participants through the trial.
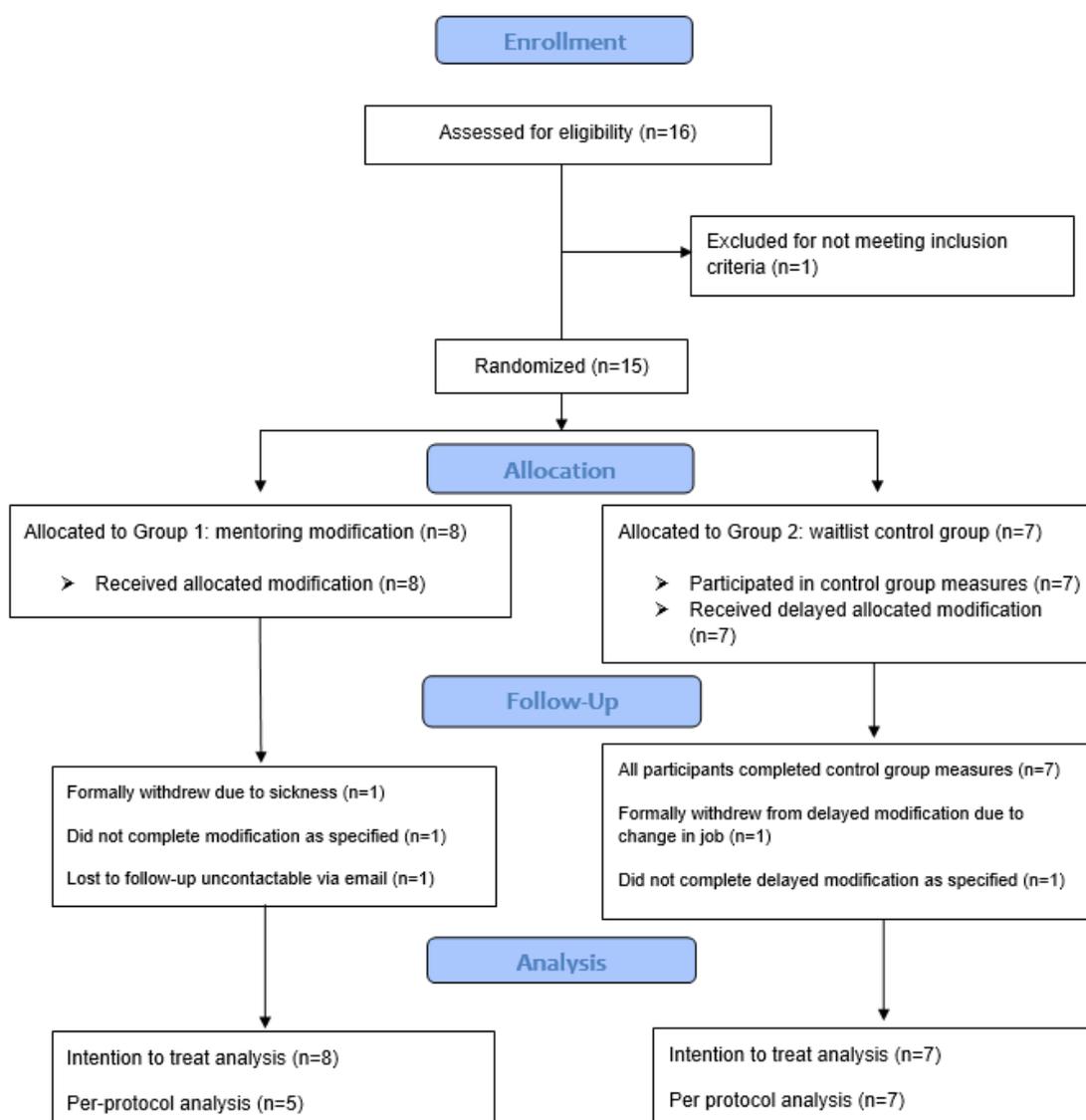
Figure 3. *Flow of participants through trial. The two mentees who did not complete the modification/delayed modification as specified completed all six mentoring sessions but did not complete within the specified timeframe of 8-12 weeks.*

Outcome measures

Mentees completed the primary outcome measures (occupational self-efficacy) and secondary outcome measures (quality of life scores) at baseline (0 weeks), post-modification (11 weeks) and follow-up (26 weeks). I also conducted

qualitative analyses of mentees' and mentors' experiences of taking part in the mentoring programme.

Demographic characteristics

Participants completed a structured questionnaire covering demographic characteristics, including participant age, gender, ethnicity, autism and mental health diagnoses, and time spent working in the performing arts (see Table 15).

Quantitative measures

The programme was designed to determine whether occupational self-efficacy (primary outcome) and quality of life (secondary outcome) could be improved through receiving professional mentorship.

To address this aim, I used an online questionnaire which contained two sections, and took approximately 10 minutes to complete. Part 1 of the questionnaire contained a bespoke scale to measure occupational self-efficacy for performing arts professionals. The bespoke scale was designed to address the unique demands of performing arts careers (Bennett, 2009). It was based on Bandura (2006) but was adapted specifically to target professionals' perceived confidence when performing activities associated with their performing arts careers. This scale was used in my previous work examining the professional self-efficacy of workers in the performing arts (n = 1,427) and showed excellent internal consistency (Cronbach's alpha = .94) (Buckley et al., 2021b). The self-efficacy scale contained 24 statements to which participants could respond to each item with a score ranging from 0 ("not at all confident") to 10 ("extremely confident"). Items used in the scales included, for example, "interview / audition for roles", "fully understand all instructions given to me", and "get a colleague or peer to help me if I have difficulty interacting with others at my workplace". Scores from each item were averaged to yield a mean self-

efficacy score. Higher scores reflected greater occupational self-efficacy. The scale in the current sample also showed excellent internal consistency (Cronbach's alpha = .95).

Part 2 of the questionnaire contained the World Health Organization abbreviated version of the WHOQOL-100 quality of life assessment (WHOQOL-BREF; The Whoqol Group, 1998), including the additional autism-specific items (ASQoL) developed by McConachie et al. (2018). In total, the WHOQOL-BREF combined with the ASQoL yielded 35 items. The four domains of the WHOQOL-BREF have acceptable internal consistency ($\alpha s \geq 0.7$; Skevington, Lofty, & O'Connell, 2004) and the ASQoL has good internal consistency ($\alpha = 0.82$; McConachie et al., 2018). The WHOQOL-BREF contains 26 items (e.g., "how satisfied are you with your ability to perform your daily living activities?"), which measure four domains of quality of life (physical, psychological, social, environment). Each domain of the WHOQOL-BREF is scored separately. The ASQoL contains eight items that produce a total score (e.g. "do sensory issues in the environment make it difficult to do things you want to do? For example, supermarket too noisy, public transport too busy, etc.") and one global item about autistic identity (e.g. "Are you at ease (OK) with 'Autism' as an aspect of your identity?"). Overall, higher scores on the four domains of the WHOQOL-BREF (in the current study: physical domain $\alpha = 0.82$; psychological domain $\alpha = 0.83$; social domain $\alpha = 0.69$; environment domain $\alpha = 0.84$) and the ASQoL add-on module (in the current study $\alpha = 0.79$) reflect greater quality of life within those specific areas. The WHOQOL-BREF has been shown to be comparable to the WHOQOL-100 in having excellent ability in discriminating between ill and well respondents and high test-retest reliability across all four domains (Skevington et al., 2004).

Mentees were asked to complete the online questionnaire at the beginning (week 0) and end of the modification (week 11), as well as at a three-month follow-up (week 26).

Qualitative analyses

To assess acceptability of the mentorship programme, I conducted in-depth interviews with our participants – including both the modification and waitlist control groups – to understand their perceptions and experiences of it. Semi-structured interviews were conducted with all participants prior to the beginning of mentoring programme (1-14 days before week 0) and again once it was completed (week 11-12). Interviews were recorded with participants' prior consent and professionally transcribed verbatim. In the pre-mentoring interviews, mentees and mentors were asked about their hopes and expectations around taking part in the mentoring. In the post-mentoring interviews, mentees and mentors were asked about their experiences and any challenges and/or benefits to taking part in the mentoring. See Appendices for full interview schedules.

Procedure

Following randomisation to modification vs. waitlist control group using a block randomization method, all participants were sent an online questionnaire to collect demographic information. Both modification group and waitlist control group mentees completed occupational self-efficacy and quality of life measures 1-14 days before the mentoring programme in December 2018. Quantitative outcomes were not examined for waitlist control group mentees receiving the delayed mentoring. All participants (mentors and mentees in both groups) completed individual semi-structured interviews over the phone, on video-call, or in-person, either on University

premises or in a location of their choosing within two weeks of beginning their first mentoring session. This meant interviews took place across different time periods for the modification group and the waitlist control group (December 2018 and March 2019, respectively). Pre-mentoring interviews with mentees ranged in length from four to nineteen minutes (Median = 6 minutes), and with mentors five to fifteen minutes (Median = 9 minutes). Mentees and mentors were then introduced to each other over email by the first author and asked to schedule their six mentoring sessions with each other, with the aim of having a mentoring session every 14 days on average (aiming for all six sessions to be completed in 10 weeks; upper and lower bounds of acceptable completion of the six sessions = eight weeks to twelve weeks). Mentees and mentors were asked to complete online questionnaires after each mentoring session in which they were asked to briefly describe the content and their thoughts on the session.

Within two weeks following the final mentoring session, mentees and mentors were interviewed again about their experiences of the mentoring. Interviews were conducted with all but one of the mentees (who had withdrawn from the study due to illness; see Figure 3). All mentors took part in post-mentoring interviews. Mentee and mentor interviews from those who were unable to complete the modification were still included, where possible, to better understand the challenges that had led to these circumstances. Post-mentoring interviews with mentees ranged in length from 15 to 29 minutes (Median = 21 minutes), and for mentors 18 to 36 minutes (Median = 24 minutes). To preserve participants' anonymity, all quotations are identified only by participant IDs.

Data Analysis

Quantitative analysis. Pre- and post-modification questionnaire data were analysed to assess any change in the primary outcome (occupational self-efficacy) and secondary outcome (quality of life) measures. Preliminary data analyses suggested participants' data met the assumptions of normality except for the Global score of the ASQoL; therefore, only the Total scores for the ASQoL were used in subsequent analyses. We also examined changes in scores for each of the dependent variables (occupational self-efficacy; WHOQOL-BREF domains 1-4; ASQoL Total score) using a Reliable Change Index (RCI; Jacobson & Truax, 1991) computed by dividing the difference between the pre- and post-mentoring scores by the standard error of the difference between the two scores. The RCI indicates whether an individual's change in scores over time is considered statistically significant. Repeated measures ANCOVAs were performed for each of the dependent variables. For each analysis, age was entered as a covariate because it was significantly positively correlated with occupational self-efficacy and quality of life in our previous research (Buckley et al., 2021b).

Qualitative analysis. Qualitative data from pre- and post-mentoring interviews with all participants were analysed using reflexive thematic analysis, as detailed by Braun and Clarke (2006, 2019). The transcripts were analysed from an inductive (bottom-up) perspective where themes were created within a 'contextualist' method of critical realism (Willig, 1999). I and my principal supervisor carried out the thematic analysis and approached the analysis from the perspectives of psychology researchers who do not identify as autistic, and therefore analysed the data from the perspective of outside interpreters. Data were initially coded by me without any pre-existing coding schemes, and surface-level themes were identified. Themes for each participant group were first generated separately and then merged across participant

groups to determine areas of similarity and incongruity, in order to provide a multi-informant view of the mentoring. The analysis was reflexive, so the authors moved backwards and forwards between the data and analysis. The authors met together several times to discuss the themes and subthemes, ensuring that the themes and their definitions encompassed the patterns of shared meanings across the entire data set and to resolve any inconsistencies.

Ethics

This research study received ethical approval and was run in accordance with the ethical standards UCL Research Ethics Committee and with the 1964 Helsinki Declaration and its later amendments. All participants provided written informed consent prior to participating in this study.

Results

Quantitative results

Mentee characteristics. Of the 16 mentees assessed for eligibility, 15 met the inclusion criteria (one did not identify as autistic). Mentees were randomised to the modification (n = 8) or waitlist control (n = 7). During the modification, two mentees were not able to complete the modification as specified: one withdrew due to sickness and one did not complete the modification in the timeframe specified. One additional mentee completed the modification but did not participate in 3-month post-modification follow-up measures. All participants were included in the intention-to-treat analysis (see Figure 3).

Inspection of the demographic data in Table 15 suggested that the modification and waitlist control groups were similar in terms of distributions of age, gender, years in the arts, and participants who were receiving other support. The groups were too small to run sufficiently powered statistical comparisons.

Table 16

Participant measures on outcome variables at pre-intervention, post-intervention, and 3-month follow-up.

Measure	Group	Pre-intervention 0 weeks Modification group N = 6 Control group N = 7			Post-intervention 11 weeks Modification group N = 6 Control group N = 7			Follow-up 26 weeks Modification group N = 5		
		M	SD	Range	M	SD	Range	M	SD	Range
Occupational self-efficacy	Modification group	6.1	2.4	2.7-8.8	8.1	0.9	6.7-8.9	8.2	1.2	6.5-9.6
	Control group	4.9	1.8	1.5-6.8	5.1	1.9	1.7-6.8	N/A	N/A	N/A
WHOQOL-BREF Physical domain	Modification group	13.3	4.2	7-18	15.5	2.2	13-19	16.0	2.5	12-18
	Control group	13.0	1.4	11-15	13.3	2.2	10-17	N/A	N/A	N/A
WHOQOL-BREF Psychological domain	Modification group	12.7	4.0	5-17	15.5	1.8	13-18	15.2	2.2	13-18
	Control group	11.0	1.2	10-13	12.0	1.5	11-15	N/A	N/A	N/A
WHOQOL-BREF Social domain	Modification group	11.8	5.4	5-20	15.3	3.6	9-20	13.6	4.2	9-20
	Control group	13.3	3.0	8-16	13.0	2.9	8-15	N/A	N/A	N/A
WHOQOL-BREF	Modification group	12.5	4.0	6-18	15.8	2.6	12-19	15.2	3.2	11-20

Environment domain	Control group	12.4	1.5	10-14	13.6	2.4	11-18	N/A	N/A	N/A
ASQoL Total	Modification group	3.0	1.3	1.4-4.5	3.7	0.7	2.8-4.5	3.6	0.8	3-5
	Control group	2.8	0.5	2.4-3.9	3.1	0.4	2.5-3.8	N/A	N/A	N/A
ASQoL Global	Modification group	4.3	1.2	2-5	4.7	0.8	3-5	4.6	0.9	3-5
	Control group	3.9	1.1	2-5	3.7	1.1	3-5	N/A	N/A	N/A

Quantitative results

Table 16 summarises the results from the comparison of outcome measures taken at each time-point. Six of the eight modification group mentees completed pre-intervention and post-intervention measures (occupational self-efficacy and quality of life), and all seven of the control group mentees completed the same measures. Five of the modification group mentees went on to complete the same measures at 3-month follow-up (see Table 16), but the control group did not as they had started to receive their delayed mentoring programme. See Fig 4 and 5 for graphs showing the difference in mean scores on all measures between the groups.
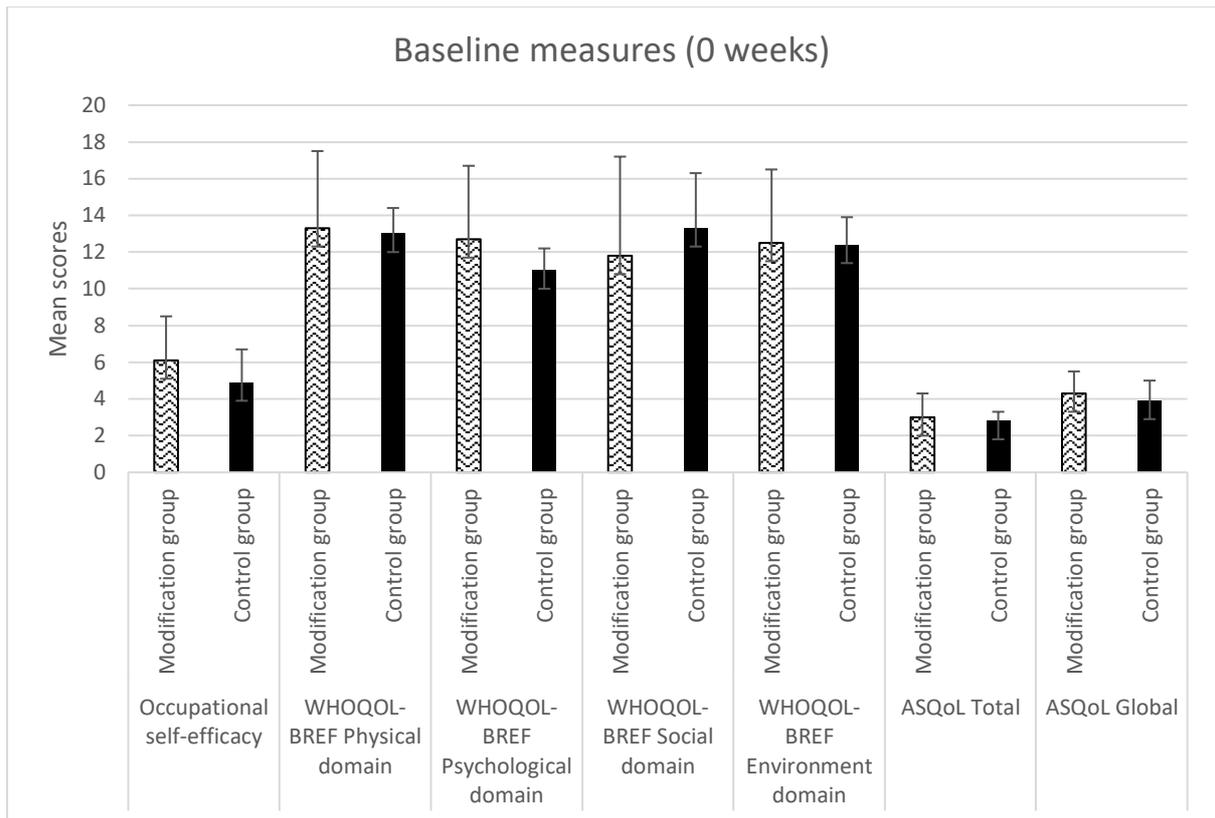
Figure 4. *Comparison of mean scores on all measures between modification and control group mentees at baseline. Standard deviation values are shown using error bars.*
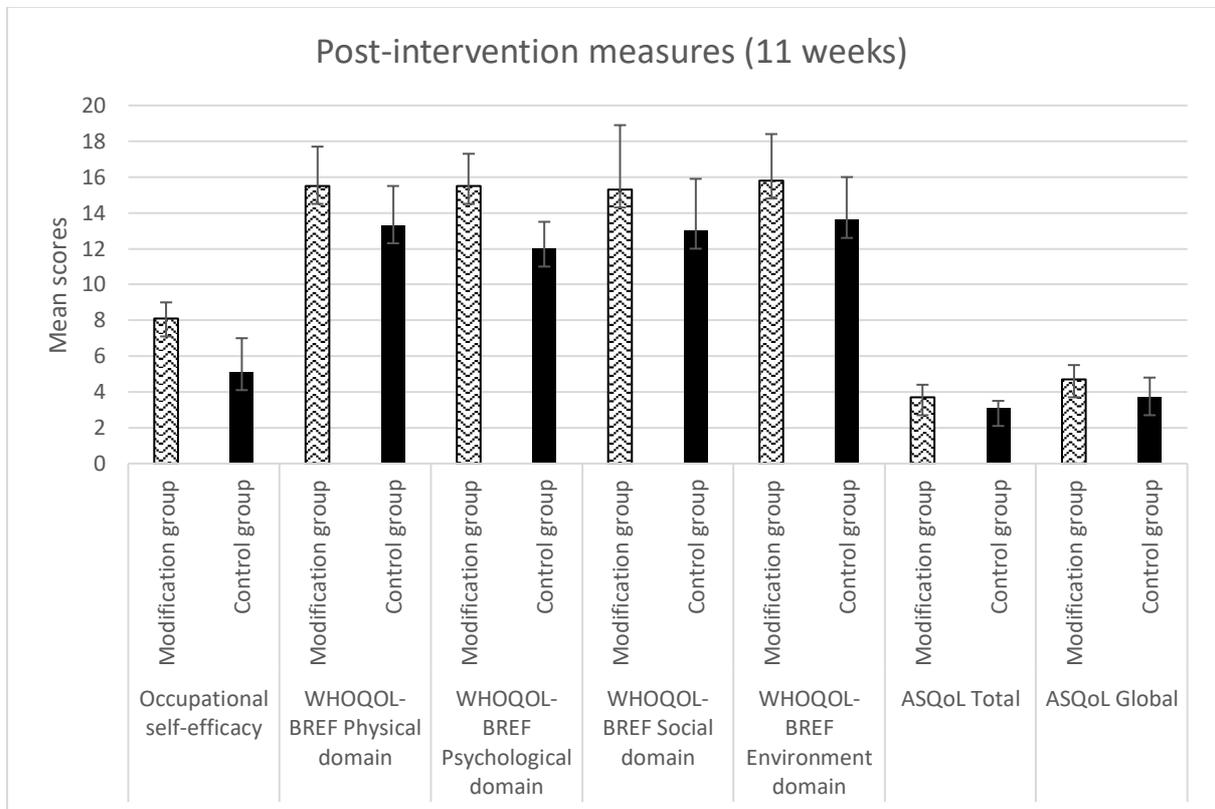
Figure 5. *Comparison of mean scores on all measures between modification and control group mentees at post-modification. Standard deviation values are shown using error bars.*

One-way between-participants repeated-measures ANCOVAs were conducted to examine the effects of receiving the mentoring on the following factors: occupational self-efficacy, the four domains of the WHOQOL-BREF (physical, psychological, social, environment) and the total score on the ASQoL. I found no significant effects of receiving the mentoring, either in terms of mentees' occupational self-efficacy or quality of life (all p values > .05), see Table 17 for all scores.

Table 17

One-way between-participants repeated-measures ANCOVAs to examine the effects of receiving the mentoring between the modification and the control group.

		F	Degrees of freedom	p	η_P^2
Occupational self-efficacy		3.916	1, 10	.076	.281
	Age as a covariate	1.229	1, 10	.294	.109
WHOQOL-BREF Physical domain		0.644	1, 10	.441	.061
	Age as a covariate	0.398	1, 10	.542	.038
WHOQOL-BREF Psychological domain		4.349	1, 10	.064	.303
	Age as a covariate	3.497	1, 10	.091	.259
WHOQOL-BREF Social domain		.002	1, 10	.963	<.001

	Age as a covariate	2.507	1, 10	.144	.200
WHOQOL-BREF Environment domain		0.313	1, 10	.588	.030
	Age as a covariate	3.910	1, 10	.076	.281
ASQoL Total		0.853	1, 10	.377	.079
	Age as a covariate	0.486	1, 10	.502	.046

For mentees in the modification group, while absolute scores on all measures increased at post-modification testing compared to baseline, reliable changes in scores (as measured by the RCI) were only seen in some of the mentees. Reliable changes in occupational self-efficacy score were observed in four out of the six modification group mentees, such that their self-efficacy score was higher after participating in the mentoring programme than at baseline. Significant reliable changes were not observed in the majority of modification group mentees with regard to quality-of-life scores. One mentee reported significant increases in the physical, psychological, and environment domains after having received the mentoring. One mentee reported significant positive change in the social domain, and one other mentee reported significant positive change in the environment domain. These results indicate the modification significantly improved occupational self-efficacy and quality of life in some of the autistic mentees. Scores stayed relatively stable on all measures between post-modification testing and 3-month follow-up, with no reliable change found in scores. Waitlist control participants did not see any reliable changes in scores between baseline and post-modification (see Table 16).

Qualitative results

Themes and subthemes from the pre- and post-mentoring interviews with all of the mentees (n = 15) and mentors (n = 11) are presented in turn below. As I identified similar themes across the various groups at each time point, we report the themes from all groups together here. All themes and subthemes (italicised in the text) and example quotations are listed in Table 18 and 19. Similarities and differences between the groups are highlighted in the text.

I found that prior to starting the mentoring mentees and mentors were apprehensive about all of the unknowns concerning taking part in the programme, but also looking forward to the opportunity to focus on their goals and hopeful for long-term benefits. In post-mentoring interviews, the mentors and mentees reflected on how the programme had provided a useful learning opportunity and a confidence boost for many involved, although they also acknowledged the practical and emotional challenges involved in taking part in the programme.

Table 18

Themes and subthemes from pre-mentoring interviews.

Themes	Subthemes	Quotations
Practical concerns	Identifying a schedule that works	"the reality of my life as a single mother of three and trying to make a living as a performing artist, some of that stuff gets in the way" [Mentee E]
		"I work like five days a week, so it would just be … just … well, timing our mentoring sessions right" [Mentee F]
		"I'm a disabled person myself I think working around both our access requirements will be interesting but not necessarily a challenge" [Mentor U]
	Reaching shared understanding	"Being able to say what I want to say I find difficult to get the words across. To make people understand what I'm trying to say" [Mentee D]
		"I'm anticipating that there will be some issues around clarity, maybe, of what they want and how I can help them" [Mentor X]
		"Effectively communicating what the issues are" [Mentee Q]
Anxious about so	Apprehensive about the unspecified	"Just being nervous about not knowing who and speaking to and what they'll be like, just the unknown of it all" [Mentee D]

many unknowns	aspects of the mentoring	
		"I am nervous, I am … I am very … I get … I am … I don't know what the challenges are going to be" [Mentee R]
		"There is definitely a big unknown question mark at this point about what that person is going to need" [Mentor W]
	So much depends on the strength of the relationship	"I'm apprehensive that I like won't be able to like establish a good relationship with the mentee and that we won't find a good way of talking" [Mentor T]
		"It will rely completely on the relationship with the other person" [Mentee U]
		"I think it will probably take a while to work out the best way of working together" [Mentor V]
	Will it be a positive experience?	"I would worry that their experience of it wasn't positive, just generally positive. And maybe that has to do with like lack of communication if the person stops making contact that I might feel well because I'm not doing a very good job or just not being able to pitch it right" [Mentor Y]
		"I just wouldn't be useful and that the mentee would find it … that they maybe would want to opt out after a few sessions" [Mentor S]
A place to share and learn	A chance to feel less isolated	"Getting advice of going, "Okay, I'm not the only one going through this"; just to find out that there is still a hand out kind of going, "Yeah, we're all going through this together"" [Mentee W]

		"I think it will provide me with purpose, it will provide me with knowing there are people out there like me. That's really important" [Mentor Z]
	Increase autism knowledge	"I like the fact that the programme was looking at ASD and autism and that you can talk to someone who, you know, has had similar challenges or experiences and I think that will be really very nice for me because you don't always get that opportunity" [Mentee N]
		"It will make me think about myself in the industry more, I also think it's a really brilliant opportunity to gain skills in working with autistic people and working with them in the arts" [Mentor Y]
		"It'll help if I'm working with any other people with autism in the future" [Mentor P]
		"I think this will be really beneficial for me to understand how the industry can be more accessible to autistic professionals" [Mentor W]
Hopeful for long-term benefits	Increased self-belief	"What this mentoring could do for me is that I can … this can give me the confidence to build up myself and then say okay let's see what … let's see how we go down this route" [Mentee L]
		"It's building my confidence as a mentor as well if I see that I have really helped someone and they're really happy with it and it helps them go further in their career" [Mentor B]
		"I hope it's going to make me more confident to do this kind of thing more often because it's something that I've been planning to do for a long time" [Mentor Q]
		"Increased confidence and feeling like it is my right to try to do these things and access these spaces" [Mentee U]

Mapping out career strategies	"Giving me some necessary skills and advice as to how to improve my own career from where it's at the moment" [Mentee K]
	"Would find a little bit more of a pathway for myself and a little bit more of a strategy" [Mentee J]
	"It's also for them to sow seeds in you so that you can better mentor other people after and for you to sow seeds in them that might blossom a year, two years down the line" [Mentor Z]

Themes from pre-mentoring interviews

A place to share and learn. All of the participants were invested in the idea that the mentoring programme would provide an opportunity to develop their career-based skills and be a space to share experiences openly. Many of the mentees and also some of the mentors expressed excitement that the mentoring would provide them with a chance to feel less isolated. They reported that the performing arts industry can be a lonely and difficult environment for many, and even more so for those navigating it with a disability: "Getting advice of going, 'Okay, I'm not the only one going through this'; just to find out that there is still a handout kind of going, 'Yeah, we're all going through this together'" [Mentee C]. Some of the mentors were also looking forward to increasing their autism knowledge. Several of the non-autistic mentors had not worked with autistic people before in a mentoring capacity, so saw this as an opportunity to broaden their experiences and learn how to potentially adapt their own practices to be more inclusive: "It will make me think about myself in the industry more. I also think it's a really brilliant opportunity to gain skills in working with autistic people and working with them in the arts" [Mentor Y].

Anxious about so many unknowns. Although the mentoring programme was structured, there were many elements to it that could not be predicted, such as the exact content of the sessions and whether the mentees and mentors would connect with each other. While participants taking part in the mentoring programme were excited about the opportunity, both mentees and mentors were also apprehensive about the unspecified aspects of the mentoring such as challenges that may arise over the course of the programme or who they were going to be paired with: "Just being nervous about not knowing who and speaking to and what

they'll be like, just the unknown of it all" [Mentee D]. Both mentees and mentors identified that the success of the mentoring programme relied on the strength of the relationship they would form with their mentoring partner, many were anxious yet hopeful about the bonds they would form: "I'm apprehensive that I like won't be able to, like, establish a good relationship with the mentee and that we won't find a good way of talking" [Mentor T]. Mentors also worried about whether they would be able to provide a useful and positive experience for their mentees: "I just wouldn't be useful and that the mentee would find it … that they maybe would want to opt out after a few sessions" [Mentor S].

Practical concerns. Mentees and mentors also discussed several challenges that they expected to come up across the programme. One potential difficulty was fitting the programme around their work and personal lives, as well as any access needs, and so identifying a schedule that works for both parties was important: "I work like five days a week, so it would just, well, timing our mentoring sessions right" [Mentee F]. Both mentees and mentors highlighted the importance of reaching shared understanding within the mentoring partnerships as to what the mentees wanted to achieve from the mentoring programme, and were expecting that there may be some challenges in effectively communicating and understand those desires: "I'm anticipating that there will be some issues around clarity, maybe, of what they want and how I can help them" [Mentor X].

Hopeful for long-term benefits. All participants signed up to the programme with the expectation that it would be immediately useful to them, but many also hoped for more enduring changes to help them progress further in their careers. Both mentees and mentors were looking forward to seeing how the mentoring might increase their self-belief and build their confidence, hoping for "increased confidence

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and feeling like it is my right to try to do these things and access these spaces" [Mentee A]. Another potential benefit of the scheme recognised by the mentees and the mentors was the possibility to map out career strategies and learn skills that they could take forward with them in their professional lives: "Giving me some necessary skills and advice as to how to improve my own career from where it's at the moment" [Mentee K].

Table 19

Themes and subthemes from post-mentoring interviews.

Themes	Subthemes	Quotations
A need for flexibility	One structure doesn't suit all	"I think two weeks is a great amount of time to be able to not only think about the previous session we'd talked about but also gear up to the next session and the work you've developed going into that next session" [Mentee I] "I would've liked is to be able to ration the sessions over a period of weeks or months" [Mentee O] "I honestly think the video chat was probably best because meeting face to face would've caused so many sensory difficulties and so much exhaustion from doing that I wouldn't have got the same out of it. So, it was actually really convenient" [Mentee E] "I think the fact we were only able to communicate over Skype or phone was a problem. I think it's different whenever you're with someone in person" [Mentee A] "I found that amount of time to be pretty good. It meant that I only had to schedule an hour for the meeting but that was long enough to talk about stuff" [Mentee H] "It was difficult for them to engage for the whole hour, so we would often do half an hour to 40 minutes and then have other tasks that we would agree for the last 20 minutes" [Mentor S]

	Support needs to be implemented at the right time	"I think I would possibly wait… if I had a chance to start at whatever time I wanted I think I'd possibly wait until I was attempting to make a show or attempting to put on a show somewhere because then I could get advice on how to find a venue and funding and stuff, which is not advice that I think can be given hypothetically" [Mentee H]
		"I think it was a good idea in principle. I think [my mentee] and I had difficulties in that they just weren't ready to plan or to work on anything, so that was kind of hard" [Mentor U]
	Being accommodating can be challenging	"I'm really up for being flexible, but I think I really tried to… like I think I really inconvenienced myself a few times because I was trying to just work with their schedule, so I think I probably could've been a bit more, "Yeah, we can rearrange but I can do this time", rather than, "Yeah, sure, I can do four o'clock; I'll make it work", kind of thing" [Mentor T]
		"I found the kind of last minute cancellations and trying to rearrange things just frustrating" [Mentor X]
Good communication is key for managing expectations		"Be a bit more aware of how much is being put on each other's plate and enforce that only so many things should be discussed, have clearer set of … be clearer with each other about how much communication's going to be had because the mentor was trying to get more out of me than I was able to give both in time and mental health wise" [Mentee C]
		"I think it worked well in terms of communication because it was always very, you know, we'll speak on Skype on this day at this time and I knew what to expect and it was structured so we knew what we were going to be talking about and what the goals were so having the

		goals and the structure made me able to kind of follow the process if you know what I mean without getting anxious" [Mentee N]
A confidence boost for many	Not defining success by other people's standards	"To value myself because I'm me rather than place the values of others on myself if that makes sense, so stop like … to just say that I'm enough kind of thing" [Mentee B]
		"So it's very much not the case of needing 100% from somebody to give me the thumbs up, but rather it's for me to give myself the thumbs up" [Mentee I]
		"Really helped me focus on putting myself at the heart of my work, which was a journey that I'd sort of started – it was like an idea – but I think the mentoring really embedded that and gave me the confidence to say, "Actually, my experience is valid"" [Mentee E]
	Reflecting on achievements	"Being able to remind me about how effective these efforts I'm doing currently because with a lot of this kind of work you're sort of shouting into a vacuum and you don't get much feedback until something clicks and so to be told, or at least to sort of realise that the stuff that you're doing is actually proactive and positive is a helpful step in itself" [Mentee M]
		"You recognise achievements [together] that they've made, which they made a whole load in the time that we spoke together" [Mentor R]
	Opening the door to new opportunities	"I've started to network and I'm like confident enough to go on my own and everything which was a goal" [Mentee N]

		"I ended up submitting a play for [a playwriting prize] which I … I suppose I wanted to do but didn't necessarily believe I would and it happened" [Mentee J]
Fostering an empathetic space	A safe and supportive environment	"It seemed like there was a space that he could actually be really truthful about the things that he does actually genuinely struggle with" [Mentor S]
		"It was just really, really lovely to have someone with that, you know, that level of experience to talk these things through with and be encouraged by" [Mentee J]
	Feeling less alone	"I think that the reduction in my anxiety and the feeling of being less alone is the most important" [Mentee N]
		"It's been reassuring really, you know, just knowing that … knowing that I'm not necessarily alone in my struggles" [Mentee K]
	A mentor with lived experience is highly valuable	"They felt they could talk about a lot of stuff because I'm autistic and they're autistic that they probably wouldn't have raised if I wasn't because when you're scared of saying, "Oh I can't, you know, I can't ring them up," you know, I probably wouldn't tell a non-autistic person that, so there was a bit more openness I feel" [Mentor Z]
		"A benefit of having an autist Mentor: they'd been through it and understood and had dealt with all that stuff themselves" [Mentee E]
		"In other similar sessions that I've done I'm essentially having to explain the problems that exist more than actually taking advantage of the mentoring because people who are mentoring me have no idea of the barriers that exist for me" [Mentee M]

	The knowledge exchange could go further	"I think it might have been useful to have a chat sort of halfway through the mentoring sessions with other mentors just to see how they're managing that balance" [Mentor V]
		"Something like establishing a network of mentors and mentees but how that would look I have no idea at the moment but that might be an interesting thing for people to exchange sort of insights that they want to share if that's even an option" [Mentor Q]
A mutual learning opportunity	New knowledge	"Time management and organisation: with the things that we'd spoken about and the techniques that had been shared with me I thought, "I've got a better understanding of this now"" [Mentee F]
		"I learnt quite a lot about breaking things down. I guess what I was asked to do in that process quite a lot was use my experience and explain my take on something, and I was trying to do in as clear a way as possible. And so I think it definitely helped me to understand the things I know better" [Mentor T]
		"I found it really beneficial for my own professional artistic output in terms of, you know, they always say that teaching is the best way to learn" [Mentor Y]
	Increased autism knowledge for mentors	"They're not an expert in autism so I think the benefits that they got is that they spoke to an actually autistic artist…So, in terms of education about autism I think that was very good because now they can go away and they'll go, "Oh yeah, I understand a bit more now about autism and that it's a spectrum"" [Mentee G]

		"I feel I have been a lot more prepared from this mentorship programme to then go into working with autistic creatives" [Mentor W]
	A constructive experience	"It's been great. Like I say, it's really been transformative; more so than any other personal development I've done and I've done a lot over the years" [Mentee E]
		"It's just been really great to have this over this period of time. It's got me focusing on really positive things, I've learned a lot from it, a huge amount. So yeah, I mean for me it's been a very positive experience" [Mentee J]
The relationship can make or break the support	A clash of personalities	"We both reacted and didn't really do anything to … positively progress those emotions we were feeling" [Mentee C]
		"This phase started off a little bit more challenging just because of personalities as in mind-sets. It was a little bit more of a challenge than in the last one to begin with but I think the results speak for themselves" [Mentor Q]
	Strong bonds can lead to success	"Just really easy, like [my mentor] is very easy to get along with, really personable and kind and, you know, you could tell that they wanted the best, like they were thinking about my best interest so that was very helpful" [Mentee N]
		"I felt like I built up a really good relationship with [my mentee] and we had a lot to talk about" [Mentor T]

Themes from post-mentoring interviews

A confidence boost for many. The majority of mentees and mentors felt that taking part in the mentoring programme built their confidence in a number of ways. One aspect of receiving mentorship that mentees found particularly helpful was how it encouraged them to not define success by other people's standards: "To value myself because I'm me rather than place the values of others on myself if that makes sense, so stop like … to just say that I'm enough kind of thing" [Mentee B]. Both mentors and mentees commented on how the mentoring provided a space where mentors could give feedback to mentees on their work and reflect on their achievements together:

Being able to remind me about how effective these efforts I'm doing currently because with a lot of this kind of work you're sort of shouting into a vacuum and you don't get much feedback until something clicks and so to be told, or at least to sort of realise that the stuff that you're doing is actually proactive and positive is a helpful step in itself [Mentee M].

Some of the mentees also felt that through their increased confidence they would then be able to achieve further goals and that this mentorship had opened the door to new opportunities: "I've started to network and I'm like confident enough to go on my own and everything, which was a goal" [Mentee N].

Fostering an empathetic space. The mentoring programme provided a space to share experiences and the opportunity to seek advice. Both mentees and mentors commented on how their mentoring sessions had felt like safe and supportive environments, where they were not only able to share positive news but also tackle challenges and be supported through difficulty: "It seemed like there was

a space that he could actually be really truthful about the things that he does actually genuinely struggle with" [Mentor S]. Mentees also commented on how they had enjoyed the fact that the mentoring programme had provided regular contact with another performing arts professional so that they felt less alone in the industry, and this had helped to normalise some of the challenges they faced: "It's been reassuring really, you know, just knowing that… knowing that I'm not necessarily alone in my struggles" [Mentee K]. The mentees who had worked with autistic mentors unanimously reported that this had been a really positive aspect of their mentoring. Having a mentor with lived experience of disability was highly valuable because they had often shared similar challenges in their own professional lives and so were able to easily relate to difficulties faced by the mentees and offer advice based on their own experiences: "A benefit of having an autist mentor: they'd been through it and understood and had dealt with all that stuff themselves" [Mentee E]. The mentors expressed a desire to be able to share their experiences more widely and that the knowledge exchange could go further. Several mentors suggested that in future schemes it would be valuable to have opportunities for mentors to meet each other and exchange information and experiences: "I think it might have been useful to have a chat sort of halfway through the mentoring sessions with other mentors just to see how they're managing that balance" [Mentor V].

A mutual learning opportunity. The majority of mentees and mentors ended the mentoring programme feeling like they had gained new knowledge and learnt or improved their skills through learning from each other: "Time management and organisation: with the things that we'd spoken about and the techniques that had been shared with me I thought, 'I've got a better understanding of this now'" [Mentee F]. Mentees and their non-autistic mentors recognised that this programme had been

a good learning opportunity for the non-autistic mentors to gain increased autism knowledge, which would be knowledge to take forward in their professional lives:

They're not an expert in autism so I think the benefits that they got is that they spoke to an actually autistic artist… So, in terms of education about autism I think that was very good because now they can go away and they'll go, 'Oh yeah, I understand a bit more now about autism and that it's a spectrum' [Mentee G].

Many of the mentees felt that taking part in the mentoring programme had been a constructive experience that that had involved positive professional development, and for some, it was transformative:

It's just been really great to have this over this period of time. It's got me focusing on really positive things, I've learned a lot from it, a huge amount. So yeah, I mean for me it's been a very positive experience [Mentee J]

Good communication is key for managing expectations. Several of the mentees commented on the importance of effective communication so that they knew they were on the same page with their mentors in terms of expected goals. Another benefit to good communication was that it helped to manage any anxiety the mentees had around previously unclear or unpredictable situations:

I think it worked well in terms of communication because it was always very, you know, we'll speak on Skype on this day at this time and I knew what to expect and it was structured so we knew what we were going to be talking about and what the goals were so having the goals and the structure made me able to kind of follow the process if you know what I mean without getting anxious [Mentee N].

There were some mentoring partnerships where there were occasional breakdowns in communication, however, which led to frustration and discord. One mentee highlighted how important it was to:

 Be a bit more aware of how much is being put on each other's plate and enforce that only so many things should be discussed, have clearer set of … be clearer with each other about how much communication's going to be had because the mentor was trying to get more out of me than I was able to give both in time and mental health wise [Mentee C]

The relationship can make or break the support. The strength of the relationships between the mentors and mentees varied between partnerships. There were some clashes of personalities where perhaps the mentees and mentors were not well matched, and this led to some difficulties with communication and goal setting:

This phase started off a little bit more challenging just because of personalities as in mind-sets. It was a little bit more of a challenge than in the last one to begin with, but I think the results speak for themselves [Mentor Q].

 There were also partnerships that worked really well with mentees and mentors reporting that they had really got along with each other and these strong bonds led to success: "I felt like I built up a really good relationship with [my mentee] and we had a lot to talk about" [Mentor T].

A need for flexibility. The mentees and the mentors had a variety of preferences for how the mentoring was conducted and when asked to reflect on the structure of the programme, there were many contrasting suggestions as to what worked well or didn't across the programme. It was clear that there was no one-size-

fits-all approach, and that support that was accessible to some did not work well for others. For example, some found the online method of speaking with their mentor practical:

> I honestly think the video chat was probably best because meeting face-to-face would've caused so many sensory difficulties and so much exhaustion from doing that I wouldn't have got the same out of it. So, it was actually really convenient [Mentee E]

Although others struggled with it: "I think the fact we were only able to communicate over Skype or phone was a problem. I think it's different whenever you're with someone in person" [Mentee A]. A few of the mentees also wished that they could have taken part in the mentoring scheme across a different time period, their mentors also recognised that it was important that support needs to be implemented at the right time: "I think it was a good idea in principle. I think [my mentee] and I had difficulties in that they just weren't ready to plan or to work on anything, so that was kind of hard" [Mentor U]. A few of the mentors also struggled with the sometimes-needed flexibility around appointments that autistic people can require due to challenges predicting their future energy levels to cope with activities in advance, which can then lead to last-minute cancellations. They spoke of how being accommodating can be challenging:

> I'm really up for being flexible, but I think I really tried to… like I think I really inconvenienced myself a few times because I was trying to just work with their schedule, so I think I probably could've been a bit more, 'Yeah, we can rearrange but I can do this time', rather than, 'Yeah, sure, I can do four o'clock; I'll make it work, kind of thing [Mentor T]

Discussion

Autistic performing arts professionals report facing many work-related challenges and have suggested professional mentoring as a way to mitigate some of these difficulties (Buckley et al., 2021a). This study trialled – for the first time – a professional mentoring programme for autistic people in the performing arts. The results of this study provide clear evidence for the acceptability and feasibility of a mentoring programme for autistic performing arts professionals and offer well-defined areas for improvement should this type of support to be expanded and tested on a wider scale. They also offer preliminary evidence indicating that professional mentoring can positively affect occupational self-efficacy in autistic performing arts professionals.

The majority of my participants found the programme not only to be acceptable but also to be beneficial and reported they would like to receive further support in a similar vein. Both the mentees and mentors recognised the value of the mentoring sessions as a rare space to speak openly and share experiences. Feeling alone in the performing arts industry is a sentiment that has been reported by many performing arts professionals, who often feel that there is little support available to mitigate this isolation (Buckley et al., 2021a, 2021b). The mentees who received mentoring from a mentor who was also on the autistic spectrum found this shared identity a highly valuable aspect of the mentorship. The mentees articulated that knowing that their mentor had already faced similar challenges reported that this allowed them to build a deeper relationship with their mentor and also receive more tailored advice on how to approach difficulties. This finding echoes research conducted by O'Mally and Antonelli (2016) in which legally blind students reported

that being mentored by others with visual impairment, and thus being able to share common experiences and challenges, helped to boost their self-efficacy and engendered high satisfaction with their mentorship.

Many of the mentees and mentors reported having gained new knowledge and improved skills. In particular, the non-autistic mentors were pleased to have specifically increased their knowledge around autism and working with autistic people, which is a recognised benefit of working as a mentor or manager to an autistic person (Hamilton et al., 2016; Martin et al., 2017; Remington & Pellicano, 2018). Encouragingly, mentors also described how they would use what they had learned and apply it to their own practice and companies, meaning that this programme may provide extended benefits to wider employment practices among those who have been trained and worked as mentors. One direction for future research could be to measure changes in autism knowledge in mentors pre- and post-taking part in the programme, and to also follow-up with those who had trained as mentors to see if their increased knowledge had tangible and lost-lasting effects on their practice.

The relationship that forms between a mentor and mentee is critical, and pairings where mentees feel listened to and well supported are more successful in improving skills than those that are not (Lucas & James, 2018; Roberts & Birmingham, 2017) and if the working alliance between mentor and mentee is perceived as strong by the mentee, this can positively affect their self-efficacy (de Haan et al., 2016). Good and clear communication played a large part in the strength of the relationship for many of the mentees and mentors and several reported how it was helpful for managing expectations. This finding reflects previous research demonstrating that communicating clearly, particularly around boundaries, is

beneficial for ensuring mentorship is successful and goals and appropriate behaviour are clearly understood by both mentee and mentor (Dawkins et al., 2016).

There was high variability in what each mentee and mentor liked and disliked about the structure of the mentoring programme, what was clear that there was a need for flexibility within the specified structure. From how the pairs communicated with each other, to being able to re-arrange sessions at short notice, many of the autistic mentees required an adaptive and responsive approach. This has been recognised as an important aspect of mentoring for autistic people, that flexibility as part of the design is key for autistic mentees being able to consistently access the support (Dawkins et al., 2016; Ridout & Edmondson, 2017). This need for adaptation has implications for how best to implement future mentoring programmes, namely with as much flexibility into the design of programmes as possible because of the wide-ranging needs of the autistic population.

The method of mentoring via video conferencing rather than having in-person sessions was chosen to enable geographically disparate pairs to work together and was a cost and time-effective method of hosting the mentoring sessions. Another benefit of this method highlighted by some of the mentees was that this enabled them to stay in the comfort of their home environment and not to have to endure the sensory processing difficulties that travelling into a set location may have engendered (Falkmer et al., 2015; Haas et al., 2020).

Another aim of the mentoring programme was to examine whether occupational self-efficacy and quality of life could be improved through receiving professional mentorship. Two thirds of the modification group mentees reported significant gains in occupational self-efficacy and half reported gains in various domains of quality of life immediately after having taken part in the mentoring

programme. But such gains were not universally experienced. The small number of

mentees (n = 13) involved in the study who completed the modification or control

measures also meant that we had limited power to detect changes on key outcome

measures. The qualitative analysis corroborates our quantitative findings such that it

revealed that, although many mentees found the programme beneficial, the structure

of the programme was less well-suited than for some than others. The strength of

relationship between mentee and mentor also varied between pairs, so these factors

may have affected the likelihood of occupational self-efficacy and quality of life

improving for some individuals in the programme (de Haan et al., 2016).

The positive gains in self-efficacy and quality of life for some of the

modification-group mentees reflect the results of a previous study, where autistic

participants (employment field not specified) showed increased wellbeing after

having received mentoring and in interviews described how they had gained

confidence (Martin et al., 2017). It also echoes the finding that autistic people report

higher self-efficacy when receiving individualised autism-specific support in their

workplaces compared to those who do not (Lorenz et al., 2016). The significant

increases in occupational self-efficacy for some of the modification group mentees

mirror the more widely described boosts in self-confidence reported by both groups

of mentees and mentors in the post-mentoring interviews. This finding is consistent

with previous studies that have examined employment-focused mentoring for

different groups and consistently found self-reported confidence to have improved as

a result of their involvement in a mentoring programme (Butterworth et al., 2012;

Dashper, 2018; Gander, 2013; Lindsay et al., 2012, 2016).

In conclusion, this study presents the results of an initial trial of a mentoring

programme for autistic performing arts professionals. I examined the feasibility and

acceptability of hosting such a programme and found strong qualitative evidence that it was well received and felt to be beneficial by the participating mentees and mentors. For some mentees who took part they also experienced significant improvements in their occupational self-efficacy and quality of life. Future research should test this programme on a wider scale.

In the next chapter I will discuss the results of chapters 2-5 and the broader implications of my findings.

Chapter 6

General Discussion

In this thesis I sought to examine the extent to which autistic people and those with elevated levels of autistic traits are pursuing careers in the performing arts in the UK, and to report and analyse the experiences and support needs of this population. To address these aims, first, I reported on the existing literature to understand what is already known about this population and outline the limits of previous research (Chapter 1). Second, I examined the relationship between autistic traits, occupational self-efficacy, quality of life, mental health, and need for support in performing arts professionals, as well as looking at professionals' experiences of accessing support in the industry (Chapter 2). Third, I then extended this vein of research to look at whether there are similar relationships between autistic traits, educational self-efficacy, quality of life, mental health, and need for support in the performing arts student population. Additionally, I compared their experiences to students studying other subjects, in order to test whether students are encountering unique challenges in performing arts education (Chapter 3). Fourth, I analysed, in-depth, the support needs and views of autistic performing arts professionals on working in the industry, and the attitudes and levels of autism knowledge of performing arts employers (Chapter 4). Fifth and finally, I tested and reported on the feasibility and acceptability of professional mentoring as a form of employment-based support for autistic performing arts professionals (Chapter 5).

In this chapter, I begin by summarising the main findings from the empirical studies presented in this thesis. I then go on to discuss the contributions these studies have made towards our understanding of the experiences and support needs of autistic performing arts professionals. I describe the limitations of my research. Finally, I outline possible future directions for research focused on this topic.

Summary of main findings

There are autistic people and those with elevated levels of autistic traits working in the performing arts in the UK. One of the initial aims of this thesis was to formally record and acknowledge that autistic people are pursuing careers in the performing arts, as diagnostic criteria (American Psychiatric Association, 2013) and research suggesting that autistic people tend to exhibit less flexibility and fluency on creative tasks compared with neurotypical people (Craig & Baron-Cohen, 1999; Liu et al., 2011; Turner, 1999), may have contributed to the assumption that very few autistic people work in the arts. Although researchers are increasingly recognising that there are autistic people with great creative abilities, working across all fields, no one to my knowledge has specifically looked at whether autistic people are working in the performing arts (de Schipper et al., 2016; Fitzgerald, 2004; Lyons & Fitzgerald, 2013). All four studies (Chapters 2-5) have included autistic participants and Chapters 2 and 3 also included a number of participants with elevated autistic traits pursuing higher education and careers in the performing arts. For the professionals' online questionnaire (Chapter 2), autistic people formed around 1% of the sample, reflecting UK population prevalence estimates (Brugha et al., 2009, 2012), and autistic students were slightly over-represented in the students' questionnaire, possibly due to targeted recruitment, forming 3% of the sample (Chapter 3).

Autistic traits are significantly associated with lower occupational and educational self-efficacy.

In addition to those who have received, or qualify for, a formal diagnosis of autism, autistic characteristics may extend into the general population and also be associated with some of the challenges seen in autism (Constantino & Todd, 2003; Hoekstra et al., 2007; Sasson et al., 2017; Wainer et al., 2011). The studies in this thesis that examined the relationship between autistic traits and occupational and educational self-efficacy showed that there are significant associations between these two factors; self-efficacy decreases as autistic traits increase. These results suggest that the those with higher, but subclinical, levels of autistic traits may be facing increased difficulty in the workplace and in higher education compared to colleagues/peers with lower levels of traits (Chapters 2 & 3). These findings are also in line with previous research that has found autistic people to have lower occupational and general self-efficacy than non-autistic people (Lorenz & Heinitz, 2014) and indicate that those with subclinical levels of autistic traits may also be experiencing similar challenges, perhaps to a lesser extent though (Constantino & Todd, 2003; Hoekstra et al., 2007). The lower self-efficacy reported by professionals and students with elevated autistic traits may be influenced by the reported lack of understanding from employers and educators, who may not believe that disabled or neurodivergent professionals or students can perform at similar levels to their non-disabled peers (Fraser et al., 2010; Graffam et al., 2002; Lengnick-Hall et al., 2008). ***People with higher levels of autistic traits are more likely to have needed and want support for their employment or higher education than those with lower levels of autistic traits.***

The lower self-efficacy that was seen in participants with elevated autistic traits may also be driving a greater desire for support. Performing arts professionals and students with higher levels of autistic traits were more likely than those with lower levels of autistic traits to report that they have previously needed employment or education-based support and not received it, and they were also more likely to desire support in the future (Chapters 2 & 3). These results reflect previous research that has shown that autistic people often are found to want support in their higher education and employment (Howlin et al., 2005; Lindsay et al., 2016; J. L. Taylor & Seltzer, 2011; Van Hees et al., 2015), and so again these effects may extend down to those with subclinical levels of autistic traits (Constantino & Todd, 2003; Hoekstra et al., 2007). The types of support desired by professionals and students with autism diagnoses or elevated levels of autistic traits were the same as the rest of the participants surveyed. Performing arts professionals wanted help with developing small business acumen, financial assistance, networks to connect professionals together, sources of general advice, alongside more tailored advice, such as mentoring – all recognised aspects of performing arts careers (Bennett, 2009). Students described the importance of comprehensive support that addressed all of their needs and challenges. They also wanted academic staff to have high and consistent levels of knowledge regarding specific challenges associated with disability, and a safe and secure environment where asking for support is comfortable and normalised.

Autistic traits are significantly associated with quality of life and mental health.

The significant associations found between autistic traits, mental health symptomology and quality of life (Chapter 2 & 3) are in line with previous findings that autistic people typically experience poorer mental health and quality of life than

the general population. It is estimated that around 70% of autistic people have a

mental health condition, and that 40% have two or more (Buck et al., 2014; Croen et

al., 2015; Griffiths et al., 2019; Joshi et al., 2013; Roy et al., 2015; Russell &

Pavelka, 2013; Simonoff et al., 2008), with autistic traits being significantly

associated with anxiety and depression symptomology (Rosbrook & Whittingham,

2010). Autistic people also report having lower quality of life than the general

population (Ayres et al., 2018; Mason et al., 2018) and autistic traits have been

found to be inversely correlated with quality of life (Pisula et al., 2015).

Many performing arts employers lack autism knowledge and are not confident

providing support for autistic employees.

Many of the performing arts employers interviewed in Chapter 4 reported that

their knowledge around autism and how to support an autistic employee was often

limited at best and that they, and their peers in the industry, lacked confidence in

providing support. Throughout Chapters 2, 4, and 5, autistic professionals reported

this, and identified a lack of employer knowledge as a barrier to them accessing

support, which is also conceptualised as a key factor in the adapted OIMIB

framework (Annabi & Locke, 2019). These findings reflect previous research that has

found that many employers do not understand the most effective ways of working

with disabled people (Rashid et al., 2017). Moreover, even when employers report

positive attitudes and are willing to work with autistic employees, these results build

on prior research that have shown employers typically lack confidence providing

appropriate workplace support without the guidance of disability employment

organisations or other external support (Howlin et al., 2005; Remington & Pellicano,

2018; Scott et al., 2015).

Autistic performing arts professionals report inadequate employment-based support and can identify desired methods of support.

Autistic performing arts professionals who were interviewed about the support available to them in their workplaces, described it as inadequate or completely lacking (Chapter 4). They reported that employers and colleagues often knew little or were misinformed around autism, and this seemed to affect how much support and understanding they received in their workplaces. The professionals identified desired support such as assistance with social situations, access to quiet spaces at work, and for some, simply for colleagues to have a greater understanding of autism and tolerance of behavioural differences.

Professional mentoring is an acceptable and feasible way to support autistic performing arts professionals.

Employment-focused mentoring for autistic adults is often suggested by researchers as a potentially effective strategy for support (Gelbar et al., 2014), and the mentoring programme trialled in this thesis supports this conclusion, as many participants reported that they found it helpful for their careers, and for some occupational self-efficacy improved as well (Chapter 5). The professional mentoring effectively addressed several of the work-oriented challenges identified by autistic performing arts professionals in Chapters 2 and 4. The mentoring helped counter feelings of isolation in the industry, both on a professional level, and for mentees with autistic mentors, also on a neurodivergent one. Autistic performing arts professionals are reporting that they are not encountering many, if any, colleagues or employers with adequate levels of autism knowledge (Buckley et al., 2021a, 2021b). For some, then, the mentoring programme provided a valuable and rare space in which to be supported by a fellow professional with shared experience and expertise in how to

navigate the industry as a neurodivergent person. The mentoring programme also saw some participants' occupational self-efficacy increase after receiving mentorship, which echoes previous research where autistic people who receive autism-specific support report higher self-efficacy, and describe gains in confidence after mentorship (Lorenz et al., 2016; Martin et al., 2017).

Overall, the studies in this thesis have shown significant inverse relationships between autistic traits and self-efficacy, mental health and quality of life. These associations may well be driving the increased likelihood for those with higher levels of autistic traits needing and wanting support. This research has shown that many performing arts employers do not feel confident in their knowledge around autism nor in providing support for autistic employees, and so working with employers to increase autism knowledge and confidence could greatly benefit autistic people working in the performing arts. One method of support that could be offered to autistic employees that is professional mentoring, and I have shown this to be both feasible and acceptable to autistic professionals.

Limitations

While the research within this thesis aimed to address my research questions comprehensively, the methods were not without their limitations.

Using online questionnaires

Using online questionnaire methods (Chapters 2 & 3) inherently comes with limitations, such as that they can be inaccessible to those who do not use the internet or have difficulty completing online forms. The benefits of using an online questionnaire were that it is accessible to many, and I was able to recruit a large number of participants through this means. Using self-report measures presumes

participants can accurately self-assess their mental and physical states. While autistic people can face difficulties understanding and reporting on their inner states and traits, prior research has shown that autistic people do have the insight to accurately self-report data relating to personality traits and mental health which are comparable with non-autistic groups (Brosnan, 2020; Ozsivadjian et al., 2014; Schriber et al., 2014). There is also a chance of fraudulent responses and I relied upon the assumption that participants had been honest with their answers. While this can be mitigated by asking participants to submit personally identifying information, it is also important to protect participants' anonymity and not burden them by asking for extraneous information, unnecessary to the study (Dewaele, 2018; Lefever et al., 2007).

Implications of missing data

Participants completing the bespoke occupational and educational self-efficacy scales could select 'not applicable' to individual items on the self-efficacy scale which were not relevant to their careers (Chapter 2 & 3). This meant that some participants had missing values for these scales, which could have potentially affected the reliability of the scales. To address this issue, however, I used multiple imputation analyses to show that the scales remained reliable for participants with missing values (see Supplementary Materials for full analyses).

Method of analysis

The method of extreme groups analyses (EGA) was used to examine the difference in levels of need for support between those with higher and lower autistic traits in performing arts professionals (Chapter 2) and both student groups (Chapter 3). EGA has been criticised for potentially falsely inflating the power of an analysis and therefore increasing the chances of Type II error (Preacher et al., 2005).

Nevertheless, the samples used for analyses (performing arts professionals n = 714; performing arts students n =140; students studying other subjects n = 72) were large and therefore sufficiently powered, thus reducing the chance of making Type II errors.

Recruiting a representative sample

Although samples were geographically diverse (Chapters 4 & 5), the studies nevertheless examined the experiences of a selective sample of autistic performing arts professionals and performing arts employers. Nearly all of the professionals that were included in this study identified publicly as autistic to some degree, if not specifically at work. I did not specifically recruit employers who had worked previously with disabled employees. Nonetheless, the performing arts employers in this study seemed to be open to considering disability support in the workplace and the supported employment of autistic people in particular, although we cannot be sure that these views represent those of all such employers. The employers reported that they were keen to learn more and improve their knowledge and ensure support for autistic employees was sufficient. Although this is a heartening response, we must be cautious that these statements are not simply the result of social desirability bias (Grimm, 2010). Nevertheless, respondents did not only report positive aspects of working with autistic people, but many were also willing to discuss their challenges and concerns as well.

Self-diagnosis

Two of the autistic performing arts professionals in this thesis self-diagnosed as autistic but did not report a clinical diagnosis of autism (one in Chapter 4 and one in Chapter 5), and two more professionals who took part in the mentoring programme (Chapter 5) did not have clinical diagnoses of autism at the time of

taking part in the study, but did report back that they had later gone on to receive their diagnoses. That all of these professionals' answers were similar in nature to the professionals with existing diagnoses warrants confidence in my decision to retain them in the sample. If these studies were to be replicated or extended one solution would be to further verify whether self-identifying autistic participants without diagnoses are having similar experiences could be to include autistic trait measures such as the AQ (Baron-Cohen et al., 2001) to compare to participants with clinical diagnoses.

Un-blind matching

The matching of the mentors and mentees for the mentoring programme (Chapter 5) was not blind; instead, matching was based on shared areas of interest and experience in order to maximise the potential benefit to mentees of receiving mentorship from a mentor with experience they considered relevant to their interests and who was able to offer advice concerning a career path they may wish to pursue. This unblind matching may have influenced the success of the programme. Further work could employ double blind matching to ascertain whether this method of matching biased the outcomes of the programme.

Implications and future directions

Autism is a condition with a changing identity, and how that identity is perceived and responded to by others can shape autistic people's employment outcomes. The four studies in this thesis (Chapters 2-5) all contain examples of autistic people's experiences of how they and others have interacted with their autism identity in their higher education and employment. Although autism is still diagnosed under the medical model as a disorder (American Psychiatric Association,

2013), many autistic people and the wider community that surrounds them are calling for this to change and discussing whether disability or difference are terms better suited to describing autism (Bagatell, 2010; Baron-Cohen, 2017; Kapp et al., 2013), and it is considered a disability under law in the UK (Autism Act; UK Public General Acts, 2009). For many, applying the social model or the social relational model of disability feel like more nuanced and progressive approaches to conceptualising autism (Bagatell, 2010). The social model of disability posits that disability is caused, not by individual differences in ability, but by how society responds and generates an environment for those that are different to exist in and interact with (Hacking et al., 1999; Oliver, 2013). Between the medical model and the social model of disability, there lies the social relational model of disability, which aims to acknowledge the complex interaction between biological and cognitive difference and how society then responds to them (Thomas, 2004).

Autism is considered an 'invisible disability' to many in terms of behavioural definition (Milton, 2012; Neely & Hunter, 2014), meaning that it is not always immediately obvious to others, particularly those who are not trained professionals, that someone may be autistic. It is estimated that only around 40% of autistic people have a distinct behavioural presentation, recognisable within minutes, a phenomenon termed 'frank' autism (Geelhand et al., 2021; Marchena & Miller, 2017). Although studies have shown that many neurotypical people form unfavourable impressions of autistic people during initial interactions, without knowing their diagnostic status, and may then behave in a negative way towards them (Grossman, 2015; Sasson et al., 2017).

Having a condition, that is defined as a disability, but can be to varying extents 'hidden', means that autistic people's disability identity can be complex and

exist at varying levels of integration with other identities, including their occupational

identity (Santuzzi & Waltz, 2016). The way others respond to a disability identity can

cause barriers to employment described by Santuzzi and Waltz (2016), initially

conceptualised by Stone and Colella (1996), in their model of factors affecting the

treatment of disabled individuals in organisations. Annabi and Locke (2019) then

described similar factors in the adapted Organizational Interventions Mitigating

Individual Barriers (OIMIB) framework, used to interpret autism employment

research and barriers to employment for autistic people. These models posit that

employment rates and outcomes for disabled people, and in the case of the adapted

OIMIB framework specifically autistic people, continue to lag behind the broader

population due to individual, organisational, and environmental factors. For example,

organisational and educational factors can be a result of neurotypicals' knowledge

and attitudes, and pose challenges and barriers to successful employment for

autistic adults (Annabi & Locke, 2019).

Annabi and Locke (2019) used the adapted OIMIB to specifically consider

autistic workers in the Information Technology (IT) industry, this was because the

framework included thinking about the role of autism employment programs in

creating barriers and opportunities in the workplace, and the IT industry has

ostensibly more autism employment programs than other industries. The studies in

this thesis did not examine any autism employment programs within the performing

arts, and to my knowledge there are no autism employment programs currently

running in the UK performing arts sector, so to fully extend the adapted OIMIB

framework to this industry would be difficult. Focus may be better placed on how

individual differences and coping methods influence autistic workers' barriers and

opportunities in their workplaces. My research did offer an initial examination of how

neurotypical knowledge and attitudes can positively or negatively influence autistic people's experiences and opportunities in performing arts workplaces, and so this is an area which could also be more easily further researched within the performing arts.

The four studies described in this thesis (Chapters 2-5) all include examples of how autistic people and their workplaces and institutions are responding and interacting with their disability identities on intraindividual, interpersonal, organisational, and societal levels. Autistic performing arts professionals reported their concerns about feeling isolated in the industry, dealing with autism-stigma, and concerns around disclosure in their workplaces. I discuss the implications of each of these factors in turn below, alongside considering whether these are unique to working in the performing arts industry, and suggest how we may improve outcomes in these areas.

Feeling isolated

Across all four studies included in this thesis, feeling isolated and alone in the industry was repeatedly identified as a challenge many autistic performing arts professionals and students were facing (Chapters 2-5). For many people with disabilities, including autism, the majority of their family members, social networks, and the people who they interact with in their institution or workplace will not have a disability or be autistic too. This can mean that the path to developing a disability identity in these contexts can be independent and lack a model or route for the individual to follow (Santuzzi & Waltz, 2016). In Chapter 4, autistic professionals described the burden of advocacy that they frequently faced in their workplaces, as they were the first autistic person their employer had encountered. This meant that the onus lay with them to establish a disability identity within their workplaces,

without a path to follow, and they had to try and explain their needs and advocate for any support they required to employers with very low levels of autism knowledge. This finding supports prior research that found employers often expect their autistic employees to be responsible for requesting or making adjustments to maintain employment and meet productivity requirements (Scott et al., 2018). Although self-advocacy can lead to support, this responsibility places additional pressure on the autistic individual and can contribute to poorer well-being and burnout (Raymaker et al., 2020; Waltz et al., 2015). One way to reduce this isolation for autistic performing arts professionals is to establish networks to link up professionals for peer support and to further develop and contribute to the ones that already exist (Flow Observatorium, 2017). Another way to tackle this problem is through professional mentorship, such as the mentoring programme tested in Chapter 5. Key subthemes identified from this study were that autistic professionals felt less alone in the industry through taking part in the mentoring scheme, and autistic mentees who had mentors who were also autistic described how valuable they found being able to consult a fellow autistic professional in the industry. This provided a space to share and problem-solve common challenges related to their autism and how others were responding to their autistic identities.

Stigma around autism

The most proximal influences on a worker's disability identity are intraindividual factors, such as their own internal experience and interpretation of their difficulties (Santuzzi & Waltz, 2016). Internalised stigma is something experienced by many autistic people, and can negatively affect employment, mental health and quality of life (Bachmann et al., 2019; Botha & Frost, 2020). Internalised stigma around a condition can potentially reduce the likelihood of adopting a

disability identity at work, without which, support can often not be accessed

(Santuzzi & Waltz, 2016). This sentiment was particularly identified in Chapter 4,

where autistic professionals voiced concerns around being perceived as needy if

they revealed their autism diagnosis to colleagues.

When autistic people experience difficulties in social interaction and

communication with non-autistic others in the workplace, both the autistic person and

others will typically attribute the problem to the autistic person, which may further

increase self-stigma and negatively affect mental health (Bury et al., 2020). These

social challenges are nearly always framed within a normative model of social

interaction, and do not acknowledge any fault on the part of the neurotypical person.

This is important as research has shown that autistic people can communicate well

with other autistic people (Crompton et al., 2020; Heasman & Gillespie, 2019), and

so this interpretation of the fault in communication lying with the autistic person in

autistic-neurotypical interactions is evocative of the so-called 'double empathy

problem' (Milton, 2012). This once again places additional responsibly on the

shoulders of the autistic person, as the source of the issue, to resolve any

associated problems, rather than having these challenges understood as a reflection

of society and a lack of organisational supports (Bury et al., 2020). Across all four

chapters autistic participants reported encountering a lack of understanding and

tolerance of differences in their workplaces and institutions. These interpersonal

factors and anticipated negative evaluations by social partners can be particularly

powerful in shaping disability identity (Santuzzi & Waltz, 2016), and social stigma at

an interpersonal level can be one of the strongest predictors of how a disabled

employee might manage their disability identity in the workplace (Beatty & Kirby,

2006; Quinn & Earnshaw, 2011). Workers with disabilities will be less likely to ask for

support in the workplace if they feel as if they will be perceived as a burden, which

could be understood as them downplaying their occupational disability identity in

order to avoid negative responses from employers and colleagues (Baldridge &

Veiga, 2006; Santuzzi & Waltz, 2016). On an organisational level, employees look

for cues regarding flexibility and individualised consideration which may signal if

disability identity will be valued or threatened in an organisation. Cues that convey

that disability is devalued may lead a worker to minimize or delete disability identity

in an effort to preserve a positive work identity (Kosciulek, 2007; Santuzzi & Waltz,

2016). We saw these apprehensions described in Chapter 2, where autistic

performing arts professionals discussed their concerns around employers' lack of

understanding of autism. This was then corroborated in Chapter 4 by many of the

performing arts employers interviewed revealing their lack of autism-specific

knowledge and low confidence in implementing support.

These factors may well have contributed to the disparity between the support

the autistic participants, and those with elevated levels of autistic traits, reported that

they needed in Chapters 2, 3, and 4 compared to the much lower levels of support

that they actually received. Combatting autism stigma and increasing autism

knowledge is a vitally important way to reduce barriers to employment for autistic

people, as described by the OIMIB framework (Annabi & Locke, 2019), and could

also potentially positively affect mental health and quality of life. This can be done

through specific training for colleagues and employers (Khalifa et al., 2020).

Disclosure and accessing support

Another interpersonal factor related to barriers to employment is disclosure.

Those with 'invisible' disabilities, such as autism, can use 'passing' strategies to

minimise or completely hide their disability identity from co-workers, which they may

do due to perceived stigma or potential discrimination at work (Lindsay et al., 2016; J. Sarrett, 2017). Passing as non-disabled can require substantial cognitive or physical effort that can detrimentally affect work performance (Santuzzi et al., 2014; Santuzzi & Waltz, 2016). Many autistic people mask their autistic behaviours, particularly in predominantly neurotypical environments, often at great personal cost to their well-being (Hull et al., 2017; Lai et al., 2017).

Passing or masking can mean that others may not be aware of a disability until it is directly disclosed, and that the disabled individual then often has to come forward and identify as disabled before being able to access support. Autistic professionals described this in Chapter 4, recognising that in many workplaces disclosure of their diagnosis was a necessary step in order to access accommodations. Autistic participants across the four studies in this thesis discussed concerns around disclosure due to stigma and a lack of understanding from colleagues and employers. Fear of workplace discrimination is often cited as cause not to disclose at work by autistic professionals (Brohan et al., 2012; Morris et al., 2015; J. Sarrett, 2017). These concerns are justified by research: in a hypothetical situation, non-autistic participants were asked to make hiring decisions about autistic and non-autistic job candidates from watching videos where they either disclosed an autism diagnosis, briefly or in detail, or didn't disclose a diagnosis. Across the disclosure conditions, the non-autistic participants were over four times more likely to hire a non-autistic candidate than an autistic one (Flower et al., 2019).

Some participants who had taken the step to disclose their autism diagnosis in their workplaces in Chapter 4 reported positive experiences with disclosure, finding that colleagues became more understanding or that they received the support that they needed. Employers can create a workplace culture that encourages

disclosure by people with invisible disabilities by being clear about the competencies required for a job; giving as much information, in accessible formats, as possible in advance; and, in recruitment and selection processes, and allowing opportunities for the individual to disclose (Lindsay et al., 2016; Prince, 2017). Another way in which autistic professionals could be supported with disclosing to their workplaces is through guidance, mentorship, and legal advice. Getting guidance around disclosing an 'invisible' disability is particularly pertinent to autism, due to the integral differences in social communication and interaction meaning that autistic people may be additionally disadvantaged at navigating the complex social norms of disclosing a disability in the workplace (Johnson & Joshi, 2014). Employers can also strive to create accepting, inclusive workplaces where disclosure may not be necessary in order to access support.

Are these barriers to employment and accessing support unique to the performing arts?

None of the challenges described above: feeling isolated, dealing with autism-stigma, and concerns around disclosure in the workplace, are necessarily unique to working in the performing arts. The comparison between students in performing arts higher education and those studying other subjects revealed no major differences between them that appeared to be related to specifically studying the performing arts (Chapter 3). The findings in the four studies contained within this thesis support and corroborate the wider research discussed above, particularly navigating a disability identity in the workplace and the more specific challenges associated with being autistic and in employment. What this thesis adds is a contribution to this growing area of research on autism and employment and the first, to my knowledge, deep dive into the experiences of autistic people studying and working in the performing

arts in the UK. It shows that while autistic people's experiences in this industry, may be similar to those reported in other types of employment, that there may be additional challenges associated with the small business and networking skills necessary to sustaining a career in the performing arts (Bennett, 2009). These exert considerable demand on people's executive functions, including flexibility, planning and organisation, and on social communication – two areas in which autistic people often face particular difficulties (American Psychiatric Association, 2013; Wallace et al., 2016). The social challenges associated with autism may be further exacerbated because performing arts workers are often employed in a project-based system, so they are frequently – more so than is typical for many other industries - having to seek new employment. This relies heavily on networking, often critical to career advancement in the performing arts, and then also undergoing numerous auditions/interviews (Menger, 2006). This may be particularly burdensome to autistic professionals as they report high anxiety around auditions and may struggle with social aspects of networking and job interviews such as small talk (VanBergeijk et al., 2008).

Concluding remarks

To conclude, the research presented within this thesis has formally shown that autistic people, and people with elevated levels of autistic traits, are pursuing higher education and careers in the performing arts. I found that autistic traits are significantly associated with lower occupational and educational self-efficacy, quality of life, and increased mental health symptomatology in performing arts professionals and students. I showed that people with higher levels of autistic traits are more likely to have needed and want support for their employment or higher education than

those with lower levels of autistic traits. I found that many performing arts employers

lack autism knowledge and are not confident providing support for existing or

potential autistic employees, and that autistic performing arts professionals describe

inadequate employment-based support. Finally, I have shown that professional

mentoring is both an acceptable and feasible way to support autistic performing arts

professionals. I have discussed how these results sit within the wider literature

concerning disability and employment and made recommendations for how this

research could be extended and improved upon.

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Appendices

1. The 'Performing Arts Occupational Self-Efficacy Scale'

This portion of the questionnaire is designed to help us understand challenges for those working in the performing arts.

Please rate how confident you are performing the activities listed below by selecting the appropriate number from 0 to 10:

0 = Not at all confident

5 = Moderately confident

10 = Extremely confident

[Participants are presented with a number scale that allows them to select a whole number between 0 and 10 for each item, they can also opt out of answering individual items on the scale that are not relevant to their career by selecting "not applicable" instead]

1. Fully understand what I am required to do to be proactive in my career

2. Motivate myself to work (e.g. apply for roles, rehearse)

3. Fully understand all instructions given to me

4. Structure my time to manage my workload

5. Keep to external deadlines

6. Concentrate when at work

7. Remember information presented at work or in books

8. Take good notes during instruction from others

9. Independently study or research

10. Complete classes or workshops that I have signed up for

11. Participate in group exercises

12. Work with others to achieve a joint goal

13. Share my ideas in group discussions

14. Lead or coordinate my peers / colleagues in group work

15. Interview / audition for roles

16. Prepare for performances (this includes technical work, rehearsals, etc. as applicable)

17. Take part in performances

18. Make phone calls to people I don't know (for work-based purposes, e.g. to hire equipment)

19. Socialize with others in my workplace

20. Ask for help with my work (if required) from a colleague or peer

21. Ask for help with my work (if required) from an employer or member of production team

22. Get a colleague or peer to help me if I have difficulty interacting with others at my workplace

23. Get an employer or member of my production team to help me if I have difficulty interacting with others at my workplace

24. Network to secure future opportunities

2. Testing the reliability of the 'Performing Arts Occupational Self-Efficacy Scale'

Participants could select 'not applicable' to individual items on the self-efficacy scale which were not relevant to their careers. I wanted to examine whether there were any meaningful differences in mean self-efficacy scores between participants who completed all 24 items of the self-efficacy scale (n = 805), and those who completed fewer than 24 (n = 622). Mean self-efficacy scores for each participant were therefore calculated from the number of completed items only.

I did this by examining the differences between mean scores for the whole sample (n = 1427) and the subset of participants who completed all of the 24 items

(n = 805). I also used multiple imputation (MI) to estimate the missing values for the participants who had completed fewer than 24 items (n = 622).

I found no meaningful differences between these different analyses, that is, by using the original raw data for all participants or analysis using multiple imputation for the missing values – which warrants confidence in my results.

There were no missing values in any of the other scales as unlike the self-efficacy scale, participants were required to complete every item on each scale, therefore no multiple imputation was necessary for other measures.

Cronbach's alpha of the occupational self-efficacy scale

Using original data (n = 1427) Cronbach's alpha = .94

Using multiple imputation pooled estimate (n = 1427) Cronbach's alpha = .92

Using only participants who answered every item on the scale (n = 805) Cronbach's alpha = .92

Table 1. *This table shows mean self-efficacy scores calculated using the original data (including missing values), using the means of the pooled data from multiple imputation (MI), and using the means of only participants who completed all of the items on the self-efficacy scale.*

Self-efficacy item	M (SD) of original sample (including missing values) N = 1427	M of sample with multiple imputation N = 1427	M (SD) of only ppts with no missing data N = 805
1. Fully understand what I am required to do to be proactive in my career	7.5 (2.1)	7.5	7.3 (2.1)
2. Motivate myself to work (e.g. apply for roles, rehearse)	7.5 (2.1)	7.5	7.3 (2.1)
3. Fully understand all instructions given to me	8.3 (1.8)	8.3	8.1 (1.8)

4. Structure my time to manage my workload	7.3 (2.2)	7.3	7.1 (2.2)
5. Keep to external deadlines	8.6 (1.6)	8.6	8.4 (1.7)
6. Concentrate when at work	8.6 (1.6)	8.6	8.4 (1.7)
7. Remember information presented at work or in books	8.0 (1.8)	8.0	7.8 (1.8)
8. Take good notes during instruction from others	8.0 (1.9)	8.0	8.0 (1.9)
9. Independently study or research	8.1 (1.9)	8.1	8.0 (1.9)
10. Complete classes or workshops that I have signed up for	8.6 (1.8)	8.7	8.6 (1.8)
11. Participate in group exercises	8.0 (2.1)	8.0	8.1 (2.1)
12. Work with others to achieve a joint goal	8.8 (1.5)	8.8	8.7 (1.5)
13. Share my ideas in group discussions	8.2 (1.9)	8.2	8.1 (1.9)
14. Lead or coordinate my peers / colleagues in group work	7.5 (2.2)	7.5	7.4 (2.2)
15. Interview / audition for roles	7.5 (2.3)	7.5	7.4 (2.2)
16. Prepare for performances (this includes technical work, rehearsals, etc. as applicable)	8.8 (1.5)	8.8	8.7 (1.5)
17. Take part in performances	9.0 (1.5)	9.0	8.9 (1.5)
18. Make phone calls to people I don't know (for work-based purposes, e.g. to hire equipment)	6.8 (2.8)	6.8	6.6. (2.8)
19. Socialize with others in my workplace	7.5 (2.3)	7.5	7.4 (2.2)
20. Ask for help with my work (if required) from a colleague or peer	7.4 (2.3)	7.4	7.3 (2.2)
21. Ask for help with my work (if required) from an employer or member of production team	7.6 (2.2)	7.5	7.4 (2.2)
22. Get a colleague or peer to help me if I have difficulty interacting with others at my workplace	6.0 (2.8)	6.1	6.0 (2.7)

23. Get an employer or member of my production team to help me if I have difficulty interacting with others at my workplace		5.7 (2.9)	5.8	5.7 (2.8)
24. Network to secure future opportunities		5.6 (2.7)	5.6	5.7 (2.7)
	Total	7.8 (1.3)	7.7	7.6 (1.3)

Table 2. *This table shows the comparison of self-efficacy (SE) columns between the correlation matrices calculated using the original mean SE scores and the correlation matrices calculated using the pooled scores from multiple imputation for SE. Eye-balling the figures in Tables 1 and 2 indicates very little difference between the two set of analyses, using the original scores or the MI scores does not affect the significance of any of the correlations.*

		Original SE (including missing values)	Pooled Multiple Imputation SE
SATQ	r_s	-.414**	-.413**
	Sig.	<.001	<.001
Self-efficacy	r_s	1.00	1.00
	Sig.		
WHOQOL physical domain	r_s	.333**	.330**
	Sig.	<.001	<.001
WHOQOL psychological domain	r_s	.458**	.451**
	Sig.	<.001	<.001
WHOQOL social domain	r_s	.329**	.323**
	Sig.	<.001	<.001
WHOQOL environment domain	r_s	.399**	.389**
	Sig.	<.001	<.001
PHQ-8	r_s	-.361**	-.354**
	Sig.	<.001	<.001
GAD-7	r_s	-.324**	-.314**
	Sig.	<.001	<.001
ASRS	r_s	-.319**	-.311**
	Sig.	<.001	<.001
Age	r_s	.237**	.222**
	Sig.	<.001	<.001
Gender	r_s	.01	.003

	Sig.	.73	.901

3. The influence of autistic participants on professionals' results

I wanted to examine whether the participants who reported a clinical diagnosis of autism had any significantly influential effects on our analyses, so I conducted correlational analyses and the extreme groups analysis (EGA) again without the 11 autistic participants (N = 1,416). Eye-balling the correlation coefficients in Table 3 below and Table 3 in the main text suggested no meaningful difference between my analyses using all participants (N = 1,427) and the analyses with autistic participants removed (N = 1,416).

Extreme Groups Analysis (EGA) excluding autistic participants

Professionals in the high autistic trait group were just as likely to have received support (25%) as those in the low autistic traits group (22%), χ^2 (1) = 2.74, p = .254. Members of the high autistic traits group were significantly more likely, however, to have needed support but not received it (39%) than members of the low autistic traits group (34%), χ^2 (1) = 7.51, p = .023. Analyses also revealed a significant group difference in terms of how many of them desired support in the future: professionals with high autistic traits were more likely to desire support in the future (48%) than those with low autistic traits (38%), χ^2 (1) = 11.50, p = .003.

Next, I examined the frequency of individuals in the high and low autistic traits groups scoring at clinically significant levels for depression, anxiety and ADHD traits.

Professionals in the high autistic traits group were significantly more likely to meet clinically-significant thresholds on all of the measures (PHQ-8, GAD-7, ASRS) in comparison to the low autistic traits group (depression χ^2 (1) = 122.77, p < .001; anxiety χ^2 (1) = 66.54, p < .001; ADHD χ^2 (1) = 9.19, p = .002.

Table 3. *Correlation matrices for performing arts professionals without a diagnosis of autism, scores on occupational self-efficacy, SATQ, WHOQOL-BREF domains, PHQ-8, GAD-7, ASRS, age, and gender. Numbers with two asterisks ** beside them indicate a significant result.*

		SATQ	Self-efficacy	WHOQOL physical domain	WHOQOL psychological domain	WHOQOL social domain	WHOQOL environment domain	PHQ-8	GAD-7	ASRS	Age
SATQ	r_s	1.00									
	Sig.										
Self-efficacy	r_s	-.409**	1.00								
	Sig.	<.001									
WHOQOL physical domain	r_s	-.318**	.330**	1.00							
	Sig.	<.001	<.001								
WHOQOL psychological domain	r_s	-.399*	.456**	.587**	1.00						
	Sig.	<.001	<.001	<.001							
WHOQOL social domain	r_s	-.295**	.328**	.430**	.560**	1.00					
	Sig.	<.001	<.001	<.001	<.001						

WHOQOL environment domain	r_s	-.333**	.396**	.582**	.617**	.499**	1.00				
	Sig.	<.001	<.001	<.001	<.001	<.001					
PHQ-8	r_s	.380**	-.356**	-.583**	-.695**	-.433**	-.501**	1.00			
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001				
GAD-7	r_s	.338**	-.321**	-.491**	-.639**	-.376**	-.486**	.782**	1.00		
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001			
ASRS	r_s	.314**	-.314**	-.343**	-.413**	-.253**	-.382**	.480**	.478**	1.00	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		
Age	r_s	-.134**	.236**	.031	.206**	.054*	.279**	-.277**	-.292**	-.289**	1.00
	Sig.	<.001	<.001	.241	<.001	.042	<.001	<.001	<.001	<.001	
Gender	r_s	.173**	.008	.031	.060	-.037	.048	-.083**	-.123**	-.062*	.165**
	Sig.	<.001	.754	.248	.024	.163	.069	.002	<.001	.020	<.001

4. The 'Performing Arts Educational Self-Efficacy Scale'

This portion of the questionnaire is designed to help us understand challenges for those studying in the performing arts.

Please rate how confident you are performing the activities listed below by selecting the appropriate number from 0 to 10:

0 = Not at all confident

5 = Moderately confident

10 = Extremely confident

[Participants are presented with a number scale that allows them to select a whole number between 0 and 10 for each item, they can also opt out of answering individual items on the scale that are not relevant to their career by selecting "not applicable" instead]

1. Fully understand what I am required to do to pass my course

2. Fully understand all instructions given to me

3. Structure my time to manage my workload

4. Finish my assignments / projects by their deadlines

5. Concentrate in class

6. Remember information presented in class or textbooks

7. Take good notes during class

8. Independently study or research

9. Complete classes or workshops that I have signed up for

10. Participate in group exercises

11. Work with others to achieve a joint goal

12. Share my ideas in group discussions

13. Lead or coordinate my peers in group work

14. Give presentations

15. Interview / audition for roles

16. Prepare for performances (this includes technical work, rehearsals, etc. as applicable)

17. Take part in performances

18. Make phone calls to people I don't know (for course-based purposes, e.g. to hire equipment)

19. Socialize with other class members or peers

20. Ask for help with my work (if required) from a classmate or peer

21. Ask for help with my work (if required) from a teacher or other member of staff

22. Get a classmate or peer to help me if I have difficulty interacting with others at my educational institute

23. Get a teacher (or other member of staff) to help me if I have difficulty interacting with others at my educational institute

24. Network to secure future opportunities

5. Testing the reliability of the 'Performing Arts Educational Self-efficacy Scale'

All participants completed the full 24-item scale, for the purposes of comparison of educational self-efficacy between the 2 student groups I used a reduced 21-item scale in analysis. I removed 3 scale items specifically associated with performing arts education (items 15, 16, and 17) so that the scale was more broadly applicable to students studying a variety of topics.

Participants could select 'not applicable' to individual items on the 21-item self-efficacy scale which were not relevant to their education. I wanted to examine whether there were any meaningful differences in mean self-efficacy scores between participants who completed all 21 items of the self-efficacy scale (performing arts students, n = 158; students studying other subjects, n = 56), and those who completed fewer than 21 (performing arts students, n = 122; students studying other

subjects, n = 88). Mean self-efficacy scores for each participant were therefore calculated from the number of completed items only.

I did this by examining the differences between mean scores for the whole sample (performing arts students, n = 280; students studying other subjects, n = 144) and the subset of participants who completed all of the 21 items (performing arts students, n = 158; students studying other subjects, n = 56). I also used multiple imputation (MI) to estimate the missing values for the participants who had completed fewer than 21 items (performing arts students, n = 122; students studying other subjects, n = 88).

I found no meaningful differences between these different analyses, that is, by using the original raw data for all participants or analysis using multiple imputation for the missing values – which warrants confidence in my results.

There were no missing values in any of the other scales as unlike the self-efficacy scale, participants were required to complete every item on each scale, therefore no multiple imputation was necessary for other measures.

Cronbach's alpha of the occupational self-efficacy scale

Using original data (n = 280) for performing arts students Cronbach's alpha = .93
Using multiple imputation pooled estimate (n = 280) for performing arts students Cronbach's alpha = .92
Using only performing arts students who answered every item on the scale (n = 158) Cronbach's alpha = .93

Using original data (n = 144) for students studying others subjects Cronbach's alpha

= .93

Using multiple imputation pooled estimate (n = 144) for students studying other

subjects Cronbach's alpha = .93

Using only students studying other subjects who answered every item on the scale

(n = 56) Cronbach's alpha = .94

Table 4. *This table shows mean self-efficacy scores for performing arts students calculated using the original data (including missing values), using the means of the pooled data from multiple imputation (MI), and using the means of only participants who completed all of the items on the self-efficacy scale.*

Self-efficacy item	M (SD) of original sample (including missing values) N = 280	M of sample with multiple imputation N = 280	M (SD) of only ppts with no missing data N = 158
1. Fully understand what I am required to do to pass my course	8.6 (1.8)	8.6	8.6 (1.9)
2. Fully understand all instructions given to me	7.9 (1.8)	7.9	7.9 (1.9)
3. Structure my time to manage my workload	7.2 (2.2)	7.2	7.2 (2.2)
4. Finish my assignments / projects by their deadlines	8.6 (1.9)	8.6	8.6 (2.0)
5. Concentrate in class	8.2 (1.7)	8.2	8.2 (1.8)
6. Remember information presented in class or textbooks	7.3 (1.9)	7.3	7.2 (2.0)
7. Take good notes during class	7.3 (2.3)	7.3	7.3 (2.4)
8. Independently study or research	7.9 (1.9)	7.9	8.0 (1.8)
9. Complete classes or workshops that I have signed up for	9.2 (1.3)	9.1	9.1 (1.4)
10. Participate in group exercises	8.8 (1.8)	8.7	8.7 (1.9)
11. Work with others to achieve a joint goal	8.9 (1.6)	8.8	8.8 (1.8)

12. Share my ideas in group discussions	7.9 (2.2)	7.9	7.8 (2.2)
13. Lead or coordinate my peers in group work	7.6 (2.4)	7.6	7.6 (2.4)
14. Give presentations	7.6 (2.3)	7.6	7.5 (2.3)
18. Make phone calls to people I don't know (for course-based purposes, e.g. to hire equipment)	6.9 (2.9)	6.9	6.8 (2.9)
19. Socialize with other class members or peers	7.6 (2.6)	7.6	7.7 (2.7)
20. Ask for help with my work (if required) from a classmate or peer	7.5 (2.4)	7.5	7.7 (2.4)
21. Ask for help with my work (if required) from a teacher or other member of staff	7.4 (2.5)	7.4	7.6 (2.5)
22. Get a classmate or peer to help me if I have difficulty interacting with others at my educational institute	6.3 (3.0)	6.5	6.6 (2.9)
23. Get a teacher (or other member of staff) to help me if I have difficulty interacting with others at my educational institute	5.8 (3.3)	6.0	6.3 (3.1)
24. Network to secure future opportunities	6.5 (2.7)	6.5	6.7 (2.7)
Total	7.8 (2.2)	7.7	7.7 (2.2)

Table 5. *This table shows mean self-efficacy scores for students studying other subjects calculated using the original data (including missing values), using the means of the pooled data from multiple imputation (MI), and using the means of only participants who completed all of the items on the self-efficacy scale.*

Self-efficacy item	M (SD) of original sample (including missing values) N = 144	M of sample with multiple imputation N = 144	M (SD) of only ppts with no missing data N = 56
1. Fully understand what I am required to do to pass my course	8.2 (1.9)	8.2	8.1 (1.9)

2. Fully understand all instructions given to me	7.8 (1.8)	7.7	7.7 (1.7)
3. Structure my time to manage my workload	6.8 (2.3)	6.8	6.7 (2.4)
4. Finish my assignments / projects by their deadlines	8.2 (2.3)	8.2	8.6 (2.0)
5. Concentrate in class	7.0 (2.3)	6.9	6.5 (2.5)
6. Remember information presented in class or textbooks	6.9 (2.0)	6.9	6.8 (2.1)
7. Take good notes during class	6.3 (2.7)	6.3	5.9 (3.0)
8. Independently study or research	7.8 (2.0)	7.8	7.4 (2.3)
9. Complete classes or workshops that I have signed up for	8.1 (2.2)	8.0	8.1 (2.1)
10. Participate in group exercises	7.3 (2.6)	7.3	6.9 (2.8)
11. Work with others to achieve a joint goal	7.6 (2.3)	7.5	7.5 (2.4)
12. Share my ideas in group discussions	7.3 (2.5)	7.3	6.9 (2.7)
13. Lead or coordinate my peers in group work	6.7 (2.8)	6.7	7.0 (2.5)
14. Give presentations	7.1 (2.8)	7.1	7.1 (2.7)
18. Make phone calls to people I don't know (for course-based purposes, e.g. to hire equipment)	6.6 (3.2)	6.5	6.5 (3.2)
19. Socialize with other class members or peers	7.0 (2.5)	7.0	7.1 (2.3)
20. Ask for help with my work (if required) from a classmate or peer	7.0 (2.6)	7.0	7.2 (2.6)
21. Ask for help with my work (if required) from a teacher or other member of staff	7.0 (2.4)	7.0	6.7 (2.4)
22. Get a classmate or peer to help me if I have difficulty interacting with others at my educational institute	5.1 (3.2)	5.3	5.7 (2.9)

		4.6 (3.2)	4.9	4.7 (3.0)
23. Get a teacher (or other member of staff) to help me if I have difficulty interacting with others at my educational institute				
24. Network to secure future opportunities		5.6 (2.9)	5.6	5.5 (3.0)
Total		6.9 (2.6)	7.0	6.9 (2.5)

Table 6. *This table shows the comparison of self-efficacy (SE) columns for performing arts students between the correlation matrices calculated using the original mean SE scores and the correlation matrices calculated using the pooled scores from multiple imputation for SE. Eye-balling the figures in Tables 4 and 6 indicates very little difference between the two set of analyses, using the original scores or the MI scores does not affect the significance of any of the correlations.*

		Original SE (including missing values)	Pooled Multiple Imputation SE
SATQ	r_s	-.453**	-.453**
	Sig.	<.001	<.001
Self-efficacy	r_s	1.00	1.00
	Sig.		
WHOQOL physical domain	r_s	.410**	.413**
	Sig.	<.001	<.001
WHOQOL psychological domain	r_s	.426**	.426**
	Sig.	<.001	<.001
WHOQOL social domain	r_s	.347**	.348**
	Sig.	<.001	<.001
WHOQOL environment domain	r_s	.396**	.392**
	Sig.	<.001	<.001
PHQ-8	r_s	-.395**	-.391**
	Sig.	<.001	<.001
GAD-7	r_s	-.299**	-.291**
	Sig.	<.001	<.001
ASRS	r_s	-.317**	-.308**
	Sig.	<.001	<.001
Age	r_s	.011	.004
	Sig.	.852	.953
Gender	r_s	-.038	-.042

Table 7. *This table shows the comparison of self-efficacy (SE) columns for students studying other subjects between the correlation matrices calculated using the original mean SE scores and the correlation matrices calculated using the pooled scores from multiple imputation for SE. Eye-balling the figures in Tables 5 and 7 indicates very little difference between the two set of analyses, using the original scores or the MI scores does not affect the significance of any of the correlations.*

		Original SE (including missing values)	Pooled Multiple Imputation SE
SATQ	r_s	-.488**	-.495**
	Sig.	<.001	<.001
Self-efficacy	r_s	1.00	1.00
	Sig.		
WHOQOL physical domain	r_s	.424**	.418**
	Sig.	<.001	<.001
WHOQOL psychological domain	r_s	.476**	.475**
	Sig.	<.001	<.001
WHOQOL social domain	r_s	.251**	.241**
	Sig.	.002	.004
WHOQOL environment domain	r_s	.397**	.386**
	Sig.	<.001	<.001
PHQ-8	r_s	-.419**	-.408**
	Sig.	<.001	<.001
GAD-7	r_s	-.346**	-.328**
	Sig.	<.001	<.001
ASRS	r_s	-.308**	-.297**
	Sig.	<.001	<.001
Age	r_s	.042	.037
	Sig.	.621	.660
Gender	r_s	-.020	-.033
	Sig.	.811	.704

6. The influence of autistic participants on students' results

I wanted to examine whether the participants who reported a clinical diagnosis of autism had any significantly influential effects on my analyses, so I conducted correlational analyses and the extreme groups analyses (EGA) again without the 7 autistic performing arts students (N = 273) and without the 4 autistic students studying other subjects (N = 140). Eye-balling the correlation coefficients in Table 8 below and Table 10 in the manuscript and Table 9 below and Table 11 in the manuscript suggested no meaningful difference between my analyses using all participants and the analyses with autistic participants removed.

Performing arts students in the high autistic trait group were more likely to have received support (47%) than those in the low autistic traits group (31%), $\chi^2 (1) = 4.73$, p = .030. Members of the high autistic traits group were significantly more likely to have needed support but not received it (40%) than members of the low autistic traits group (10%), $\chi^2 (1) = 16.78$, p < .001. Analyses also revealed a significant group difference in terms of how many of them desired support in the future: performing arts students with high autistic traits were more likely to desire support in the future (47%) than those with low autistic traits (26%), $\chi^2 (1) = 7.61$, p = .006.Next, I examined the frequency of individuals in the high and low autistic traits groups scoring at clinically significant levels for depression, anxiety and ADHD traits. Performing arts students in the high autistic traits group were significantly more likely to meet clinically-significant thresholds on all of the measures (PHQ-8, GAD-7, ASRS) in comparison to the low autistic traits group (depression $\chi^2 (1) = 36.04$, p < .001; anxiety $\chi^2 (1) = 38.65$, p < .001; ADHD $\chi^2 (1) = 20.76$, p < .001.

Student studying other subjects in the high autistic trait group were not more significantly likely to have received support (31%) than those in the low autistic traits group (20%), $\chi^2 (1) = 1.37$, p = .243. Members of the high autistic traits group were

also not significantly more likely to have needed support but not received it (26%)

than members of the low autistic traits group (26%), χ^2 (1) = .02, p = .884. Analyses

also revealed no significant group difference in terms of how many of them desired

support in the future: students studying other subjects with high autistic traits were

not significantly more or less likely to desire support in the future (20%) than those

with low autistic traits (34%), χ^2 (1) = 1.44, p = .230. Next, I examined the frequency

of individuals in the high and low autistic traits groups scoring at clinically significant

levels for depression, anxiety and ADHD traits. Students studying other subjects in

the high autistic traits group were significantly more likely to meet clinically-significant

thresholds on the depression and anxiety measures, but not the ADHD measure

(PHQ-8, GAD-7, ASRS) in comparison to the low autistic traits group (depression χ^2

(1) = 5.04, p = .025; anxiety χ^2 (1) = 7.53, p = .006; ADHD χ^2 (1) = 3.17, p = .075).

Table 8. *Correlation matrices for performing arts students without a diagnosis of autism, scores on educational self-efficacy, SATQ, WHOQOL-BREF domains, PHQ-8, GAD-7, ASRS, age, and gender. Numbers with two asterisks ** beside them indicate a significant result.*

		SATQ	Self-efficacy	WHOQOL physical domain	WHOQOL psychological domain	WHOQOL social domain	WHOQOL environment domain	PHQ-8	GAD-7	ASRS	Age
SATQ	r_s	1.00									
	Sig.										
Self-efficacy	r_s	-.455**	1.00								
	Sig.	<.001									
WHOQOL physical domain	r_s	-.346**	.399**	1.00							
	Sig.	<.001	<.001								
WHOQOL psychological domain	r_s	-.449**	.420**	.619**	1.00						
	Sig.	<.001	<.001	<.001							
WHOQOL social domain	r_s	-.230**	.348**	.416**	.550**	1.00					
	Sig.	<.001	<.001	<.001	<.001						

		SATQ	Self-efficacy	WHOQOL	WHOQOL	WHOQOL	WHOQOL	PHQ-8	GAD-7	ASRS	Age
WHOQOL environment domain	r_s	-.349**	.394**	.535**	.585**	.442**	1.00				
	Sig.	<.001	<.001	<.001	<.001	<.001					
PHQ-8	r_s	.460**	-.383**	-.578**	-.709**	-.381**	-.506**	1.00			
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001				
GAD-7	r_s	.403**	-.303**	-.454**	-.629**	-.309**	-.545**	.757**	1.00		
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001			
ASRS	r_s	.412**	-.309**	-.309**	-.443**	-.169**	-.351**	.510**	.534**	1.00	
	Sig.	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001		
Age	r_s	-.168**	.009	-.042	.045	-.053	.048	-.140**	-.146**	-.156**	1.00
	Sig.	.006	.882	.490	.461	.383	.426	.021	.016	.010	
Gender	r_s	.177**	-.009	-.026	-.037	-.065	-.090	.049	.032	.052	-.018
	Sig.	.003	.880	.670	.547	.285	.139	.417	.599	.395	.763

Table 9. *Correlation matrices for students studying other subjects without a diagnosis of autism, scores on educational self-efficacy, SATQ, WHOQOL-BREF domains, PHQ-8, GAD-7, ASRS, age, and gender. Numbers with two asterisks ** beside them indicate a significant result.*

		physical domain	psychological domain	social domain	environment domain		
SATQ	r_s	1.00					
	Sig.						
Self-efficacy	r_s	-.463**	1.00				
	Sig.	<.001					
WHOQOL physical domain	r_s	-.220**	.399**	1.00			
	Sig.	.009	<.001				
WHOQOL psychological domain	r_s	-.332**	.463**	.772**	1.00		
	Sig.	<.001	<.001	<.001			
WHOQOL social domain	r_s	-.249**	.244**	.533**	.542**	1.00	
	Sig.	.003	.004	<.001	<.001		
WHOQOL environment domain	r_s	-.330**	.390**	.584**	.542**	.520**	1.00
	Sig.	<.001	<.001	<.001	<.001	<.001	
PHQ-8	r_s	.346**	-.413**	-.720**	-.772**	-.372**	-.491**	1.00

	Sig.	<.001	<.001	<.001	<.001	<.001	<.001				
GAD-7	r$_s$	.284**	-.334**	-.596**	-.624**	-.324**	-.494**	.786**	1.00		
	Sig.	.001	<.001	<.001	<.001	<.001	<.001	<.001			
ASRS	r$_s$	.306**	-.289**	-.569**	-.558**	-.376**	-.431**	.543**	.600**	1.00	
	Sig.	<.001	.001	<.001	<.001	<.001	<.001	<.001	<.001		
Age	r$_s$	-.199**	.046	.085	.157	-.016	-.074	-.200**	-.156	-.109	1.00
	Sig.	.019	.594	.317	.066	.848	.385	.018	.066	.203	
Gender	r$_s$	.007	.018	-.015	.020	.025	-.015	-.011	-.108	.061	.006
	Sig.	.933	.830	.857	.811	.769	.862	.898	.204	.477	.948

7. Autistic performing arts professionals interview schedule

Thank you very much for being involved in this research. This interview will give me a chance to talk to you about your career, if you've ever wanted or needed support, what support is currently there and what you would like to see in the future.

1. Are you currently working in the performing arts?

   >>> What is your current role?

   >>> How long have you been working in your current role?

   >>> How long have you been working in the performing arts?

   [I'm interested in finding out… enjoyable/challenging]

2. Ok first let's talk about the good parts of your work (over the course of your career in general).

   >>> Are there any particular aspects of your work that you enjoy and why?

   >>> Are there any particular aspects of your work that you don't enjoy and why?
   >>> Is there anything about your work that you would change?

   [If not mentioned] I'd just like to ask specifically about a couple of things:

   a) One aspect of work is interacting with colleagues and superiors (for example directors/producers). How easy is this for you?

      >>> communication
      >>> understanding instructions

   b) I know that in the performing arts, things often change last minute, how easy is it for you to deal with that?
   c) Projects in the performing arts often involve very long hours and intense periods of work. How easy do you find dealing with this?

   >>> Overall, when you are working on a project do you generally understand what is required of you to fulfil your role?

>>> Do you feel able to meet those requirements?

>>> Do you think meeting those requirements requires the same amount of energy and effort for you as it does for your colleagues?

3. Now let's talk about the support generally available to you (you can either tell me about your most recent employment, or another project if you think it's a better example).

>>> Have you ever needed or wanted support in the workplace?
>>> Did you ask for that support? Or was it offered? (give details)
>>> Did you receive that support? Was it effective?
>>> Was there additional support that you would have liked (either now, or in the past)?

If no/at your discretion:
>>> If you did need support, do you know who to go to in your workplace?
>>> Do you feel comfortable going to that person/service?
>>> Are you aware of the types/methods of support which might be available to you?
>>> How successful do you think they would be at providing support?

4. Lastly, can you tell me a bit about how accepting your colleagues and employers have been about any additional needs you've had?

>>> disclosed needs to all? Hidden their needs?
>>> modifications made willingly? Any reticence etc.?

Ok, brilliant, thank you so much for taking the time to talk to me today. Do you have any questions?

8. Employers Interview Schedule

Do you have any questions about the interview before we start?

Okay, let's start. I'm going to ask you some questions about you, and then we will talk in a bit more detail about your understanding and experiences of working with autistic people.

> Tell me about your role
----

1. How much do you know about autism?

   >>> Do you have any personal experience of autism? (e.g. being autistic yourself, or through having a relative, colleague or friend on the autism spectrum)

   >>> Any training?

2. Have you ever worked with any autistic employees in your current role? Or before?

>>> If yes, let's talk a bit more about that experience:

   >>> How many, roughly, have you worked with?
   >>> How did you know they were autistic? If told by others - would you be able to tell if someone was autistic, and if so, how?
   >>> Did they need any extra support?
        What was it?
        How did you know they needed it?
        Did they get it?
        If no, did you ask them?
   >>> Did you do anything differently when working with them? If so, what? And was it successful?
   >>> Did you encounter any challenges? What were they? (e.g. attendance, work habits (organisation etc.) social aspects?) How did you go about dealing with them?
   >>> How confident did you feel in knowing what to do/how to respond etc.?

>>> If no:

   >>> Do you think there are things you would do differently when interacting with an autistic colleague/employee?

   >>> How confident do you feel about potentially responding to an autistic individual's extra needs in relation to work?

   >>> Do you know how you might tell if someone is autistic?

>>> In what areas do you think autistic people, or those with high levels of traits, might need specific support?

Are you aware of any of these? [Refer to those they may have mentioned in earlier examples]

   - Communication (e.g. interpreting things literally)
   - Social interaction

- Executive function (planning and organisation)
- Sensory differences (e.g., …)
- Difficulties dealing with uncertainty

[For those who said yes to working with autistic people: does that fit with your experiences?]

>>> Do you know where to find further information about those aspects if you needed it? E.g. Is there any support or information you have access to regarding working with autistic people specifically?

>>>Do you know where to refer an autistic individual who you are working with for extra support if they require it?

3. Do you feel that you need any extra support or information regarding working with autistic people or those with other needs?

>>> If yes, what form should this support take?
>>> website links
>>> access to advisor/clin psy [for them or for the student/employee?]
>>> training [for whom?]
>>> text materials

Anything else they would like to add?

Ok, brilliant, thank you so much for taking the time to talk to me today. Do you have any questions?

9. Mentee pre-mentoring interview schedule

1. Are you currently working in the performing arts?

>>> What is your current role?

>>> How long have you been working in your current role?

>>> How long have you been working in the performing arts?

2. What do you know about mentoring?

>>> Have you had mentoring before (in what context)?

>>> What do you think the role of the mentor is?

>>> What do you think the role of the mentee is?

3. How do you think taking part in this mentoring programme will affect your professional life?

>>> Do you think taking part in the mentoring programme will have any benefits for you?

>>> What would you like to achieve with this mentoring programme?

>>> Do you think taking part in the mentoring programme will have any challenges for you?

10. Mentor pre-mentoring interview schedule

1. Are you currently working in the performing arts?

   >>> What is your current role?

   >>> How long have you been working in your current role?

   >>> How long have you been working in the performing arts?

2. What do you know about mentoring?

   >>> Have you mentored before (in what context)?

   >>> What do you think the role of the mentor is?

   >>> What do you think the role of the mentee is?

3. How do you think taking part in this mentoring programme will affect your professional life?

   >>> Do you think taking part in the mentoring programme will have any benefits for you?

   >>> What would you like to achieve with this mentoring programme?

   >>> Do you think taking part in the mentoring programme will have any challenges for you?

11. Mentee post-mentoring interview schedule

Reflecting back on all 6 sessions of the mentoring programme I will ask you about your thoughts on the content of the sessions, the structure of the programme, and finally your thoughts about anything you would have liked to do differently.

1. To what extent did you set goals with your mentor at the beginning of the programme?
   >>> Were there goals for each session or long-term goals?

   >>> Did you achieve those goals?

2. What aspects went well during the mentoring programme?

3. To what extent do you think taking part in the mentoring programme had any benefits for you?
>>> To what extent do you think taking part in the mentoring programme had any benefits for your mentor?

4. To what extent do you think taking part in the mentoring programme presented any challenges for you?
>>> To what extent do you think taking part in the mentoring programme presented any challenges for your mentor?

5. Did anything occur during the mentoring programme that you didn't anticipate?
   >>> In what way?

6. Before you started the mentoring to what extent did you have any expectations of the mentoring programme?
>>> Were those expectations met?

7. In the context of this mentoring programme what do you think your role as mentee involved?

8. Let's talk about the structure of the mentoring programme, how did you find the six sessions of mentoring in terms of achieving what you wanted?

9. You were asked to aim to schedule a mentoring session once every 14 days with your mentor.
>>> How easy did you find it to do this?

>>> To what extent was having a session once every two weeks enough?

10. You were asked to aim to have sessions that lasted for around 60 minutes.
>>> How did you find this amount of time?

11. You were asked to aim to conduct the sessions on using the video chat on Skype if possible.
>>> How did you find this as a method for the mentoring?

12. Is there anything during the mentoring programme that you would have liked support on?

13. Would you recommend any changes to the mentoring programme if it were to be done again?

14. Would you like to add anything else?

12. Mentor post-mentoring interview schedule

Reflecting back on all 6 sessions of the mentoring programme I will ask you about your thoughts on the content of the sessions, the structure of the programme, and finally your thoughts about anything you would have liked to do differently.

1. To what extent did you set goals with your mentee at the beginning of the programme?
>>> Were there goals for each session or long-term goals?

>>> Did you achieve those goals?

2. What aspects went well during the mentoring programme?

3. To what extent do you think taking part in the mentoring programme had any benefits for the mentee?
>>> To what extent do you think taking part in the mentoring programme had any benefits for you?

4. To what extent do you think taking part in the mentoring programme presented any challenges for the mentee?
>>> To what extent do you think taking part in the mentoring programme presented any challenges for you?

5. Did anything occur during the mentoring programme that you didn't anticipate?
   >>> In what way?

6. Before you started the mentoring to what extent did you have any expectations of the mentoring programme?
>>> Were those expectations met?

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14. Would you like to add anything else?