

# Job equality and inclusion in Supported Employment: the experience of the Engage to Change Project

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# Abstract

## Background

Paid employment in the open labour market represents a challenge for people with an intellectual disability and/or autism. This paper analyses the quality of jobs offered by the Engage to Change project and their relationship to the “typicalness” of the employment offered.

## Method

Data on the quality of 384 paid jobs was collected including hours worked and wages earned and reported social integration at work. The typicalness of the employment experience was assessed after 3 months in employment for 141 young people, using the Index of Typicalness of Placement Questionnaire. The associations between participant demographic data and outcomes such as the extent of participant’s social relationship in the workplace, their wages and hours worked were explored. The role of typical job arrangements for people with intellectual disability and/or autism in delivering higher outcomes is also explored.

## Results

The Engage to Change project offered a wide range of job opportunities, in the open labour market, and paid more than the National Living Wage for the age group. There is no difference in the typicalness of employment experience if compared with interactions in the workplace, but there are some differences in the recruitment process for men and women.

## Conclusions

The employment experience can be typical or atypical in the way someone is recruited, trained and participates in the work environment. Job coaches play a central role in that the employment outcome is a typical employment experience. Greater typicalness in finding, getting, and learning a job, pay, and in workplace management arrangements leads to better employment outcomes. Implications for employment support and policy are discussed.

# Introduction

## Background for this research

Employment is a key element in anyone's life, and it has been shown to deliver significant outcomes for people with an intellectual disability, specific learning difficulty or autism, and combinations of these conditions. Increased income from people with an intellectual disability and/or autism when the employment is happening in the open labour market compared to other forms of employment and unemployment (Beyer and Beyer 2016). Being employed can also deliver greater independence and better physical and mental health, and improved well-being (Robertson et al. 2019). It can also increase social inclusion and friendships by connecting people socially (Chadsey and Beyer 2001), in a context that is different from the school or family one, with both work colleagues, customers and other networks, depending on the working environment. However, the employment rate for young people with an intellectual disability and/or autism remains extremely low in the UK. The latest data from NHS Digital shows that 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).

These low employment rates are due to several interacting factors that are specific to individuals, but can include cognitive, social, and organisational elements. Experiencing an intellectual disability and/or autism can affect the way a person learns, socialises, and participates in their community across their lifespan. People with intellectual disabilities, specific learning difficulties and autism, may experience difficulties in transitioning to adulthood because of their lack of skills, including literacy, numeracy, problems solving and independent living skills. They may have difficulties in learning tasks through the mainstream educational channels as they can often find it difficult to cope with new environments, and to transfer the knowledge of tasks to new contexts and situations. They can struggle with concentration and memorising information. New and unknown situations can be a source of stress and anxiety, significant enough to prevent them from applying for jobs, learning new tasks and maintaining any job they do find.

While there are a proportion of people with intellectual disabilities who also have autism, autism does raise several barriers to people working. These barriers include non-typical social skills that can make applying for jobs and the interviewing process more difficult, in addition to severe anxiety and difficulty with uncontrolled over-stimulation in workplaces.

Despite the barriers they face, people with intellectual disabilities and autistic people have much to offer in relation to employment, with individual abilities and strengths which can contribute to the labour market and the wider community if these are recognised and valued. Nevertheless, transition from school to adulthood for young people with intellectual disabilities and/or autism often does not translate into employment, as they might lack practical skills, confidence and support to face transition, even if transition remains a priority for national and local government in the UK (Government 2022). Despite the existence of this strategy, transition remains a time of uncertainty for both young people and carers, as transitions involve the whole family (Kaehne and Beyer 2011).

## Supported Employment

Supported Employment is a model created to support people with intellectual disabilities into jobs. Initially developed in the US in the 1980s (Wehman and Kregel 1985), it is now available in many countries. The success of this model lays in having several stages designed to understand the person, their abilities and support needs, and to identify the right job for them before placing someone into employment. Supported Employment consists of: participant engagement; vocational profiling; job finding; employer engagement; in work support and career progression (EUSE 2010). The model is delivered through a job coach, who is specifically trained to support individual needs, including one-to-one training of the person in the workplace, where the job is individually matched to the person. Research demonstrates that this model is more effective in getting people into employment than alternatives, because the job is learnt in the workplace, with one-to-one support to guide the learning. The model is effective for people with intellectual disabilities (Beyer and Beyer 2017), but is proven to be effective also with other groups of individuals, such as autistic people (Nicholas et al. 2015), sensory impaired people (Hanley-Maxwell et al. 1990) and people with mental health issues (Bond et al. 2012).

Transition of employment can be helped by the use of Supported Internships, a model to support for young people aged 16 to 24 with an intellectual disability (Rutkowski et al. 2006) or who are autistic (Wehman et al. 2013). The model includes vocational education and job coach support as an integrated method to support the employment skills development of young people. An educator, usually a college in the UK, delivers a vocational curriculum to a class of interns for 2 hours per day one in the morning and one in the afternoon. For the rest of the day the intern carries out real work within the host business supported by job coaches. Interns commit to 3 placements over a year, allowing for skills to grow and vocational preferences to develop. Project SEARCH is the most common model for delivering Supported Internships in the UK (DFN Project SEARCH 2023), but funding in England and Wales supports other delivery models (Department for Education 2022).

In a series of studies, Mank et al (1997) set out to capture the impact of many of these factors on the extent of social interaction of people with intellectual disabilities in ordinary workplaces, and to assess the impact of these factors on other outcomes such as wages, hours worked, and time employed. Mank et al. (1997) operationalised the concept of “typicalness” in the hiring and management of a person with intellectual disabilities, identifying these dimensions with several elements within each: Job Acquisition and Hiring; Compensation (pay and hours); Initial Orientation (training); Work Roles (similarity of work roles to others) and Social Aspects (broadly social interaction and engagement). They found that the more typical job arrangements were, the higher the level of worksite interaction and wage levels.

### **Social integration, social interactions, and typicalness of employment**

Social integration in the workplace has been defined as adherence to regular and ordinary patterns of minute to minute and day-to-day working life (Mank and Buckley 1989, p 320). Social interaction has been measured in several ways including use of direct observation (Chadsey-Rusch et al 1989; Beyer et al. 2010), using specific questionnaires (Shafer et al. 1989), narrative recording (Chadsey-Ruscsh 1990), use of scaling systems against set dimensions (Mank et al. 1998), and qualitative interviewing (Storey 1992). Reviews of social interaction research have highlighted the potential of Supported Employment and individual job placement to extend the social networks of people with intellectual disabilities, highlighted the important role that job coaches play in helping people to integrate, and the importance of promoting supervisors and work colleagues as in-work supporters of social integration at work (Chadsey and Beyer 2001). The importance of setting characteristics in promoting or inhibiting social integration have been identified by other researchers (Jenaro et al. 2002; Chadsey et al. 1997). These include: the number of people in the immediate team the person works within; the presence of other people with disabilities; the solitary or interactive content of work itself; the hours and schedule that disabled people work in relation to that of other staff; and the extent of inclusion of the person in the supervisory and other management systems of the company.

In an international study, Jenaro et al. (2002) used the Mank et al. (1997) typicalness dimensions and compared wage, integration and other outcomes for groups defined by direct job coach support and natural support (i.e., support by co-workers or supervisors) of workers with intellectual disabilities. They found that natural support was associated with better social integration. They also found that the more typical the recruitment, orientation and other aspects of workplace process, the greater social interaction and wages of the worker. In broad terms, these studies support the conclusion that typical workplace processes and forms of support generally deliver better work outcomes for people with intellectual disabilities.

In this study we are analysing the quality of jobs offered by the Engage to Change project, considering the job description, the hours worked, and the wages offered. An analysis of the levels of typicalness of jobs found by the Engage to Change project, along with their associated levels of social interaction, hours worked, and wage levels, is performed to establish if greater job outcomes come from greater job typicalness for this group of young people.

## Method

This study is based on data collected by job coaches from the Supported Employment agencies operating for the Engage to Change project. Data was collected with a real-time data collection system, supported by an App available on tablets. Data collection was uploaded to the evaluation team daily and stored in the University database.

Job coaches were trained on data collection and a detailed timetable for data collection was provided to the job coach and followed for the duration of the young person's engagement in the project. Data collected was used by the Supported Employment staff for their planning of actions and support and by the research team for the evaluation work. In the initial stages of referral, job coaches collected the following data on the young people entering the project: diagnosis relating to project eligibility; date of birth and age at referral; gender; previous work experience, and benefits status. Data was also collected describing the jobs found, including job title, job description, employer, hours worked, and wages paid. T-test analysis was used to see if there were differences in wages and hours worked for men and women and a non-parametric Kruskal-Wallis' test was used to determine differences in outcomes for five different and mutually exclusive diagnostics categories of participants.

When young people entered employment and were settled into their new roles, job coaches completed an evaluation to measure the level of integration in the workplace and level of "typicalness" of employment, compared with other employees from the same work environment. Young people were observed during the job coaching activity by the job coach who acted as trainer and observer until young people were settled into their new jobs and after a relatively long term relationship with their job coaches who acted as observer (Lofland and Lofland 1984; Mank and Buckley 1989). Job coaches had an understanding of the young person and the work environment through their activity of job coaching, so they were asked to evaluate the young person in relation to their work environment. Twenty-four Likert-scale questions were arranged in clusters to evaluate: job acquisition and hiring (e.g. recruiting the same as other employees [e.g. news ads, temp. agency, job centre]; job features (e.g. hourly pay rate, others in the company doing similar work); human resource management processes (e.g. orientation and induction, supervision, disciplinary processes); and social aspects (e.g. participation in non-work social activities with co-workers, behaves within accepted social norms and culture at work) (Mank et al. 1997). Likert response categories for all of these ranged from 1 (Not typical) through to 4 (Somewhat typical) to 7 (Quite typical).

The project was able to collect Typicalness data for 141 young people from the total of 318 employed. A Principal Component Analysis (PCA) was carried out considering all the individual items of the typicalness assessment for 141 young people employed in the open market, when they were settled into employment or after 3 months from the contract date. The PCA helps us to explore the underlying Components in the typicalness assessment to understand how typical a job is compared to the specific workplace culture. The PCA follows Mank et al.'s method, with the aim to derive independent Components using a Varimax rotation, by maximising the sum of the variance of the squared Component loadings. To measure the sampling adequacy, we used the Kaiser-Meyer-Olkin and Bartlett's tests to measure the significance of the model. We included all Components with an Eigenvalue greater than 1. On the model considering all items, only factors clustering together on a Component were considered, for a total of 20 variables. Internal reliability of the Principal Component was checked using the Cronbach's alpha and the Principal Component was excluded as not reliable if the value was below 0.6. The degree of personal integration was measured within the index of typicalness after 3 months in employment, whatever was soonest after the job started. The purpose of this study is to investigate the employment elements for young people supported by the Engage to Change project such as quality of jobs, rate of pay, hours worked compared to the general population in Wales, and to investigate



# Results

## Employment opportunities description and quality of jobs

The Engage to Change project supported 1070 young people with a job coach support model, a further 233 took part in a supported internship, resulting in 420 paid jobs. The independent evaluation team has data available for 1186 young people referred to the project and 384 paid jobs, resulting in 318 young people being employed through the Engage to Change Project. Other employment opportunities were offered such as short, unpaid placements lasting one day to a week; 457 unpaid employment placements were delivered, for a total of 347 young people engaging in this experience (Figure 1).

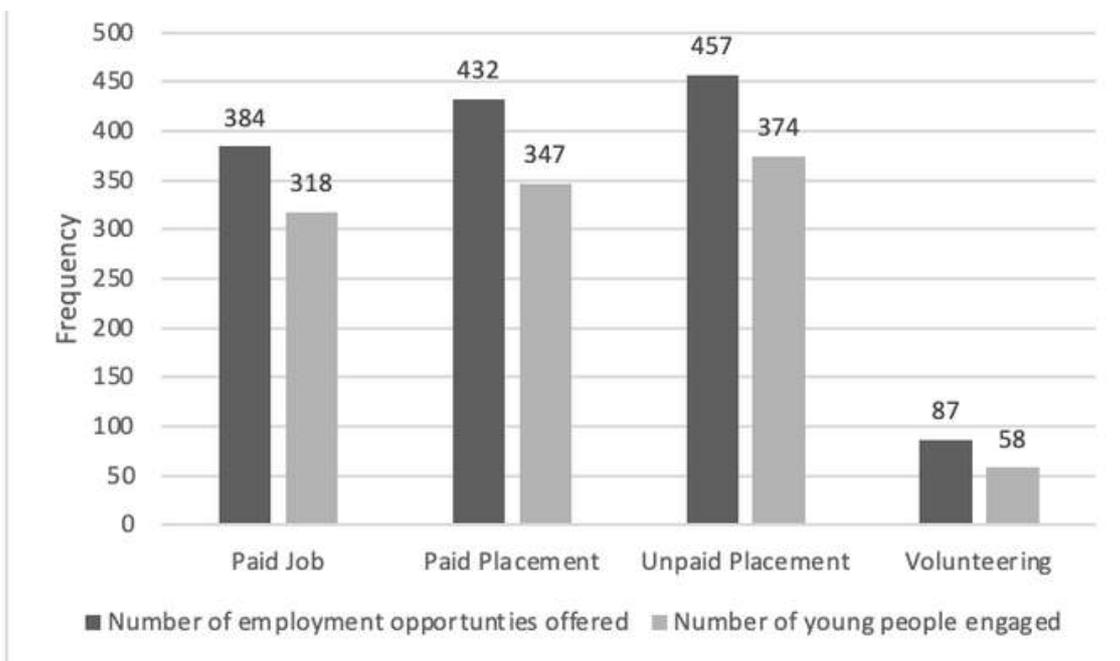


Figure 1: Employment opportunities developed by Engage to Change.

The project also offered longer employment opportunities with ordinary employers, with pay subsidised up to 100% of salary by the Engage to Change project, lasting up to six months. 432 paid placements were offered. A total of 347 young people were engaged in at least one placement; a small number of young people (n=50) experienced two or more paid placements, generally shorter and with different employers. The average hours worked in a paid placement were 12 and the average hourly pay rate £7.40, which is close to the average National Living Wage for the age range of young people involved for the relevant years.

## Paid employment job characteristics

Young people in the project achieved a wide range of job types. The most popular type of occupations were sales and retail roles (15%); administrative roles (12%); catering and hospitality roles (11%) and cleaning processing (11%).

There were several assistant roles including: General Assistant (3.2%), Domestic Assistant (2.7%), Farm Assistant (2.3%) and Recycling Operative (2.3%). There is a large proportion of jobs that could not be included in the previous classification (48.9%), which included individual examples of occupations with potentially higher skill requirements such as Care Assistant, Maintenance Assistant, Pharmacy Assistant and Technician.

## Hourly and pay rate

Young people worked an average 17 hours per week (range 2 to 45 hours). Figure 2 shows that a majority of 55% of young people worked over 16 hours. The Department of Work and Pensions use working under 16 hours per week as the boundary for claiming some welfare benefits, therefore this threshold is still considered important. Indeed, one of the eligibility criteria for the “new style” Jobseeker’s Allowance is working less than 16 hours a week, while there is no criteria for application to receive Universal Credit (DWP 2022).

In our study, 45% of young people are working less than 16 hours a week, therefore some young people were able to retain some form of legacy benefits if in receipt of any. The Engage to Change Supported Employment agencies involved in the project completed a better-off in work calculation for each young person before starting employment, considering the benefits they receive, the hours they were expected to work and the pay rate. This was part of the person centre approach to understand if the job opportunity was able to guarantee a better economic outcome for the individual in employment.

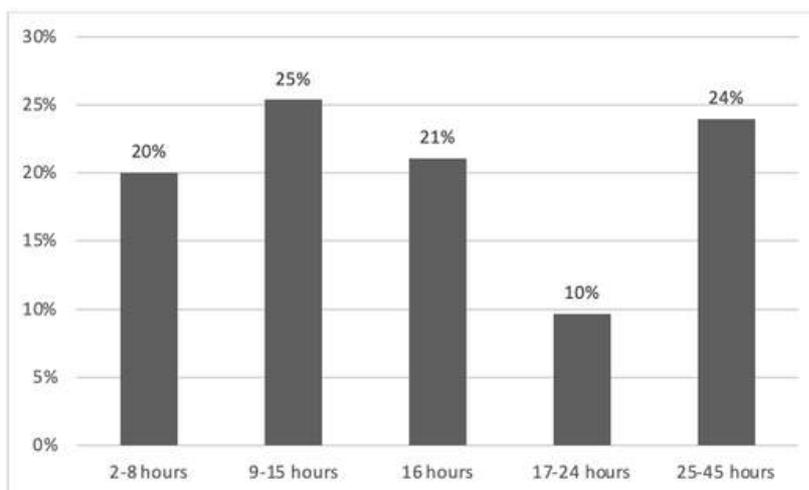


Figure 2: Hours of paid employment worked per week.

When looking at hourly pay rate, most young people earned more than the expected National Minimum Wage, or the Living Wage. Table 1 shows the number of jobs achieved in every tax year up until April 2022, the average hours worked, the hourly rate of pay and finally the average National Living Wage based on the age for each participant reaching employment and the tax year of reference.

Tax year	Jobs achieved	Average hours worked	Hourly rate of pay (£)	National Living Wage (based on the average per age group)
2016/2017	4	15	£7.26	£5.64
2017/2018	35	12	£9.97	£6.71
2018/2019	78	15	£7.24	£6.61
2019/2020	50	16	£7.46	£6.55
2020/2021	40	22	£8.29	£7.16
2021/2022	37	22	£7.86	£6.72
2022/2023	23	20	£7.70	£7.22
<b>All years</b>	<b>267</b>	<b>17</b>	<b>£7.92</b>	<b>£6.71</b>

Table 1: Hours, wages, and National Living Wage based on age groups.

When considering the monthly wages reported (Figure 3), the modal gross income of the employed young people is between £500-£599 a month (19%). There is a wide spread of income, but with the distribution skewed to the lower incomes, with 66% of young people earning a modal or lower income. Some are earning a significant monthly wage, earning over £1300 per month.

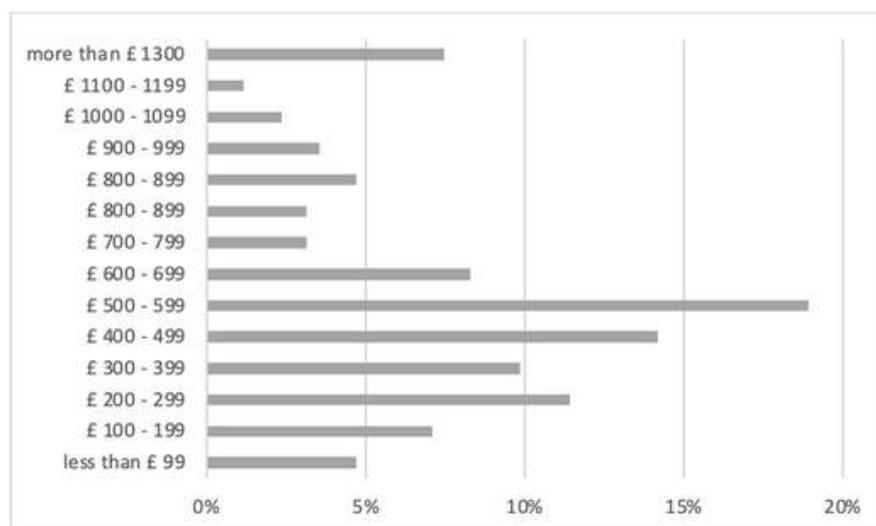


Figure 3: Monthly wages of those employed.

There is no significant difference in the monthly wage earned by women and men (t test=0.313, sign. 0.148), nor between young people experiencing intellectual disabilities, autism or specific learning disabilities diagnoses (Kruskal Wallis test 2.322, df=4, sign. 0.677).

## Typicalness of Supported Employment Jobs

We replicated the methodology used by Mank et al. (1997) using data from the 24 question Typicalness questionnaire to examine the data's Principal Components Analysis (PCA) structure (Table 2). A four-Component model provided the best solution for the data, and it explained 80% of the data variance. However, one of these Components had poor internal consistency (a Cronbach's alpha < 0.65) and was excluded from our analysis. The three-Component model explained 69% of the variance. The excluded Component included "Others in company do similar work" and "Breaks/lunch location and schedule". Five questions were excluded from the analysis as they did not cluster together to form a Component. The items were "Hourly pay rate"; "Transport to and from work"; "Amount of interaction with co-workers required by job tasks"; "Performance evaluation" and "Opportunities for promotion".

We used Component loading scores for each question in the Typicalness questionnaire to identify those questions most associated with each Component. Questions were included in the Component descriptions if they had a loading score of 0.5 or greater. The Components that presented a good Cronbach's coefficient alpha were labelled "Job Acquisition", "Initial training and workplace behaviour" and "Participation" based on their contributing questions (Table 2). These Components were different to those found by Mank but had common elements.

The Job Acquisition was identical to the one found by Mank, which was predictable due to the nature of the questions strictly linked to the recruitment phase. In our study, several Components cluster together in the "Initial training and workplace behaviour Components" including elements such as orientation, initial training, supervision and company expectation, policy and work schedule that in Mank's study clustered in two different Components, Orientation and Compensation. This difference can be explained as all the Components encompass company policy, procedures and rules; therefore, it is logical that they cluster together. The Participation Component, which was not explored by Mank, includes work related and non-work-related social activity, access to company benefits, opportunity for job variety and support in time of crises. These elements define participation at both social and organisational level.

Principal Component Analysis	Component loading		Cronbach's coefficient alpha
Job Acquisition	Job Application	0.932	0.96
	Interviewing	0.922	
	Recruiting	0.808	
Initial training and workplace behaviour	Disciplinary process	0.912	0.86
	Supervision	0.853	
	Layoff / termination process	0.851	
	Behaves within accepted social norms and culture at work	0.850	
	Company expectation on work rules (time off, quality & pace standards, behaviour)	0.833	
	Initial job training	0.783	
	Orientation and induction	0.777	
	Work schedule & hours per week	0.747	
Participation	Participation in at-work social activities	0.92	0.89
	Participation in non-work social activities with co-workers	0.86	
	Company benefits	0.85	
	Person's role in decision-making choosing employer/job	0.72	
	Opportunities for job variety	0.63	
	Support in time of crisis (personal assistance, counselling, retraining, flex schedules)	0.61	
Not significant	Others in company do similar work	0.861	0.58
	Breaks/lunch location and schedule	0.587	
<b>KMO=0.696, Bartlett's test (Chi-square = 716.648 df=190 sign=0.000)</b>			

Table 2: Factor analysis of paid jobs found by Engage to Change.

We explored the relationship between each Component, job outcomes and people's characteristics.

The average score for each Component was calculated based on the 1-7 scale ("1" being atypical and "7" being quite typical).

- Job Acquisition: Mean = 3.60 (Standard Deviation = 2.17)
- Initial Training and workplace behaviour: Mean = 6.33 (Standard Deviation = 0.98)
- Participation: Mean = 5.10 (Standard Deviation = 1.61)

The Job Acquisition, Initial Training and Workplace Behaviour and Participation Components were tested with the Shapiro-Wilk test to check if data followed a normal distribution. This was done to determine what was the appropriate statistical test to use for comparisons; no Components followed a normal distribution.

We calculated the mean score for each of the three components, using the responses to the relevant questions defining the Component, for each employed young person. We then looked at the significance of any differences between these scores for the following variables:

- gender, using the Mann-Whitney test non-parametric test.
- diagnostic category, using the Kruskal-Wallis non-parametric test.
- social relationships in the workplace, using the Kruskal-Wallis non-parametric test.
- hours worked, using the Mann-Whitney non-parametric test.
- hourly wage rate using the Mann-Whitney non-parametric test.

There is a statistically significant difference when considering the “Job Acquisition” Component between men and women, where women generally experience a less typical recruitment experience than men (Mann-Whitney = 1132,  $p=0.023$ ). There were no significant differences between genders for other Components.

When considering diagnosis, there are no significant differences with the typicalness of Job Acquisition scores (Kruskal-Wallis Test = 2.954 Sig. =0.566), or with the typicalness of Initial Training and Workplace Behaviour scores (Kruskal-Wallis Test = 1.971 Sig.=0.741) or with the typicalness of Participation scores (Kruskal-Wallis Test = 2.949 Sig. 0.566).

When analysing typicalness in relation to the hours worked per week, young people working 16 hours or more scored higher in Job Acquisition typicalness scores (Mann-Whitney U test  $Z=-1.975$  Sign 0.048). Instead, the typicalness score was similar for both groups when looking at Initial Training and Workplace Behaviour (Mann-Whitney U test  $Z = -1.237$  Sign.0.216) and Participation (Mann-Whitney U test  $Z = -0.443$  Sign. 0.657) (Figure 4).

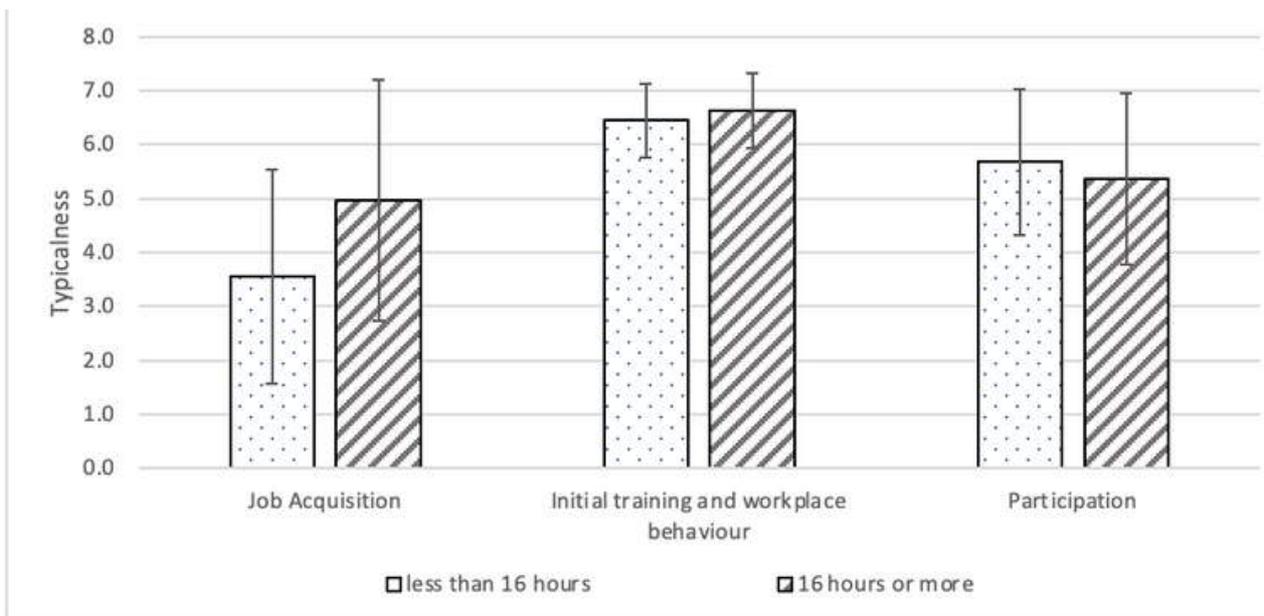


Figure 4: Hours worked per week and typicalness mean component scores.

We also looked at the wage earned per hour and related to typicalness Components (Figure 5); the reference point for our comparison group young people earning more or less than £.7.50, which is the average wage across the period Engage to Change was finding jobs, accounting for the yearly increase in age related National Minimum Wage and the age range of young people. There are no differences in the Job Acquisition Component (Mann-Whitney test  $Z = -0.775$ , Sign. 0.438) and in the Initial Training and Workplace Behaviour Component when comparing the wages earned (Mann-Whitney  $Z = -0.16$  Sign. = 0.987). Young people earning less than £.7.50 per hour scored lower in the Participation Component; the difference is statistically significant (Mann-Whitney test  $Z = -2.018$ , Sign. 0.044).

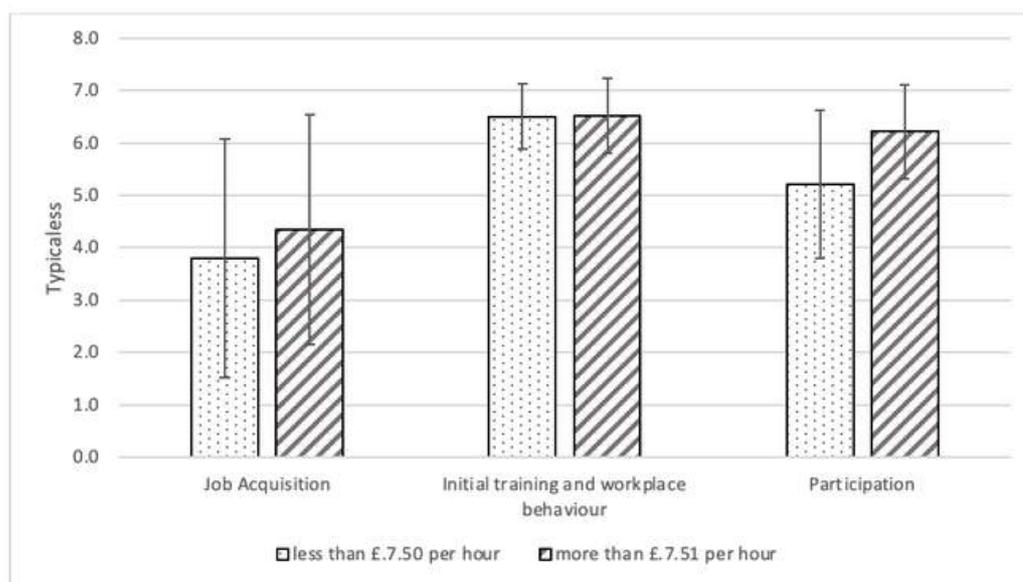


Figure 5: Typicalness mean component scores and wage per hour.

## Interaction

Table 3 reports data on social inclusion for women and men, based on 134 people where the typicalness and integration questionnaires were fully completed. Nearly half of the total sample engaged in “frequent and ongoing interactions with others at work”, while 18% of young people interact “substantially with others about the work tasks and work duties”. Almost a third of the sample interacted with others in work, but interactions are brief and are about the job. Only 3% of the sample “rarely if ever interacts with others at work”. The way young people interact according to their gender is statistically significant ( $\chi^2 = 21.766$   $p < 0.001$ ), with a larger proportion of women engaging in frequent and ongoing interactions at work.

Interactions	Frequent and ongoing interactions at work		Substantial interaction about work tasks & duties		Typically exchanges greetings and has very brief social interactions at the job but little interaction beyond this		Rarely, if ever, interacts at work		TOTAL
	n	Row %	n	Row %	n	Row %	n	Row %	
Men	35	37%	22	23%	35	37%	3	3%	95
Women	29	74%	2	5%	7	18%	1	3%	39
<b>TOTAL</b>	<b>64</b>	<b>48%</b>	<b>24</b>	<b>18%</b>	<b>42</b>	<b>31%</b>	<b>4</b>	<b>3%</b>	<b>134</b>

Table 3: gender and interactions.

Women proportionally engaged in more frequent interactions than men, and 37% of men had brief social interactions with others related to the job. A very small proportion of both women and men “rarely if ever” interact with others at work (Table 3).

Table 4 shows that young people with a diagnosis of autism and autism with an additional diagnosis of intellectual disability or specific learning difficulties experience brief social interactions more frequently if compared with others with a different diagnosis of intellectual disability or learning difficulty (Table 4). People with an intellectual disability or a specific learning difficulty engaged more frequently in ongoing interaction at work. There is a statistically significant difference in the way young people interact in work if they present an autism diagnosis or not (Pearson Chi-Square = 9.654 Sign < 0.05)

Interactions and Diagnosis		Engages in frequent and ongoing interactions at work		Interacts substantially about work tasks and duties		Typically exchanges greetings and has very brief social interactions at the job but little interaction beyond this		Rarely, if ever interacts at work		Total
		n	Row %	n	Row %	n	Row %	n	Row %	
	Autism and autism with co-occurring intellectual disability or learning difficulty	23	38%	11	18%	26	43%	1	2%	61
	Intellectual Disability and Specific Learning Difficulty	35	56%	12	19%	12	19%	3	5%	62
<b>Total</b>		<b>58</b>	<b>47%</b>	<b>23</b>	<b>19%</b>	<b>38</b>	<b>31%</b>	<b>4</b>	<b>3%</b>	<b>123</b>

Table 4: Interactions and diagnosis

Figure 4 shows the association between people’s level of social integration at work, expressed on a four-point scale, and their average score calculated on each of our three Components. We excluded the rarely interact category because only 4 people were classified under this category. There is no significant difference in the interactions levels when looking at the Initial Training and Workplace Behaviour (Kruskal Wallis Test 2.678, Sign. 0.444) and at the company Participation Component (Kruskal Wallis Test 7.365, Sign. 0.061). There is no significant difference for Job Acquisition (Kruskal Wallis Test 6.504, Sign. 0.089).

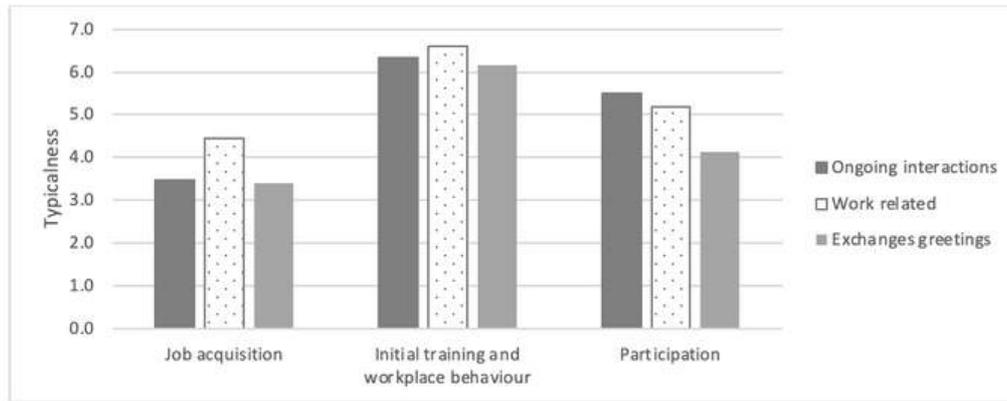


Figure 6: Worksite interactions and typicalness mean Component score.

Table 2: Factor analysis of paid jobs found by Engage to Change.

Mank (1997) identified a positive relation between interaction and hourly and monthly wage, showing that individual who interacted more had higher pay (Mank et al. 1997). This is not the case for this study as there is no difference in people’s hourly wage (Kruskal Wallis 0.867 Sign. 0.648) or monthly wage (Kruskal Wallis 0.135 Sign. 0.935) compared with the levels of interaction.



## Discussion

Research has demonstrated that individuals with intellectual disabilities do have an interest in employment with a significant number of people wanting to work (Hennessey and Goreczny 2022). The Engage to Change project offered a wide variety of jobs to young people aged 16-25, from a large variety of sectors and businesses. This demonstrates that young people with an intellectual disability, specific learning difficulty or autism are not confined to working in the expected sector such as cleaning, hospitality or portering, but can be placed in a variety of sectors with job coach support.

According to the independent evaluation, the employment rate for the project is 27%, higher than for young people with intellectual disability 5.1%, and for autistic people, 22% (NHS Digital 2021; Office for National Statistics 2022) based on the population aged 16-65. When comparing the employment rate for the United Kingdom for young people aged 16-24, men and women have a similar employment rate of 55%, which lowered as a result of the pandemic to 48.5% for men and 51.3% for women (Census 2021). The minimum was reached after the Covid-19 Job Retention Scheme was lifted, leaving the higher unemployment rate for 2020 to the 16-24 age band to 14% for men and 10% for women (Powell and Francis-Devine 2022).

Some young people from the project had more than one job, this is because they might have moved from one job to another with the support from the Engage to Change project to accommodate a career change or progression. For some young people, the second job was a return to employment after they were made redundant during the Covid-19 pandemic. The effect of the pandemic on young people's participation in the labour market is still to be assessed. When looking at the main measure of the number of young people in education, employment or training, there has been an increase among people aged 19 to 24 (Census 2021). We are aware that the effect of the 2008 recession impacted on young people aged 19 to 24 disproportionately compared to other age groups. However, since this period access to the labour market for this age group has increased steadily (WG 2021). Based on these findings we might expect a similar trend for the post-pandemic recovery and a return to pre-pandemic employment levels for young people with an intellectual disability and/or autism.

This study focuses on the characteristics of paid jobs, with a regular contract and in the open market. Young people worked 17 hours on average, earning on average more than the National Living Wage, considering the age range. If we consider the monthly wage, two third earned the modal wage of £500-599 or lower, with no difference of earning when considering gender and diagnosis. This is a positive outcome as it means that the choice of hours was not linked to demographic or diagnostic elements, but it was likely to be person-centred. However, the number of hours worked has been a recurring source of concern within the project's Patient and Public Involvement (PPI) group, in particular, why a number of young people were working less than 16 hours. The choice of working hours was linked with individual needs, as some young people struggle to work a full time job, employer needs (some employers could only offer a limited number of hours) and the better off calculation system to understand if the individual was better off in employment. It has to be noted that in some cases the number of hours worked is a conservative figure, as several young people worked variable hours, or began their employment journey with a lower number of hours, that increased later on to satisfy the employers' needs. Future studies should take into consideration the reason why young people work a certain amount of hours to better understand if this is reflecting a personal choice, or is dictated by businesses' needs or financially driven.

The element of typicalness of the employment opportunities examined in this study, highlight a difference between men and women in the process of Job Acquisition that could have involved the job application process, interviewing and/or recruiting, with women generally experiencing a less typical recruitment process than men. This can be seen as a positive element as some employers might have adopted some low cost reasonable adjustment (Beyer and Beyer 2017) during the recruitment process to support the candidates with the Job Acquisition process, such as easy read application forms, provision of personal support during the interview, or working interview options. Further studies should explore the recruitment process and the use of reasonable adjustments and accessible resources to increase accessibility for anyone who needs support at this stage.

Young people working for more than 16 hours a week scored higher in the Job Acquisition Component. This means that young people working for more hours, usually had a typical recruitment process, compared to the ones working for fewer hours, who might have accessed more reasonable accommodation during the interview process. This might be because people going for 16 hours and over needed less reasonable adjustments during the recruitment process; further studies, considering a larger sample, should be considered to check if this is the case.

When looking at the wages earned per hour, people earning less than £ 7.50 scored lower in participation than those who earned more than £ 7.50. Young people earning less per hour experienced less typical social and organisational participation. A follow-up would be useful to understand what is happening in long-term employment on a longitudinal basis.

Half of the young people engaged in frequent and ongoing interactions, while others interacted substantially to complete their job well. Women generally interacted more than men in the workplace. Autistic young people, with or without co-occurring intellectual disability or learning difficulty, engaged in less meaningful interactions, and more interactions were limited to greetings and short conversations when compared to young people with an intellectual disability or specific learning difficulties. This might be expected, given the difficulties some autistic people can have with social communication. However, it highlights the need for effective strategies to help autistic people manage work-related social interactions that are central to work-based communications.

Mank (Mank et al. 1997) highlighted a significant relationship between the typicalness of employment features and the degree of worksite interaction and wage levels. This finding is not confirmed in this study, and this is due to several reasons. Firstly, the sample for this study is much smaller than for the Mank study. Secondly, this study only includes young people aged 16-25 therefore the overall results are more restricted. This is also linked to wages, with this younger group generally earning the National Minimum Wage or the National Living Wage, with little variation in the total wage. Thirdly, the hours worked are skewed to the mid-lower end, meaning there is little variation compared to the Mank study.



## Conclusions

The Engage to Change project provided young people with a wide variety of job opportunities, with a fair and above the national minimum wage pay rate. The amount of working hours varies on an individual basis, and further studies are needed to investigate the reasons why young people commonly work less than 16 hours a week. Elements of typicalness have been considered, with no differences related to the level of interaction in the workplace being found. As the assessment was carried out after 3 months of employment, a follow-up would be beneficial to understand changes in the typicalness Components and level of interactions in the longer-term.

Young people generally received a typical employment experience, where initial training and workplace behaviour is similar to their fellow employees. This was possible through job coaching support, as the job coach trained young people on the tasks, but also on other aspects of the work environment such as social elements, expected behaviour that is necessary to break down barriers. Having a job coach is not typical for most individuals, but it is the key element to guarantee that young people can access typical employment experience.

In this study, differences were generally found in the Job Acquisition procedures, that can be linked primarily to differences in aspects of the recruitment process. We are not aware of the details of the reasonable adjustments that have been adopted by the employer, but we can list some. Firstly, employers might have adopted easy to read application forms, to make them accessible to everyone. Secondly, employers might have provided the possibility of an in-work trial instead of a proper job interview. Thirdly, if an interview took place, the interview could have been supported by a job coach.

The company Participation Component included several aspects such as social participation, decision making, access to company benefits and opportunities for job variety. The amount and quality of input to promote social participation is unknown, but job coaches provided support to achieve this goal. Some young people experienced more job variety than others, but further investigations are needed regarding how a job role develops over time and if greater job variety is achieved.

In conclusion, the approach to employment can be typical or atypical in the way someone is recruited, trained and the way they participate in the company. Job coaches have a role in adapting their practice to make sure that, despite the procedures being “atypical” for the workplace, the outcome is “a typical employment experience” and that the employee’s work is living up to the employer’s expectations and standards.

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