

# A demographic and qualitative analysis of the determinants of success in a National Supported Employment project

Elisa Vigna | Stephen Beyer | Andrea Meek

National Centre for Mental Health – School of Medicine, College of Biomedical and Life Sciences, Cardiff University, Cardiff, UK

## Correspondence

Elisa Vigna, National Centre for Mental Health – School of Medicine, College of Biomedical and Life Sciences, Cardiff University, Cardiff, CF24 4HQ, UK.

Email: [vignae@cardiff.ac.uk](mailto:vignae@cardiff.ac.uk)

## Funding information

National Lottery Community Fund; Welsh Government

## Abstract

**Background:** People with an intellectual disability and/or autism experience low employment rates compared to the general population. This study shows what the determinants of success are in getting this group of young people into paid employment.

**Method:** The research is based on data collected on 1008 young people, aged 16–25, participating in the Engage to Change project across Wales, to support young people to achieve employment. A real-time data collection system was used from their engagement and throughout their journey to employment.

**Results:** This research indicates an overall employment rate of 23% for the project to date, based on total referral. Young people who engaged in ‘significant work experience’, such as paid placement or supported internship, had a greater employment rate of 37%.

**Conclusion:** Previous and current real work experiences increased the chances of young people of becoming employed, above the effect of supported employment and job coach support.

## KEYWORDS

autism, employment, intellectual disability, supported employment, supported internship

## 1 | INTRODUCTION

### 1.1 | Context for the research

Employment is a key element in individuals' lives. The United Nations Convention on the Rights of Persons with Disabilities (United Nations, 2006) recognises: ‘The right of persons with disabilities to work, on an equal basis with others; this includes the opportunity to gain a living by working freely chosen and accepted in a labour market and work environment that is open, inclusive and accessible to persons with disabilities’. It is well documented that people who have an intellectual disability and/or are autistic are disadvantaged in the labour market and face significant challenges in finding, obtaining and maintaining employment. Only

5.1% of adults with an intellectual disability aged 18–64 and known to social services were in paid employment in England (NHS Digital, 2021) and 21.7% of autistic people were employed (Office for National Statistics, 2022).

The outcomes of having an intellectual disability and/or autism range greatly and it can be difficult to predict the result on a person's learning and employment. Some people with an intellectual disability and/or autism may, to a greater or lesser extent, have difficulty with reading and writing, understanding language, questioning and responding, and have problems with daily independent functioning. They may have difficulty with communicating and social interaction. They may have difficulty coping with change, time management and may prefer routine. People can find concentration difficult and may

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2023 The Authors. *Journal of Applied Research in Intellectual Disabilities* published by John Wiley & Sons Ltd.

struggle with stress and anxiety. They may also find remembering and replicating complex tasks difficult which makes it hard to transfer tasks learned in a training environment to a real employment setting. Additionally, neurodiverse individuals may be more significantly affected by poor sleep, illness or other personal circumstances reducing their ability to focus on a work, impact varying across the day.

Additional documented vocational barriers for people with intellectual disabilities include work environments that emphasise independent decision-making and worker flexibility with low supervision levels. The location of the workplace, or difficulty people with intellectual disabilities have with travelling independently, can also disadvantage individuals. Fear of losing welfare benefit status if a job is unsuccessful can dissuade many from seeking work. Further obstacles include: lack of awareness of people's potential; lack of employer support and workplace adjustment; mismatches between job tasks and the person's interests; lack of accessible job application and recruitment processes; and lack of work experiences to enable young people to make informed choices around employment (Beyer, Brown, et al., 2010; Ray & Wilson, 2016).

Historically, a range of initiatives have been introduced in the United Kingdom to address these employment barriers, including: sheltered employment; vocational training; employment and equality laws and regulations (Powell, 2021; Riddell, 2010); schemes to offset costs of disability in employment such as the Access to Work scheme (Dewson et al., 2009); employer disability awareness and Disability Confident schemes (DWP, 2018); and inclusive apprenticeships.

Despite this investment, the rate of successful transitioning of young people with an intellectual disability or autism from post-16 education to paid employment remains low. Only 12.3% of applicants for any type of apprenticeship in England were learners with learning difficulties and intellectual disabilities (ONS, 2022). There remain few effective pathways adult employment for this group of young people. There is no agreed model of service delivery and local implementation can in reality be a jigsaw of national, regional and local funding, suggesting we have yet to deliver appropriate support to make a difference to employment rates.

Research has shown that many people with an intellectual disability learn work skills better in real job environments, with support to guide their learning, rather than in special or simulated environments (Carter, 2005; Cimera, 2009; Phelps & Hanley-Maxwell, 1997). Supporting young people with an intellectual disability and/or autism to have employment experiences similar to their neurotypical peers is also essential for developing independence and informed choice around work (Kaehne & Beyer, 2009).

## 1.2 | Supported internships

The supported internship model is an emerging approach to supporting young people aged 16 to 24 who have intellectual disabilities (Rutkowski et al., 2006) or are autistic (Wehman et al., 2013) into employment. The aim of the model is to equip young people with the skills they need to enter sustainable paid employment through

vocational education and job coach support in the workplace. Primarily based within mainstream employment settings, supported internships are unpaid work-based learning placements, typically lasting a minimum of 6 months. A local college provider delivers a vocational curriculum to interns for 2 hours per day when on site. For the remainder of the week the intern carry out real work within the host business supported by a small team of job coaches. Interns commit to three placements, one per academic term, allowing for skills to grow and vocational preferences to develop. Project SEARCH is the most popular model for delivering supported internships in the UK (DFN Foundation, 2023). The supported internship model has provided higher rates of employment for people with intellectual disabilities than alternatives in the United States (Rutkowski et al., 2006) and United Kingdom (Cooper Gibson Research, 2013) and delivered financial savings (Social Value Lab, 2013).

## 1.3 | Supported employment

Supported employment is a model designed for people with intellectual disabilities, and was developed in the United States in the 1980s (Wehman & Kregel, 1985). It is extensively researched, with outcomes, including better large-scale jobs delivered (Shafer et al., 1990; West et al., 1992); better wage outcomes than alternatives (Griffin et al., 1996); financial benefits for taxpayers (Cimera, 2010); and health benefits (Robertson et al., 2019). Significant benefits have been identified for employers of people with an intellectual disability (Beyer & Beyer, 2017). Supported employment has subsequently expanded to encompass other groups such as autistic people (Mawhood & Howlin, 1999; Nicholas et al., 2015); people with mental health issues (Bond et al., 2012); acquired brain injury (Wehman, Kregel, et al., 2003; Wehman, Revell, & Brooke, 2003); physical disabilities (Ottomanelli et al., 2012); and sensory disabilities (Hanley-Maxwell et al., 1990). There are five primary stages of the model (EUSE, 2010): participant engagement; vocational profiling; job finding; employer engagement; and in-work support and career progression. The model is delivered through a job coach and requires that jobs are individually matched to the person, paid at the National Minimum Wage or above, and are in the open labour market with terms and conditions equal to other workers in their company.

## 1.4 | Engage to change

The Engage to Change project is the focus of this research and draws from previous good practice to demonstrate what works for this population in Wales. The Engage to Change is a 7-year project working across Wales, funded by the National Lottery Community Fund in partnership with Welsh Government. The project aims to support 1000 young people aged 16 to 25 with an intellectual disability, autism or a specific learning difficulty, who are not in education, training or employment (NEET) or are in danger of becoming NEET, to increase their employment skills and gain employment opportunities

and ultimately paid jobs. The project is led by Learning Disability Wales and brings together a consortium of partners: Elite Support Employment and Agoriad Cyf, the Supported Employment Agencies, deliver job coach support following the supported employment model. Participants can make use of up to 6-months of an employer wage incentive in a paid placement. Wider services are also offered, such as vocational assessment; careers guidance and counselling; supported interviews and work trials; and travel to work training. The project also delivers four DFN Project SEARCH, and three Supported Internship schemes. Self-advocates from All Wales People First provide an advisory and consulting capacity to the project. A research team from the National Centre for Mental Health, Cardiff University carried out an independent evaluation of the project.

## 2 | METHODS

### 2.1 | Data collection procedure

Job coaches collected data throughout the project using an application on digital tablets link to a real time data collection system hosted by Cardiff University. Young people provided Informed Consent on the first day with the project. Job coaches received training on data collection which followed the young person's progression throughout the project. Data collected was used for evaluation, and to plan and record job coaching activities by agency staff.

Data were collected on demographic information, previous work experience or paid employment history, primary and secondary disabilities, difficulties in school or day-to-day life experienced by the individual, special needs status at school, personal employment preferences and aspirations. Information about difficulties in day-to-day life or in schools was collected on referrals from year two of the project. This provided job coaches with a more accurate picture of how the individual was functioning, allowing a more needs-led approach to supporting people to enter employment. Questions covered dyscalculia, dyslexia, dysgraphia, dyspraxia and other difficulties such as memory, organisation, attention, sensory overload and sensory difficulties.

The age range intervals used in data analysis were selected according to important milestones in young people's life. Young people aged 16–19 are generally still in full-time education or about to complete it and begin their transition to adulthood. Young people aged 20–22 can be still engaged in further education courses which can last 1 or 2 years. Young people aged 23–26 are generally in the final stages of, or have left, education and need help to consolidate their learning to get a paid job.

At the end of each employment experience an assessment of skills was performed, job coaches detailing any placement, paid or unpaid, completed by the young person and any employment or volunteering outcomes originating from the Engage to Change project.

Job coach support is a central element in the success of supported employment. Data on the number of job coach hours dedicated to each young person on Engage to Change was collected, excluding supported interns.

Chi-square analysis was used to compare employment or work placement outcomes for groups defined by their characteristics and previous experiences. Further, a stepwise inclusion approach to a logistic regression analysis was used to determine which factors might together influence employability. Categorical variables were included by creating dummy variables for both previous employment experience (a work experience, volunteer placement or a paid job) and diagnosis. Modelling includes dichotomous variables such as gender and having had a significant experience of a paid placement or supported internship during the project. Continuous variables such as age and job coaching hours delivered to the person were considered for the assumption of linearity and their significance, to the logit transformation of the dependent variable.

### 2.2 | Participants

The study includes all eligible young people referred to the Engage to Change Project who received input from the project. In total 1008 eligible young people were referred to the project over 5 years. Participant age criteria were age 16–25 years and having an intellectual disability, a specific learning difficulty and/or autism. Participants were not in education, employment or training and also needed to be committed to gaining paid employment.

In this paper, we compare those who achieved paid employment by the end of their engagement in the project with those who did not, according to demographic descriptors such as gender and age, previous experience, diagnosis, self-reported difficulties and special educational status at school.

## 3 | RESULTS

### 3.1 | Employment outcomes

A total of 231 young people achieved paid employment, with an employment rate of 23%, based on referrals.

Employment rates vary according to young people's diagnosis. Autistic young people have a 27% employment rate. However, if autistic young people also have a specific learning difficulty the rate is lower, at 22%. Where both autism and intellectual disability are reported, the rate falls to 16%. Young people with a specific learning difficulty achieved 27% employment rate and young people with an intellectual disability 23%. Ten young people reported other diagnoses (Table 1). A diagnosis was missing for 79 young people.

The project also offered 318 paid placements lasting up to 6 months with a subsidised wage paid for by the Engage to Change Project, and 342 unpaid placements usually of short duration (Table 2). The project also delivered 4 DFN Project SEARCH and 3 alternative Supported Internship programmes that together served 161 young people.

**TABLE 1** Employment rates by diagnosis.

	Young people in paid employment by diagnosis	Employment rates	Total of young people reporting this diagnosis
Intellectual disability	58	23%	257
Autism	49	27%	184
Specific learning difficulties	41	27%	153
Autism and intellectual disability	29	16%	178
Autism and specific learning difficulties	32	22%	147
Other diagnosis	5	-	10
Missing diagnosis <sup>a</sup>	17	-	79

<sup>a</sup>On the first year of the project, data collection about the diagnosis was delegated to supported employment agencies, leaving some missing data. To avoid missing data, a set of questions about self-reported diagnosis and individual difficulties was introduced after a year of project operation.

**TABLE 2** Description of employment outcomes for the first 5 years.

	Number of young people
Paid jobs	231
Volunteering	42
Paid placement	318
Unpaid placement	342
Young people enrolled in Project SEARCH/alternative supported internships	161

## 3.2 | Demographic elements

### 3.2.1 | Gender

The majority of eligible young people referred to the Engage to Change Project were male (75%). Of those reaching employment, 175 individuals were male, 46 were female. 10 young people did not report their gender. with an overall employment rate of 23%, the percentage of males in employment was 25% and female 19%. However, the difference between males and females in employment rate was not statistically significant ( $\chi^2 = 3.323$  Sign. 0.068).

### 3.2.2 | Age

Table 3 shows the distribution of participants by age. When considering number of referrals, the largest group of participants is young people aged 20 to 22 years (39%), followed by those aged 16 to 19 (33%) and those aged 23 to 26 (22%). Age is missing for 66 young people (6%). Table 3 shows the employment rate for each age group. The highest employment rate is for young people aged 23 to 26 years (26%), followed by young people aged 20 to 22 (24%), with the lowest rate for young people aged 16–19 (20%).

There are no statistical differences in employment rate between the age groups ( $\chi^2 = 3.122$  Sign. 0.210).

## 3.3 | Previous experience

At referral, young people and any parents/carers were asked to describe their previous experiences of employment (Table 4). 21% had attended a work awareness course while in educational or elsewhere. A large number of young people had had a work experience (72%), while half had had the opportunity to volunteer. A quarter of the sample had experienced paid employment before entering the project.

We explored whether number of previous work experiences influenced job outcomes resulting from participation in the Engage to Change project. It appears that having had some work experience before does help in getting employment within this support model. 180 out of 203 young people employed (89%) had a previous work experience. The employment rates, based on referrals, for people who had previous work experience was 24.7% compared to 8.2% for those without this experience, a statistically significant difference ( $\chi^2 = 11.072$ ;  $p < .001$ ). When considering combined historical experiences, 45% of young people employed had two work experiences before entering the project, 25% had three and 9% had four. When looking at the proportion of young people unemployed at the end of the project, 35% had two employment experience, 29% had one, 17% had 3 and 13% had none. Those employed tend to have experienced more previous work experience placement than those who did not get a job ( $\chi^2 = 27.587$   $p < .000$ ).

Figure 1 shows a relationship between the number of previous work experiences and increasing levels of paid employment. Having had a number of work experiences seems to help people gain employment through this support model. However, each experience level can be very different and we have little information about the experiences itself, such as duration, quality and outcomes.

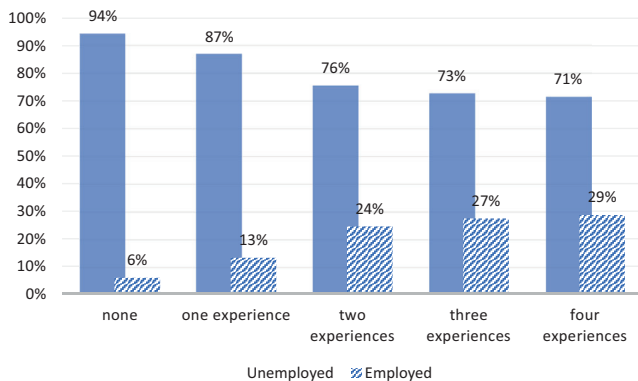
We also looked at whether experience of paid employment or volunteering was related to getting a paid job through the project; 46% of young people achieving paid employment through Engage to Change previously had had a paid job (83 young people out of 176). Compared to an

**TABLE 3** Employment rate and age range.

		Number of young people in paid jobs	Young people taking part in engage to change	Employment rate
Age range	16–19	67	334	20%
	20–22	95	389	24%
	23–26	57	219	26%
Missing		12	66	-

**TABLE 4** Previous employment experience.

Relevant previous experiences	Number of participants	Percentage of total referrals
Work experience	729	72%
Work awareness course	207	21%
Volunteering	506	50%
Paid employment	257	25%

**FIGURE 1** Percentage of young people employed based on their previous experience.

employment rate of 26% for those who did not experience employment before, this is statistically significant ( $\chi^2 = 26.381 p < .001$ ). The employment rate through Engage to Change for those previously experiencing volunteering was 68%, compared to 46% who had not had that experience, again a statistically significant difference ( $\chi^2 = 11.981 p < .001$ ).

Previous experience appears to be a relevant factor in determining outcomes of paid employment for young people with intellectual disabilities and/ or autism. The data here provides a basis for further investigation around the impact of quality and duration of work experience during school and further education on later job outcomes.

### 3.4 | Benefits

At referral, 75% of the participants received some form of welfare benefit payment. Personal Independence Payment (PIP) was the most common benefit received (57% of participants), followed by Universal Credit (29%) and legacy benefits such as Income-related Employment

and Support Allowance. No statistically significant difference in employment rate was found between those who received welfare benefits (22%) and those who did not (27%) ( $\chi^2 = 2.659$  Sign = 0.130).

### 3.5 | Paid placements

Three hundred and eighteen participants (37%) took up a paid placement through Engage to Change of up to 6 months (Table 5). This excludes supported internship schemes offered by Engage to Change because internships use unpaid placements. Individuals aged 23 and above were more likely to take up a paid placement than younger groups ( $\chi^2 = 10.451 p = .005$ ). A smaller number (39 young people) entered employment without any other form of placement.

Young people having a diagnosis of autism and intellectual disability were less likely to access a paid placement than those with a diagnosis of intellectual disability, autism, learning difficulty or autism and specific learning difficulty ( $\chi^2 = 4.280 p = .039$ ) (Table 6). There was no statistically significant difference in the number of young people accessing paid placements between genders.

### 3.6 | Significant work experience and employment

The Engage to Change project offered work opportunities of significant duration to enable young people to be ready for employment. We selected everyone who had a significant input from the project to check the effect on their employability. We included everyone who:

- had a paid placement, lasting up to 6 months in duration;
- anyone who had an unpaid supported internship, with a maximum of three rotations, lasting up to 9 months.

Within this subsample, unpaid placements were not included because they were generally shorter in duration and, on their own, cannot be classified as significant experience.

This high level of involvement means young people had the opportunity to work in one or more settings, supported by a job coach. The employment rate for young people who had a paid placement is 41%, and those who had a supported internship is 31%. If data from these two significant work experiences are combined, the overall employment rate for people having a 'significant work experience' is 37%, compared with 16% without this level of experience (Table 7).

Within the Engage to Change project 443 young people (321 male, 113 female, 10 missing; average age 21) had a 'significant work experience', as defined above.

Our analysis of outcomes shows that there is a significant difference between young people with a 'significant work experience' through Engage to Change, and those who did not, in their ability to achieve employment later on ( $\chi^2 = 92.477 p < .001$ ).

There is no difference in involvement in a 'significant work experience' between genders or age groups. Young people having a

specific learning difficulty were more likely to experience a 'significant work experience' than young people reporting a different diagnosis ( $\chi^2 = 9.274 p < .002$ ). Young people with autism and intellectual disability were less likely to have a 'significant work experience' ( $\chi^2 = 7.868 p < .005$ ).

Young people who had a previous work experience before joining the Engage to Change project were also more likely to have had access to a 'significant work experience' during the project ( $\chi^2 = 18.225 p < .000$ ).

**TABLE 5** Paid placement and age range.

		Young people in paid placement <sup>a</sup>		Total
		No	Yes	
Age Range	16–19	177 (71%)	74 (29%)	251
	20–22	207 (62%)	127 (38%)	334
	23–26	112 (56%)	88 (44%)	200
Total		496 (63%)	289 (37%)	785

<sup>a</sup>Statistics based on 289 paid placements, out of the 318 offered by the project; 29 young people who engaged in a paid placement did not provide information about their age.

**TABLE 6** Paid placement and diagnosis in the main Engage to Change (excluding supported internships).

Reported diagnosis	Paid placement <sup>a</sup>	Total
Autism	61 (37%)	164
Intellectual disability	80 (39%)	208
Specific learning difficulty	47 (42%)	112
Autism and intellectual disability	45 (29%)	154
Autism and specific learning difficulty	52 (39%)	134
Missing	33	75
Total	318 (37%)	847

<sup>a</sup>Statistics based on the main Engage to Change project, not including the supported internship programmes which do not offer paid placements.

**TABLE 7** Engage to Change employment experience and employment rate.

Engage to change employment experience and employment rates	Young people employed	% of young people employed	Total receiving experience
Paid placement	130	41%	318
Supported internship (Project SEARCH and alternative supported employment)	43	31%	137
Significant experience (paid placement or supported internship) <sup>a</sup>	161	36%	443

<sup>a</sup>Totals take into account that a small minority (12 young people) had both experiences (supported internship and paid placement).

Variables in the equation	B	Sig.	Exp (B)
Not having a significant placement during Engage to Change	-1.486	0.000	0.226
Not having a historic paid job	-0.936	0.000	0.392
Constant	0.000	0.998	1.000

### 3.7 | Factors facilitating and hindering employment

A logistic regression was performed to ascertain the effects of age, gender, historical employment experience, reported diagnosis, job coaching hours, welfare benefit status on the probability that participants entered employment during the project (Table 8). Using a stepwise method, variables were introduced into the model if they reached significance. Table 8 shows that only two variables reached significance: having had a 'significant work experience' in the project and having had an historical paid job. The model containing these two variables and a constant explained 17% of the data variance ( $R^2 = .166$ ) and correctly classified 78.0% of cases as employed or not employed.

An analysis of the logistic regression coefficients showed that young people who had no experience of 'significant work experience' during the project were less likely to be employed at the end of it. Furthermore, young people with no historical experience of paid employment were less likely to be employed at the end of the project.

## 4 | DISCUSSION

The Engage to Change project shows that many people with an intellectual disability, specific learning difficulty and/or autism can work if

**TABLE 8** Logistic regression factors.



they have the right job match and the right support, supporting the extensive literature on supported employment (Beyer, Jordán De Urries, & Verdugo, 2010; Cimera & Rusch, 1999; De Urries et al., 2005).

The employment rate of 23% based on people referred to the Engage to Change project, and 37% for those receiving 'significant work experience', is a significant achievement for Wales, considering the overall 5.1% employment rate for people with intellectual disabilities in England (NHS Digital, 2021). This is particularly relevant as the period from March 2020 through to June 2021 saw significant disruption to the United Kingdom and Welsh labour markets, with marked reductions in referrals to the project, the availability of new jobs, and some delays in converting paid work placements into substantive jobs. This situation did not recover significantly until the last quarter of 2021. The project enhanced the opportunity of autistic young people to obtain employment with a rate of 27%, higher than an overall 22% for all age ranges in England (ONS, 2022). However, the employment rate is lower for those young people with a co-morbidity, linked to the complexity of their learning, emotional or social support needs in relation to starting a job. Young people presenting with a co-morbidity may benefit from a longer period of time with needs-led support, to achieve employment.

This article highlights several key factors which are important in getting more people into employment. There was a difference in the extent to which female participants and male participants access paid placements, with a ratio of 3:1 in favour of males. This could be linked to females being more sensitive to potential welfare benefits change when entering employment than males, or females could have a social role within their family environment that leads to employment being seen as less relevant to them than their male counterparts. Overall, the project experienced a gender disparity, as only one quarter of the project participants are female. The gender disparity may be linked to the high prevalence of autistic participants. A higher proportion of males are identified as autistic than females (Baron-Cohen, 2002; Baron-Cohen et al., 2011; Learning Disability Observatory, 2016), and there is a lower incidence of clinical diagnosis of autism in females due to camouflaging of autistic traits (Lai et al., 2017). Nevertheless, the inclusivity of female individuals with an intellectual disability or/and autism has always been a matter of concern for the project. Initiatives to promote the involvement of young women with autism or intellectual disabilities were organised, but the participation of females remained lower than males. We should continue to deliver initiatives to redress disadvantages in employment for young women with autism.

Rates of employment for people with different diagnoses differed: 27% for autism; 23% for intellectual disabilities and 23% for people with a specific learning difficulty. Having a co-morbidity negatively influenced the employment rate, young people with autism and an intellectual disability having an employment rate of 16%, and autism with a specific learning difficulty at rate of 22%. This is likely to be linked to extra support being needed to support the learning process and the additional social and emotional demands of work (Tobin et al., 2014).

The project supported young people aged 16 to 25, with young people aged 20–22 being the largest group served. The group with

the highest rates of paid placement and paid employment are young people aged 22–26. This could be linked with greater life experience, degree of work readiness and higher motivation to be employed for this group, as 70% of young people aged 23 and over who are employed at the end of the project had had a paid job previously.

Indeed, having a previous work experience, a volunteering placement or paid employment contributed to the success of getting paid employment through the Engage to Change project. Even if work experience was of a short duration and within the school environment, this can help the young person understand a particular business environment. We can conclude that previous experience of employment is one of the main factors leading to sustained paid employment within this model of employment support. This is supported by the literature on transition from school to employment, studies showing that employment experience (Benz et al., 2000; Test et al., 2009) and pre-established links with community employers while at school (Howartha et al., 2006; White & Weiner, 2004) predict higher employment rates post-school for people with intellectual disabilities.

However, the study lacked information on the quality of these previous work experiences, volunteering or paid employment opportunities, and we cannot be sure of their length, job characteristics, businesses engaged, wages or level of support provided. We do know through the application of the project's eligibility criteria that the young people entering the project were not in employment, education or training at the time of referral, and that they needed job coach support to enter employment through the Engage to Change Project.

Job coach support appears central to getting more young people into employment. The Engage to Change project supports individuals with a wide range of support needs, and therefore the employment trajectory of individuals varies. Some young people might need more input to acquire new employment skills, others might need more input in job coaching and job maintenance. Young people experienced different pathways to employment, the most popular being going through a period of paid placement, followed by paid employment. Others were going through a short unpaid placement, followed by a paid placement and a paid job. Different pathways reflected individual needs and availability of placements with local employers.

Diagnosis can play an important additional role. Young people reporting co-morbidity of autism and intellectual disability are less likely to start a paid placement and to experience a reduced probability of becoming employed. This could be linked to the complexity of the support needed by young people with a comorbidity, compared with other young people with a less complex profile and lower support needs. This highlights the importance of a needs-led approach and that we should recommend this flexible package of supported employment for young people with an intellectual disability and autism to meet this need. Young people with a diagnosis of specific learning difficulties experience greater probability of a paid placement. Specific learning difficulties covers a wide range of conditions, including dyslexia and dyspraxia, and may represent less of a challenge to move into the labour market than those with more significant intellectual disabilities.

Finally, we can conclude that employment can be facilitated by several factors, such as previous work experience, volunteering or

paid employment and being older. Experiencing several employment opportunities is also important to the development of employment skills and the employability of young people. Young people who are older had more opportunities to have work experiences and to develop a better understanding of employment.

## 5 | CONCLUSION

The Engage to Change study reinforces the importance of supported employment and job coaching to secure paid employment for young people with intellectual disabilities and/or autistic young people.

National and Welsh Government can help make employment outcomes more widely available to them by understanding the importance of inclusive employment and of promoting successful supported employment, an individualised, needs-led model. One out of four young people entering the Engage to Change project had a previous paid employment experience, which had not lasted over time, or developed into a paid job. It is evident that young people served by the project needed specialised, extra support to enter and sustain employment.

There remains a lack of Government support for autistic people and people with intellectual disabilities to enter the workforce and to reduce the employment gap between them, other people with disabilities and non-disabled people. Dedicated, national funding for supported employment is required for it be accessible for everyone who would benefit from it. Better transition pathways from education to employment are needed, such as supported internships and supported apprenticeships, with job coach support.

There is a need to develop deliver job coaching of a professional standard that can support people with more complex needs. Some positive steps are being taken, with a clear commitment in the new Welsh Government's Employability Strategy to deliver programmes improving access to employment for people with significant intellectual disabilities through job coach support (Welsh Government, 2022a). The Employability Strategy highlights the importance of the public sector in promoting the employability of people with disabilities and in widening access to work experience for young disabled people. There is also a commitment to eliminate the employment gap for people with disabilities by 2050, (Welsh Government, 2022b). It remains important for Government to invest in the future of people with intellectual disability and autism, including raising the employment aspirations of young people and their families when they start school, through improved careers advice and by ensuring that post-education options are better planned, inclusive, and meet the needs of this group of talented young people.

## ACKNOWLEDGEMENTS

The authors would like to express our gratitude to the Engage to Change project partners and collaborators, Learning Disability Wales, Agoriad Cyf, Elite Supported Employment, All Wales People First and DFN Project SEARCH for their collaboration over the years. We would like to thank the National Lottery Community Fund and Welsh

Government for funding this project and research. Assistance provided by Jacob Meighan with administrative tasks over the years was greatly appreciated. Our special thanks are extended to the employment advisors and job coaches for supporting with data collection, and to young people for their contribution to this research.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the Engage to Change Consortium. The data are not publicly available due to ethical restrictions. Ethical approval: Study title: Evaluation of the outcomes of the Engage to Change transition to employment project REC reference- 16/WA/0392 Protocol number- Spon 1557-16 IRAS project ID:- 214705.

## REFERENCES

- Baron-Cohen, S. (2002). The extreme male brain theory of autism. *Trends in Cognitive Sciences*, 6, 248–254.
- Baron-Cohen, S., Lombardo, M. V., Auyeung, B., Ashwin, E., Chakrabarti, B., & Knickmeyer, R. (2011). Why are autism Spectrum conditions more prevalent in males? *PLoS Biology*, 9, e1001081.
- Benz, M. R., Lindstrom, L., & Yovanoff, P. (2000). Improving graduation and employment outcomes of students with disabilities: Predictive factors and student perspectives. *Exceptional Children*, 66, 509–529.
- Beyer, S., & Beyer, A. (2017). *A systematic review of the literature on the benefits for employers of employing people with learning disabilities*. Mencap.
- Beyer, S., Brown, T., Akandi, R., & Rapley, M. (2010). A comparison of quality of life outcomes for people with intellectual disabilities in supported employment, day services and employment enterprises. *Journal of Applied Research in Intellectual Disabilities*, 23, 290–295.
- Beyer, S., Jordán De Urriés, F. D. B., & Verdugo, M. A. (2010). A comparative study of the situation of supported employment in Europe. *Journal of Policy and Practice in Intellectual Disabilities*, 7, 130–136.
- Bond, G. R., Drake, R. E., & Becker, D. R. (2012). Generalizability of the individual placement and support (IPS) model of supported employment outside the US. *World Psychiatry*, 11, 32–39.
- Carter, E. (2005). Meaningful work: Improving employment outcomes for transition-age youth with emotional and behavioral disorders. *Preventing School Failure*, 49, 63–69.
- Cimera, R. (2010). The national cost-efficiency of supported employees with intellectual disabilities: The worker's perspective. *Journal of Vocational Rehabilitation*, 33, 123–131.
- Cimera, R. E. (2009). *Can community-based high school transition programs improve the cost-efficiency of supported employment?* (Vol. 33). *Career Development for Exceptional Individuals*.
- Cimera, R. E., & Rusch, F. R. (1999). The cost-efficiency of supported employment programs: A review of the literature. *International Review of Research in Mental Retardation*, 22, 175–225.
- Cooper Gibson Research. (2013). *Supported internship trial for 16 to 24 years old learners with learning difficulties and/or disabilities: An evaluation*. Department for Education.
- De Urriés, F. B. J., Verdugo, M. A., Jenaro, C., Crespo, M., & Caballo, C. (2005). Supported employment and job outcomes. Typicalness and other related variables. *Work (Reading, Mass.)*, 25, 221–229.
- Department Work And Pension. (2018). Disability confident scheme: Summary findings from a survey of participating employers. Disability Confident: survey of participating employers - Gov.Uk ([www.gov.uk](http://www.gov.uk)).
- Dewson, S., Hill, D., Meager, N., & Willison, R. (2009). Evaluation of access to work: Core evaluation.
- DFN Foundation 2023. <https://www.dfnprojectsearch.org>
- EUSE. (2010). European Union of supported employment toolkit.



- Griffin, D. K., Rosenberg, H., Cheyney, W., & Greenberg, B. (1996). A comparison of self-esteem and job satisfaction of adults with mild mental retardation in sheltered workshops and supported employment. *Education and Training in Mental Retardation and Developmental Disabilities*, 31, 142–150.
- Hanley-Maxwell, C., Griffin, S., Szymanski, E. M., & Godley, S. H. (1990). Supported and time-limited transitional employment services. *Journal of Visual Impairment & Blindness*, 84, 160–166.
- Howartha, E., Mann, J., Zhou, H., Mcdermott, S., & Butkus, S. (2006). What predicts re-employment after job loss for individuals with mental retardation? *Journal of Vocational Rehabilitation*, 24, 183–189.
- Kaehne, A., & Beyer, S. (2009). Transition partnerships: The views of education professionals and staff in support services for young people with learning disabilities. *British Journal of Special Education*, 36, 112–119.
- Lai, M.-C., Lombardo, M. V., Ruigrok, A. N. V., Chakrabarti, B., Auyeung, B., Szatmari, P., Happé, F., & Baron-Cohen, S. (2017). Quantifying and exploring camouflaging in men and women with autism. *Autism: The International Journal of Research and Practice*, 21, 690–702.
- Learning Disability Observatory. (2016). People with learning disabilities in England 2015: Main report. <https://www.gov.uk/government/publications/people-with-learning-disabilities-in-england-2015>
- Mawhood, L., & Howlin, P. (1999). The outcome of a supported employment scheme for high-functioning adults with autism or Asperger syndrome. *Autism: The International Journal of Research and Practice*, 3, 229–254.
- NHS Digital. (2021). Measures form the adult social care outcomes framework.
- Nicholas, D. B., Attridge, M., Zwaigenbaum, L., & Clarke, M. (2015). Vocational support approaches in autism spectrum disorder: A synthesis review of the literature. *Autism: The International Journal of Research and Practice*, 19, 235–245.
- Office for National Statistics. (2022). *Outcomes for disabled people in the UK:2021. Outcomes for disabled people in the UK*. Office for National Statistics. [ons.gov.uk](https://ons.gov.uk)
- Ottomanelli, L. P., Goetz, L. L. M. D., Suris, A. P., Mcgeough, C. M. S., Sinnott, P. L. P., Toscano, R. M., Barnett, S. D. P., CIPHER, D. J. P., Lind, L. M. P., Dixon, T. M. P., Holmes, S. A. M. D., Kerrigan, A. J. P., & Thomas, F. P. M. D. (2012). Effectiveness of supported employment for veterans with spinal cord injuries: Results from a randomized multi-site study. *Archives of Physical Medicine and Rehabilitation*, 93, 740–747.
- Phelps, L. A., & Hanley-Maxwell, C. (1997). School-to-work transitions for youth with disabilities: A review of outcomes and practices. *Review of Educational Research*, 67, 197–226.
- Powell, A. (2021). *NEET: Young people not in Education, employment or training*. House of Commons Library.
- Ray, K., & Wilson, T. (2016). Addressing barriers to work for disabled people and those with long term health conditions in Brighton & Hove.
- Riddell, R. (2010). *Aspiration, identity and self-belief: Snapshots of social structure at work*. Trentham Books Ltd.
- Robertson, J., Beyer, S., Emerson, E., Baines, S., & Hatton, C. (2019). The association between employment and the health of people with intellectual disabilities: A systematic review.
- Rutkowski, S., Daston, M., Van Kuiken, D., & Riehle, E. (2006). Project Search: A demand-side model of high school transition. *Journal of Vocational Rehabilitation*, 25, 85–96.
- Shafer, M. S., Wehman, P., Kregel, J., & West, M. (1990). National supported employment initiative: A preliminary analysis. *American Journal of Mental Retardation*, 95, 316–327.
- Social Value Lab. (2013). Sroi evaluation of project Search: For north Lanarkshire council.
- Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving Postschool outcomes for students with disabilities. *Career Development and Transition for Exceptional Individuals*, 32, 160–181.
- Tobin, M. C., Drager, K. D. R., & Richardson, L. F. (2014). A systematic review of social participation for adults with autism spectrum disorders: Support, social functioning, and quality of life. *Research in Autism Spectrum Disorders*, 8, 214–229.
- United Nations. (2006). Convention on the rights of persons with disabilities.
- Wehman, P., & Kregel, J. (1985). A supported work approach to competitive employment of individuals with moderate and severe handicaps. *The Journal of the Association for Persons With Severe Handicaps*, 10, 3–11.
- Wehman, P., Kregel, J., Keyser-Marcus, L., Sherron-Targett, P., Campbell, L., West, M., & Cifu, D. X. (2003). Supported employment for persons with traumatic brain injury: A preliminary investigation of long-term follow-up costs and program efficiency. *Archives of Physical Medicine and Rehabilitation*, 84, 192–196.
- Wehman, P., Revell, W. G., & Brooke, V. (2003). Competitive employment: Has it become the “first choice” yet? *Journal of Disability Policy Studies*, 14, 163–173.
- Wehman, P., Schall, C., McDonough, J., Molinelli, A., Riehle, E., Ham, W., & Thiss, W. R. (2013). Project Search for youth with autism Spectrum disorders: Increasing competitive employment on transition from high school. *Journal of Positive Behavior Interventions*, 15, 144–155.
- Welsh Government. (2022a). *Stronger, fairer, greener Wales. A plan for employability and skills*. Welsh Government. <https://www.gov.wales/sites/default/files/publications/2022-05/stronger-fairer-greener-wales-plan-employability-and-skills0.pdf>
- Welsh Government. (2022b). *Stronger, fairer, greener Wales. Technical annex. A plan for employability and skills*. Welsh Government. <https://www.gov.wales/sites/default/files/publications/2022-05/technical-annex-stronger-fairer-greener-wales0.pdf>
- West, M., Revell, W. G., & Wehman, P. (1992). Achievements and challenges I: A five-year report on consumer and system outcomes from the supported employment initiative. *The Journal of the Association for Persons With Severe Handicaps*, 17, 227–235.
- White, J., & Weiner, J. S. (2004). Influence of least restrictive environment and community-based training on integrated employment outcomes for transitioning students with severe disabilities. *Journal of Vocational Rehabilitation*, 21, 149–156.

**How to cite this article:** Vigna, E., Beyer, S., & Meek, A.

(2023). A demographic and qualitative analysis of the determinants of success in a National Supported Employment project. *Journal of Applied Research in Intellectual Disabilities*, 1–9. <https://doi.org/10.1111/jar.13094>