A systematic review of the literature on the benefits for employers of employing people with learning disabilities

Dr. Stephen Beyer & Dr. Annie Beyer

Acknowledgments

Terms

Research discussed in this report covers a long time span and a number of countries, which mean that descriptions of people involved in research can be confusing. We refer to people with a learning disability throughout as the focus of our report. By this we are using the UK Department of Health definition of a person experiencing *"a significant reduced ability to understand new or complex information, to learn new skills (impaired intelligence), with a reduced ability to cope independently (impaired social functioning), which started before adulthood."*

In other research, the same people can be referred to as having a learning difficulty, an intellectual disability, a developmental disability, a cognitive disability, a mental impairment and, in older reports, as having mental retardation. To simplify terminology, wherever a research study is reporting on people who are likely to meet the definition above, we have referred to the people concerned as having a "learning disability" rather than the term used in the paper. Some terms incorporate other groups of people, as in the case of developmental disabilities in the US, and where this is the case we have used their term but mentioned its relationship to people with a learning disability in the text.

The authors

Dr. Stephen Beyer is the Honorary Lead for Learning Disability Employment at the National Centre for Mental Health (NCMH) at Cardiff University. Dr. Annie Beyer is a Chartered Psychologist specialising in organisational change.

Introduction

In the UK, the numbers of people with a learning disability who have a job are very low. In 2016 in England around 6%[1] of people "known to social services" are in paid employment, compared to 48% for people with a disability and 75% for the general population in the UK. The reason for this very low figure comes from a combination of the personal barriers people with a learning disability face in working, the lack of appropriate support to help them work, and a lack of awareness and aspiration among all stakeholders that they can be valuable workers. The work barriers people face themselves can include: slower than average learning of new tasks; impaired memory; impaired communication impacting on receiving instruction and giving information; impaired motor function performance; and difficulty in changing learned routines (Beyer and Robinson, 2009; Lysaght et al., 2012). It is of course important to recognise that, like all others, people with a learning disability are all individuals and have unique combinations of strengths and weaknesses in relation to employment. Some will need a lot of support to find, get, learn and keep a job. Others will need only a little help. Certainly, many more people who want to work could if they received the appropriate support. The tasks that they will be good at are likely to vary between individuals and would need to be carefully matched to the individual to assure success. In addition, the motivations for, and what people with a learning disability take from, being employed will also differ. These may include: pay; being engaged and not bored; social contact and friendship; being valued; making a contribution; and learning. As a result, all are likely to need an individually tailored approach to job finding and support if they are to be successful.

The very low rates of employment that we see among people with a learning disability suggests that we have yet to deliver enough support of the appropriate type to make a difference to national figures. We do, however, know a lot about what that appropriate model of support looks like and have research evidence that it does work. The short hand for this is the "supported employment" model. The British Association of Supported Employment (BASE, 2017) explains the supported employment model a personalised model for supporting people with significant disabilities to secure and retain paid employment. It uses a partnership strategy to enable people with disabilities to achieve sustainable long-term employment and businesses to employ valuable workers. The European Union of Supported Employment (EUSE, 2010) provide a 5-stage model for delivery: 1. Engagement; 2. Vocational profiling; 3. Job finding; 4. Employer engagement; and 5. On/off job support (EUSE, 2010). The job coach role is important to supported employment being an individualised process, able to respond to the needs of a wide range of people (Department of Health and Valuing People Now, 2011) and there is now a National Occupational Standard for Job Coaching in the UK.[2] Also key to supported employment's success is having an emphasis on employers as an equal consumer of its services alongside the people with a learning disability they employ.

Supported employment has been around for a long time. It was developed in the US in the 1980's, legislated for in 1984 in the US and widely implemented and researched throughout the 1990s and 2000s, with evidence of positive outcomes (Beyer and Robinson, 2009). It was designed for people with a learning disability and has been very successful in delivering jobs of good quality to them. The model has been successfully extended over time to many other groups of people with disabilities, especially people with mental health issues, where it has been called Individual Placement with Support (Rinaldi et al., 2007).

1 http://www.content.digital.nhs.uk/catalogue/PUB21934
2 http://base-uk.org/knowledge/national-occupational-standards

The relative advantages of using a supported employment model for supporting people with a learning disability (and other disabilities) into paid employment have been evaluated quite extensively through cost-benefit studies. These fall into two broad categories; cost-efficiency and cost-effectiveness studies. Cost-efficiency studies seek to establish whether the benefits of a particular programme exceed its financial costs. Various perspectives can be taken such as worker, taxpayer, employer or society as a whole, each having different elements to cost (e.g. costs and benefits for a worker are different from those needing to be counted for employers). Cost-effectiveness studies seek to compare the outcomes of more than one programme, to establish which can achieve the same results for the lowest cost. Here difficulties arise from whether different programmes deliver similar outcomes when costs are being compared.

Cimera (2000) reviewed cost-efficiency of supported employment programmes and identified 21 cost studies published since 1991, all relating primarily to people with a learning disability. He concluded that at the individual level people were generally financially better off by a significant margin. Cimera (2010), in US study of data from 2002-2005 involving 104,213 people with a learning disability he has demonstrated that supported employment is cost-beneficial for people themselves, yielding them on average a gain of $4.20 for every 1$ lost in welfare benefits through becoming employed, and also for taxpayers with a $1.21 return for every $1 spent on supported employment. Beyer (2008) found evidence that supported employment can be cost-efficient in the UK, yielding a saving of £1.21 in relation to costs. Seebohm and Beyer (2003) found supported employment to be cost-effective for people with a learning disability in the UK context. In a study of supported employment compared to day occupation models and social enterprises for people with a learning disability in the UK, they found that outcomes for individuals were better for supported employment than for day occupation or social enterprises. However, there appears to be great variability in costs and outcomes across the supported employment field in England. Greig et al. (2014) reported that *"Most significantly we can begin to indicate for services that follow evidence based models of support, the price range for a cost per job outcome, when defined in specific ways (£1600-£4000), a reasonable job outcome rate (30%-50%) and an approach which concentrates equally on job retention as on gaining new jobs. These costs and figures are significantly different than the current national averages - in that they indicate a substantial potential for achieving more and better outcomes from current levels of investment than is presently being achieved."*(p94)

These reviews are of studies which have focused on costs and benefits to individuals show that there can be financial benefits to taxpayers and society through offering job coach supported employment. However, there has been very little research which has explored the costs and benefits of supported employment from the perspective of employers. Cimera (2006) noted that:

"Although this is certainly a central issue critical to the success of supported employees, and supported employment programs in general, very little is known about the actual monetary benefits and costs associated with hiring supported employees." (p137)

While there is a lot of evidence about the costs and wider benefits of employing disabled people, much of it is qualitative and does not often provide concrete monetary estimates. More theoretical considerations of the gains to employers of employing disabled people do identify a wide range of possible benefits (Needels and Scmitz, 2006). These include:

- access to a larger pool of potential recruits for businesses that are experiencing recruitment difficulties and with a greater likelihood of getting the right person for the job

- disabled people remaining in post longer, have lower absenteeism and good punctuality records and that retaining employees saves on recruitment and training costs
- improved employer loyalty and commitment
- people with a disability making reliable workers and saving employers costs from worker's compensation or other insurance costs
- improving access to disabled customers
- improving staff relations and personnel practices, possibly linked to Increased overall company productivity
- making the business more representative of the community, and fostering the public image of a fair and inclusive employer

The adoption of anti-discrimination legislation in many countries means that employers are required to make "reasonable adjustments" ("accommodations" in some countries) for people with a disability to help them get a job and to perform effectively. One of the main concerns of employers is that employing a disabled person may require them to make costly changes to the work that people do, and to the workplace. These may include:

- provision of personal support on the job
- provision of equipment for a disabled person
- modification of the workplace
- change of location of job
- redesign of work duties
- reallocation of a worker to another job (in the case of retention after becoming disabled)
- offering more flexible working patterns or working hours
- allowing special leave or additional time off work

It is clearly important to assess whether there are likely to be abnormal costs of adjustments involved in employing people with a learning disability.

Employers are often regarded as the primary barrier to people with a learning disability gaining employment (Forest, 2015) and that concerns over lower performance and possible additional costs are at the heart of their reticence to employ people with a learning disability. The research on cost-benefit and the success of supported employment in getting people with a learning disability into paid employment suggests that the situation is in reality more complex (Beyer and Beyer, 2017). This report reviews the literature on the business case for employers of employing people with a learning disability. The results are presented broadly in terms of the following headings: economic benefits; productivity and workforce cohesion benefits; benefits from customer reaction; and the absence of perceived costs that may impact on a hiring decision.

Methodology

A systematic review of published scientific literature and the 'grey literature' was conducted, by systematically searching 5 relevant databases and 1 generic internet search engine (Web of Knowledge, Medline, PsycINFO, Social Care Online, EBSCO and Google Scholar). Four key search areas were identified based on the brief of the review; 1) 'subject', 2) 'intervention', 3) employer', and 4) 'employer outcome'. A 7-step protocol was then followed in order systematically review the relevant literature. STEP 1 - Each of the 4 key search areas consisted of a combination of search terms that were inputted into each of the 6 databases in the following combination:

1. intel* dis* or learning diff* or mental retard* or developmental dis* or autism or autistic spectrum or Asperger* or handicap* or disab*

AND

2. employ* OR work OR voc* rehab* OR supported emp* OR customi$ed employ* OR open employ*

AND

3. employer* OR company* OR organi*ation OR social return on investment OR SRI

AND

4. employer satisfaction OR productivity OR illness OR sickness OR absence OR cost OR cost benefit OR cost effectiveness OR cost efficiency OR cost eff*

Only literature from 1980 to current was selected. After the initial searches a total of 2,727 titles were identified.

STEP 2 - Each title was then reviewed and kept if at least two of the four search areas appeared. 2063 titles were discarded with 664 relevant titles remaining.

STEP 3 - The abstracts of each title were then reviewed for relevance using the same selection method. 405 titles were discarded with 259 relevant titles remaining.

STEP 4 - The remaining titles were then cross referenced and any duplicates removed with 183 relevant titles remaining.

STEP 5 - The full texts were obtained and read by both reviewers in full, with validity and relevance assessed and accepted by agreement. This left 138 titles remaining.

STEP 6 - The bibliographies and reference sections for each of the remaining titles were reviewed and refined using the same steps outlined above, with 2570 additional references being reduced to 69 relevant titles. The 138 titles from the main systematic search were added to the 69 titles from the systematic search of the additional references, leaving 202 relevant titles remaining.

STEP 7 - 14 full text articles could not be found and were therefore removed from the final number of titles. Therefore, a total of 193 titles have been systematically selected to be used in this review.

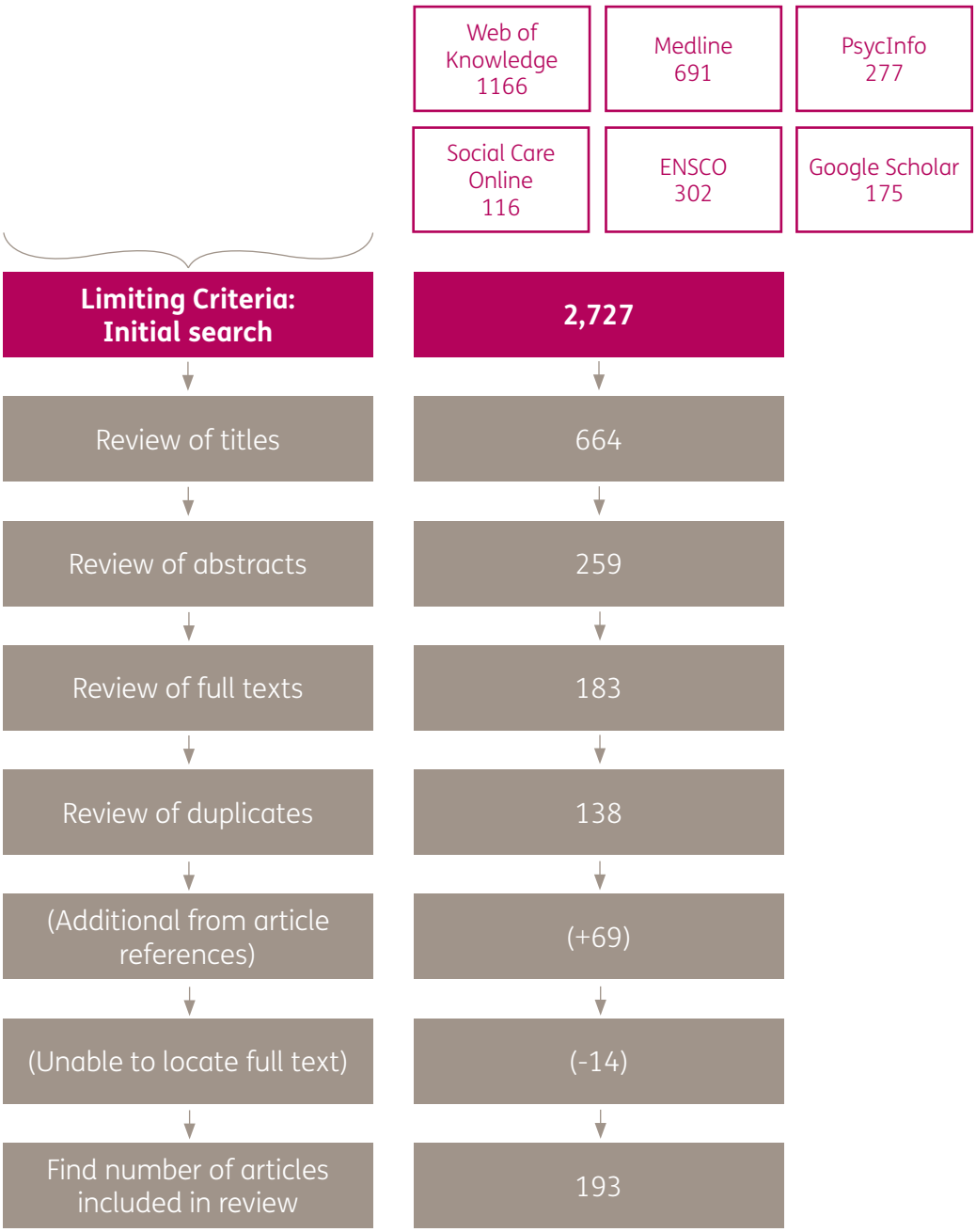

Figure 1: Summary of papers selected and rejected

Results

1. Economic benefits to employers

1.1. Work quality and performance

Attitudes to the employment of disabled people generally

The literature shows views from employer towards employing disabled people in general over the years that are contradictory. Houtenville and Kalargyrou (2012) studied employer perspectives on employing people with a disability, including people with "mental disabilities" and identified that employers valued satisfactory job performance, attendance and job retention as the highest rated reasons that they would hire a person with a disability. A number of studies have shown that employers who had no experience of employing people with a learning disability had significant concerns in these valued areas: such as productivity, having jobs that people with a disability could do, as well as concerns over accidents and compensation claims (Blessing & Jamieson, 1999; Diska & Rogers, 1996; Fuqua et al., 1984; Johnson et al., 1988; Scheid, 1999; Weisenstein & Koshman, 1991). Indeed, Shafer et. al. (1988) in a survey of 125 employer evaluations of workers with a learning disability hired through a supported employment service did find that they scored people lower over time in the performance areas of communication, attending to task consistently, and overall performance as compared to workers without a disability.

There have also been positive evaluations, however. Olson et al. (2001) found that employers reported no differences in human resources costs for disabled workers compared to the general workforce with the exception of higher training costs. A study of US statistical service data found that 91% of workers with disabilities were rated either "average" or "better than average," the same rating as their counterparts without disabilities (Stein, 2000). A study by Lee and Newman (1995) reported that 72% of employers who had hired persons with disabilities rated their job performance as average, above average, or excellent.

Smith, Webber, Graffam and Wilson (2004b) have gone on to study the basis for employer attitude formation. A significant proportion of disabled employees in this study were people with intellectual disabilities (48.6%). The authors found that, on a general measure of satisfaction, employers rated disabled workers significantly less favourably than non-disabled workers. However, when employer ratings of performance (workplace climate, work speed and rate, and accuracy and quality) were examined, the majority of employers (430 vs 199) rated disabled workers significantly more highly than non-disabled workers.

Comparative studies of perception of employability across people with different types of disability tend to show more negative results for people with a learning disability than other forms of disability. Peck and Kirkbride (2001) found that employers reported concerns that there would be additional costs associated with people with Developmental Disabilities (which includes LD) in relation to hiring, additional supervision and loss of productivity, difficulty in carrying out job terminations if needed, and their having skill deficits. The authors suggest that It is critical that employment professionals make the business case to employers, underlining the work strengths of people with disabilities and their fitness to do the job. Lengnick-Hall, Gaunt and Brooks (2017) suggest that such concerns are largely unjustified noting that: *"In summary, the evidence shows no significant productivity differences between PWDs and people*

without disabilities. However, there is still the perception that differences do exist between these two groups among employers."

As Unger (2002) notes, employers who have hired people learning disabilities in the past are generally positive about hiring them in the future (Gibson and Groeneweg, 1986; Gruenhagen, 1982). Respondents from studies where employer respondents were supervisors of employees with disabilities on a regular basis found that these workers were reported to have average or above-average performance (Blanck, 1998). Further, studies working with front line supervisors were more likely to indicate that they were generally satisfied with work performance and reported fewer concerns about hiring people with disabilities (Pitt-Catsouphes and Butterworth, 1997; Shafer et al., 1987). This suggests that being closer to the day to day experience of people's performance in a company leads to more positive performance assessments.

Working from employer records, Graffam et al. (2002a) were able to compare speed/rates of work and accuracy/quality of work for disabled and non-disabled workers in an Australian sample of employers *"all having employed a person with a disability through a funded disability employment service during the preceding three years"* (Graffam et al., 2002a, p252). Rates favoured workers with no disabilities on speed/rates of work (1.93/2.67) and accuracy quality (2.11/2.69) but with both sets of scores ranking equivalent performance of "medium."

Table 1: Summary of relative performance of people with disabilities compared to non-disabled co-workers

	Disabled performance expressed as a percentage of average non-disabled worker performance
Absent days	62%
Accrued absent/sick costs	34%
Recruitment	13%
Occupational Health incidents	12%
Costs of occupational Health incidents	26%
Worker compensation incidents	18%
Worker compensation incident costs	4%
Accumulated insurance costs	4%

Source: Graffam et al. (2002a)

These are important data as people with learning disabilities were a significant proportion of people served in by the Disability Employment Services over this period. An evaluation of the DES programme (DEEWR, 2014) noted that: *"In the 1990s people with intellectual disability were the largest disability group in specialist employment programmes, making up more than 50 per cent of people in employment services administered under the Disability Services Act. Supported employment was, and remains, the predominant service model for this group though, even in 1998, some 40 per cent were in open employment services (FaCS 1999)."* (p110). Employees in the Graffam et al. (2002a) study were employed from 1996-1998.

Comparative studies of attitudes to different disabilities

While all the proceeding studies of disability and employment will, by definition, include people with a learning disability, we know that there are key differences in the needs of people with a learning disability that matter in terms of employer views and the support that is necessary to

help people find, get, learn and keep a paid job. There are research studies that have sought to draw out the differences in employer attitudes to people with different disabilities. Where studies have looked specifically at employer views of people with a learning disability they have shown even lower expectations of employability. Schloss et al. (1989) found in a study of 40 business managers who were asked to evaluate a resume of either a non-disabled applicant, or an applicant with a learning disability, exhibited lower expectations of success for the latter. Pessimistic views were due to beliefs that the applicant with a learning disability would be unable to perform socially, rather than that task demands would be beyond them. Buccini (1981), in a study of 277 personnel directors, found again that anticipated work problems varied by disability condition and were perceived as greater for people with a learning disability or mental health issues.

A US study of 326 employers (Minskoff et al., 1987) found positive attitudes towards making special allowances for "learning disabled"[3] workers, as long as this did not involve reduced workloads or the employer's involvement in the worker's personal life. Employers had less positive attitudes towards employing people with a learning disability, with only half of the employers being willing to hire these workers. These negative attitudes seemed to relate to prejudice against workers with a learning disability, or lack of experience in supervising these workers. Minskoff et al. (1987) found that one third of employers would not knowingly hire a person with a learning disability. In contradiction, they also found that 72% of employers would give people with learning disabilities special considerations that they would not offer to co-workers without a disability.

Gibson and Groeneweg (1986) in a survey of 3,263 employers across a range of industrial sectors looked to establish their readiness to hire people with Developmentally Handicaps (which includes people with learning disabilities). Most employers accepted their potential to become work force members, but this did not generally translate into a willingness to receive inquiries or job applications from them.

A study from the grey literature (Richardson, 1995) looked 20 employers and showed that *"seventy percent of employers agreed that people with disabilities could meet the same work standards as other people."* 70% disagreed that *"people with disabilities are best at doing simple jobs where they do the same things over and over again."* All disability groups, including learning disability, were regarded as "somewhat unfavourable" in "accident-proneness," "work quality," "better employee," "productivity," and "ability to benefit from training." For learning disability, however, a significant relationship was identified between previous working experience and viewing the "work performance and employment costs" of these employees positively. The finding suggested that the more contented the employers felt about their previous working experience with the disabled workers, the more approving they felt towards this group with respects to "work performance and employment costs."

Koser et al. (1999) asked human resource professionals to choose one of two candidates with similar backgrounds but with different disabilities. A job applicant who used a wheelchair was more likely to be given the job than an employee taking medication for depression or anxiety. Jones et al. (1991), in a survey of Fortune 500 companies[4], found that the physically handicapped ranked much higher as desirable employees than did people with mental health

3 The US definition of "learning disability" used in this study will mean that the population under study may include people with a mild or borderline learning disability as well as people with what in the UK would be called a "learning difficulty."

4 The "Fortune 500" is a list of companies compiled annually by Fortune magazine ranking the largest 500 U.S. corporations ranked by total revenue.

issues. There being a perceived hierarchy in the employability of people with different disabilities has been found in other studies (Fuqua et al., 1984; Johnson, Greenwood and Schriner, 1988; Thakker, 1997).

Gilbride et al. (2000) surveyed 200 employers from two US States who had employed a people with disabilities. Employees with a learning disability made up 40% of those they had employed through the federal Vocational Rehabilitation system. The majority of employers believed that it would be more difficult to employ a person with a moderate or severe learning disability or people who are blind to perform the job duties of a specific job. The authors suggest that such stereotyping of people with a disability may affect hiring decisions and lead to people at the bottom of these perceived hierarchies, often people with a learning disability, to miss out on employment.

Geng-qing Chi and Qu (2005), in a study of 500 restaurant employers found that employers had more positive attitudes to employees with sensory impairment and physical disability than to those that have learning disabilities. *"Employers did not treat disability as a homogenous entity, but instead tend to evaluate each type of disability as a unique phenomenon"* (Geng-qing Chi and Qu, 2005, p11). Disabled workers, regardless of their disability types, were perceived as requiring close supervision and special attention from coworkers/supervisors, with people with a learning disability having the lowest scores in this respect. However, authors suggested that employers might hold more positive attitude towards employees with a learning disability in relation to their greater commitment towards the company and their relatively low turnover.

Attitudes of employers who have employed disabled people before

Studies that compare the views of employers with experience, and without experience, of employing people with disabilities show more informed and more positive views from those who have hired people. Cavanagh et al. (2017) reviewed literature in relation to people with physical, mental health and learning disabilities and from 8 studies of people with learning disability found poor understanding of the needs of people with a learning disability, poor employment levels and lack of take-up of supports available. Unger (2002) in a review of the literature notes that employers with experience of employing people with disabilities were generally positive about hiring people with the same characteristic. This included people with deafness (Phillips, 1975), epilepsy (Gade and Toutges, 1983) and psychiatric disabilities (Diksa and Rogers, 1996).

Many other studies have investigated the relationship between employer attitudes toward employing people with a disability, and their previous experience with people with a disability on the part of the employer (Blessing and Jamieson, 1999; Diska and Rogers, 1996; Fabian et al., 1995; Kanter, 1988; Kregel and Tomiyasu, 1994, Levy et al., 1992; Levy et al., 1993; McFarlin et al., 1991; Scheid, 1999; Walters and Baker, 1995). These studies have found that prior positive contact has a direct relationship with favourable employer attitudes.

Several studies have reported positive attitudes of employers toward employees with disabilities that they have employed through vocational rehabilitation or supported-employment programs (Cook at al., 1994; Cooper, 1991; Eigenbrood & Retish, 1988; Nietupski et al., 1996; Petty & Fussell, 1997; Sandys, 1994; Shafer et al., 1987; Wilgosh & Mueller, 1989). Eigenbrood & Retish (1988) surveyed 38 employers that had provided work experience to mixed groups of young people from special education in the US. This included people with a learning disability, with employers describing many of the students placed as being "slow learners" or having "behavioural problems" (p22). 52.6% agreed that people with disabilities were quite capable of

performing at least some of the jobs in their business. Most employers (86.6%) felt that co-workers were generally comfortable with disabled individuals and that customers would feel comfortable if disabled students were to work in their company full time (67.5%).

Nietupski et al. (1996), in a study of 98 employers in Iowa, set out to gain feedback on supported employment and supported employees. In 1995, people with a learning disability were the largest group of people served in supported employment representing 60.5% of participants, and while a breakdown of disabilities was not attempted in this study, it is likely that the findings include people with a learning disability within in its study group. It compared the perceptions of employers who had hired, or not hired, people with disabilities. The authors found that employers who had hired people had significantly more positive perceptions of supported employees that those who had not hired, with mean scores on 5-point Likert Scales of 3.82 vs 3.33.

Attitudes of those employing people with a learning disability

When we look at studies of employers with experience of employing people with a learning disability directly, we find that there are many positive accounts of the performance of people and the outcomes stemming from hiring them. It is also true that research based on direct observation or accounts of performance, rather than higher level perceptions of employability, highlight many more benefits to employers. A number of studies have reported positive attitudes of employers toward employees with a learning disability where they have employed them before, where assessments tend to be more positive than for employers who have no experience. Workers with disabilities were rated higher than their non-disabled counterparts on a number of factors, including attendance, arriving to work and returning from breaks on time, accepting authority, and being accepted by the public. (McFarlin, 1991; Kregel and Tomiyasu, 1994; Kregel and Unger, 1993; Kregel, Parent, and West, 1994; Shafer et al., 1987; Shafer et al., 1988; Olson et al., 2001). Others have identified advantages for employers of hiring people with developmental disabilities, which include dedication, job coach assistance, and reduced turnover (Nietupski et al., 1996; Sitlington and Easterday, 1992).

Employers who have employed people with a learning disability in the past have reported more favourable attitudes toward hiring people with a learning disability in the future than employers who have not (Gibson & Groeneweg, 1986; Gruenhagen, 1982). Gruenhagen (1982) in a study of fast food restaurant managers found that the majority of the managers believed that people with a learning disability should be employed competitively. They would not go so far as to commit to whether they themselves would employ an adequately prepared worker with a learning disability. Gibson & Groeneweg (1986) in a survey of 3,263 employers across a range of industrial sectors looked to establish their readiness to hire people with Developmentally Handicaps (which includes people with learning disabilities). Most employers accepted their potential to become work force members, but this did not generally translate into a willingness to receive inquiries or job applications from them.

Shafer et al. (1987) reported the results of a survey of three groups of employers of workers with a wide range of learning disabilities who received (a) supported competitive employment services (including job coach services), (b) only job placement services, or c) no known services in Virginia. Direct supervisors were respondents, again an important feature of the study. Of the 261 employers surveyed, ratings on key aspects of performance were generally positive for all options on Likert 5 point scales, with the exception of learning new skills and degree of supervision required for people in the placement only category b). Ratings were more positive in options a) and b) where more support was available from services, than for c) where people

were largely unsupported (those in category c) were generally more able). Highest average positive ratings were for work behaviour, such as returning from break on time, attendance, on time arrival and departure, safety record and acceptance by the public. Quality and speed of work were satisfactory but at a slightly lower level for all service types. Supervisors were also asked to compare the workers with a learning disability with their other non-disabled workers and no significant differences were found in the score awarded. Significant difference were found between the three service groups for people with a learning disability only in staff turnover and overall assessment, where groups a) and b) were rated higher than c). the authors note that employers in job coach group more frequently cited *"the promise of follow-along contact, presentation by the job coach, assurances that the worker could complete the job, and enhanced public relations as factors influencing them to hire workers who [have a learning disability]"* (Shafer et al., 1987, p309).

Shafer et al. (1988) considered multiple time-series supervisor evaluations of 125 people with a learning disability receiving supported employment services in Virginia. This is directly observed data from people with knowledge of the performance of the worker. They found that supervisor evaluations were not generally correlated to the level of learning disability of the employee. The evaluations of people with more severe learning disabilities increased over time, while those of people with borderline learning disabilities deteriorated over time. However, scores of consistency (on a "never" 1 to "always" 5 scale) were mostly in the 3.2-4.7 range for all levels of disability for the following areas of performance: arriving and leaving on time; maintaining a good appearance; taking breaks and meals appropriately; maintaining a good appearance; communication; attention to task; and overall appraisal (2.5 at end point evaluation for borderline learning disability). The assessment of "performance compares favourably to non-disabled workers" was positive and in the range 3.2-4.7 across the range of disabilities. The range of employment at the time of survey was from 23-2825 days employed with an average of 568 days. There were a high number of workers with a learning disability who left their jobs (58%, some to other employment) and those that ended their employment had poorer supervisor evaluations over time for attendance and consistency in task performance than those who stayed.

Wilgosh and Mueller (1989), in a Canadian study, carried out an assessment of attitudes to employing people with a learning disability for 34 employers who accepted, and 48 employers who had refused, placement of trainees with a learning disability. Employers who refused to take trainees were more negative toward hiring such individuals and rated them significantly lower on attitude scale items. These employers viewed employees with a learning disability as likely to have many problems that could irritate coworkers and that would warrant their being employed in segregated communities. Employers who had accepted people on placements had more positive attitudes toward the group and were more likely to say that they would hire people with a learning disability as employees.

Harrison and Tomes (1990) in their study of 57 employers in Sheffield found that employers with and without experience of employing people with a learning disability saw people as beneficial to their company. The features they highlighted as likely to be the same or better than co-workers without a learning disability were: turnover rates; willingness to learn; job satisfaction; unlikely to cause trouble; friendliness; honesty; hardworking; strength; timekeeping; reliability appearance; dependability; motivation; and sickness record. Employers reported that co-workers would perform better than the worker with a learning disability in the following areas: consistency; ability to learn; insurance cost; temperament; emotional stability; flexibility and social skills; competence; speed of work and productivity; speed of learning; safety and

supervision. Harrison and Tomes (1990) also found that employers expected people with a learning disability to perform better than their co-workers on measures of job satisfaction, genuineness, "grafting" and loyalty, but less well on productive capacity, supervision and risk, and learning capacity.

Cooper (1991), in a survey of 91 mixed sector employers, found that employer exhibited favourable attitudes towards hiring people with a mild learning disability. McFarlin (1991) in a study of 189 employers that encompassed people with "a physical and mental impairment" found a range of employer responses to their employment. Employers were positive in their assessments with two-thirds reporting they are likely to have lower job turnover and perform as well as, and disagreed they would have higher absenteeism and levels, than non-disabled co-workers. Forty-percent agreed that the cost of accommodating is prohibitive, and advancement slower, for disabled workers. The authors found that the greater the employer's exposure to people with a disability, the more positive the attitudes, We believe these findings relate to learning disability also.

Levy et al. (1992) focused on people with severe disabilities (including people with a learning disability) in a study of Fortune 500 companies. 341 were interviewed. Consistent differences were found, with more positive attitudes towards people with a severe disability (including learning disability) being found when the organisations had hired a person with a severe disability in the last three years and had previous work experience with people with disabilities and positive evaluations of that experience. Their findings confirmed that it was positive contact in the workplace itself that determines positive attitudes towards the employability of disabled people, and of positive attitudes to disabled people themselves, rather than personal contacts or experiences of disability. This is important evidence that experience assists positive views that can lead to positive hiring decisions.

Sitlington and Easterday (1992) in a study of 84 employers examines the extent to which 10 different incentives might influencing whether they would employ a worker with a learning disability. They found that the key factors were a high probability of regular attendance and a high probability of long-term employment (e.g. staying in the job), as well as the availability of person for on-site training and the on-going availability of a person to call for assistance. This underlines that task performance alone was not the main factor underpinning success for the employer, and the availability of the right form of support over a prolonged period also had an impact.

Kregel and Unger (1993) studied 46 employers from Richmond, Virginia and found that they scored favourably worker characteristics such as people being good workers even if they use supported employment and being able to advance in their careers.

Kregel, Parent, and West (1994) studied the reasons for the reasons for job termination for 1,484 disabled people involved in supported employment programmes in eight states of the US. We know that in 1995, people with a learning disability were the largest group of people served in supported employment representing 60.5% of participants, and while a breakdown of disabilities was not provided in this study, it is likely that the findings include people with a learning disability within in its study group. They investigated the behavioural characteristics that helped or hindered employment retention. Retention was affected by a wide variety of vocational, behavioural, economic, and external factors and compensatory strategies, self-management, and co-worker supports were suggested as useful strategies to help retention. Furthermore, the level of disability displayed by the workers did not affect how their employers

evaluated their work performance. Individuals with developmental disabilities such as severe cognitive disabilities were rated as highly as other workers with a disability.

Kregel and Tomiyasu (1994) carried out interviews with 170 employers in the Virginia area to assess employers' attitudes toward workers using a Scale of Attitudes Toward Workers with Disabilities. Authors explored the relationship between employers' attitudes and their knowledge of the Americans with Disabilities Act. The employers' attitudes toward workers with disabilities correlated positively with their attitudes toward the Americans with Disabilities Act.

Sandys (1994) looked at the perspectives of 21 employers who hired people with learning disabilities through supported employment programmes. The findings that employing people with learning disabilities is seen by employers as a positive and worthwhile. Employers may perceive the supported employee as dependent and childlike, and see their own role as taking care of the person. Some employers interviewed went to significant trouble to promote their worker's development and derived great satisfaction from their efforts. Contributing to the person's development did allow some employers to not pay people a regular wage.

Tse (1994) found that 38 Hong Kong employers were generally satisfied with the performance employees with mild learning disabilities in 20 out of 25 work related attributes, including reliability, good work motivation and work safety. Smith et al. (2004a) surveyed 656 employers who had received workers through disability employment services and found that employers rated workers with a disability (including 46.8% having a learning disability (Smith et al., 2004b)) as satisfactory when they met job expectations. This links to research cited earlier that people with a learning disability are commonly regarded as satisfactory and underlining that they often meet employer job expectations. Evidence from Smith et al. (2004a) suggests that employees with a learning disability are more likely to receive higher ratings of their work performance when employers perceive a good job-employee match. They also note that, in responding to the question *"Based on your experiences with this person with a disability, would you employ another person with a disability?"* employers respond positively when employers rated satisfaction with employees with a disability higher, or at the same level as non-disabled employees, which in the majority cases they had.

Nietupski et al. (1996) in a study of 98 employers having employed people with disabilities through the Iowa CEO supported employment scheme showed a statistically significant difference in employers, those having previously hired a person with a disability being more positive about these employees. People with a learning disability were not highly present in this sample. A sum of rankings suggests that the greatest benefits to employers were that the dedication of employers was equal or greater than non-disabled co-workers, people with disabilities would enhance the company's community image, and that hiring supported employees gave the employer personal satisfaction. It is of interest that employers reported concerns that had lower order employer rankings, which were that employees would require extra training and supervision, that they would not have the necessary work skills, and work quality would not be equal to that of co-workers. These are similar concerns to this expressed elsewhere about people with a learning disability, suggests that these concerns are not specifically related to people with a learning disability, and that fears that people with a learning disability may be harder to place than other people with disabilities may be not clear cut.

Petty & Fussell (1997) studied attitudes of 47 employers towards people with learning and physical disabilities in Tennessee. Employers generally held favourable attitudes on the

employment potential of workers with disabilities and the quality of services provided through supported employment programs. Employers also viewed supported employment favourably and reported that the physical presence of employment specialists at the job site was a strength of the supported employment program.

Gates (2000) echoes the need to provide a good employer/worker match and that there is a need for job accommodations to be fitted to the real workplace, albeit in the context of employing people mental health issues, noting that "*When the job coaches leave the workplace, they take all the support with them. With a social approach to accommodation, however, providers must be willing to enter the workplace to gain an understanding of the organization in terms of the sources of support and resistance to accommodation..... Accommodation cannot be determined in the abstract but can only be identified effectively with respect to specific tasks, routines, and relationships*" (p 95).

Morgan and Alexander (2005) report a survey of 534 employer's perception of workers with developmental disabilities (which includes people with learning disabilities). 39% had employed people with a developmental disability. Most employers (65%) with experience reported that the employment usually worked well and 97% said that were likely to hire this group again. Respondents with experience of employing people with developmental disabilities identified advantages to employing these workers with disabilities at double the rate of employer's who had not. Authors note that: *"...it is important to note that it is a highly ranked benefit by those in the best position to judge work quality: employers with hiring experience."* (Morgan and Alexander, 2005, p320). This finds support from other studies that found employers with experience in employing people with a learning disabilities appear to be pleased with the individuals' work performance (Marcouiller, Smith and Bordieri 1987).

Fornes (2006) carried out a review of factors important in job retention for people with a learning disability. The authors conclude that, while employers are concerned that individuals with a learning disability show poor work performance, in reality their productivity is equal to or better than the average entry-level position and often surpass the production records of other employees, if they receive proper placement and job match. The conclusion of the review is that adult workers with a learning disability who have good work-related social behaviours, have a good fit between their skills and a job, and elements of self-determination (e.g. ability to self-regulate and to set goals at work) are more likely to have higher job satisfaction, higher job performance and, contingent on these, achieve longer-term job retention. Staying in a job for longer periods in turn creates a positive spiral of better performance and job satisfaction. Olson, Cioffi, Yovanoff and Mank (2001) found that 79% of employers in their sample thought the amount of training and supervision needed for workers with learning disabilities to be greater than for non-disabled co-workers. However, employers also reported that employing persons with a learning disability brought other benefits for them, including enhancing their organisation's public image and promoting diversity in the workplace. Employers seem willing to provide additional time to training and supervision to obtain reliable, dedicated employees, increased workforce diversity and a positive image for corporate social responsibility.

While it is clear is that performance will vary between people with a learning disabilities, and with the effectiveness of job match achieved, other studies show that employers have been willing to make reasonable adjustments for workers with learning disabilities to allow the job to work. Employer representatives have been open to providing extra time and effort to help integrate people with a learning disability into the workforce (Nietupski et al., 1996; Shafer, Hill, Seyfarth, & Wehman, 1987). Employers seem willing to allow some flexibility in performance by

employees with a learning disability to achieve reliable attendance and low staff turnover (Blanck, 1998; Shafer et al., 1987; Shafer, Kregel, Banks, & Hill, 1988) and benefit from their greater dedication to work (Johnson et al., 1988; Nietupski et al., 1996).

Conclusion

People with a learning disability are individuals and their performance in work, their strengths and weaknesses, will differ between people and the tasks they do and the employers they work for. Employers have more concerns about employing this client group than other people with a disability. However, when employers have had the experience of employing people with a learning disability, they are significantly more positive in their ratings of their work and value to the company. It is important also to note that, in the UK especially, the employment levels remain low for people with a learning disability and there are relatively low levels of employers who have had this experience. As outlined above, when we look across time, US and UK studies do appear to show more positive attitude outcomes after the Americans with Disabilities Act (1995) and the Disability Discrimination Act (2005) were implemented. Direct observation by supervisors provide useful data showing that in many areas people with a learning disability deliver valuable work performance when compared to their non-disabled co-workers. Further, while some employees with a learning disability may require it, employers are willing to provide additional time for training and supervision of people because they are able to obtain reliable, dedicated employees, to increased workforce diversity, and to maintain a positive image of corporate social responsibility. In effect, employers are willing to discount some aspects of job performance where needed for wider net benefits to their company. It is important to note that some of the best data comes from situations where specific employment services are involved with the worker and the employer and that workplace support, at least in the early phase of a job, remains important to delivering positive employer experiences.

1.2 Reliability of workers (staying in a job, attendance, punctuality)

Key reliability features of disabled people

As we have seen from the last section, employers rate staying in a job and stable attendance highly. Employers incur costs when a worker leaves their job or is terminate. The potential costs include: advertising for a new worker; salaried time spent in review applications and interviewing any applicants. All of which takes time away from other, more productive, activities. Workers who maintain their employment for the long periods of time relative to the average turnover for other similar workers will save the employer money. Nietupski et al. (1996) and Sitlington and Easterday (1992) have found that some employers identified distinct advantages in hiring people with developmental disabilities (including people with a learning disability), in relation to their greater dedication, more consistent attendance, and reduced staff turnover.

Kettle and Massie (1981) found that workers with disabilities at the Western Electric Company had 7% less sickness absence than their non-disabled counterparts. Batty (1991) found that annual turnover rates for workers with disabilities at Pizza Hut, Inc. in 1988 was 32%, compared with 190% for non-disabled workers.

Morgan and Alexander (2005) report a survey of 534 employer's perceptions of workers with Developmental Disabilities (which includes people with learning disabilities). 39% had employed people with a developmental disability. Most employers (65%) with experience of employing this group reported that the employment usually worked well and 97% said that were likely to

hire people with a Developmental Disability in the future. Respondents with experience of employing people with Developmental Disabilities identified advantages to employing these workers to be double the rate of employer's who had not. The advantages most frequently identified were consistent attendance, workforce diversity, long-term employment, and co-worker develop partnerships (to help disabled employee). The authors say that: *"...it is important to note that it is a highly ranked benefit by those in the best position to judge work quality: employers with hiring experience."* (Morgan and Alexander, 2005, p320).

In the UK, a study by Harrison and Tomes (1990) echoed these results for people with a learning disability. They found that employers with experience of employing people with a learning disability rated them more positively than non-disabled people in relation to low job turnover rates, willingness to learn, being unlikely to cause trouble, and being hardworking, friendly and honest. They were rated as less competent on some other features such as managing dangerous machinery, not able to reach certain skill levels, and an inability to work unsupervised.

Martin et al. (2014) reported on a study of a Fortune 500 company employing over 180,000 workers, and has shown that employing people with an Intellectual or Developmental Disability (IDD) delivers benefits to the company at a number of levels. For this company employing individuals with IDD was said to have contributed to higher productivity, lower absenteeism, higher job retention rates, and increased customer loyalty. They report summarises their benefits as *"The addition of workers with IDD to an organization's talent pool has a broad and positive three-pronged impact: it affects the workforce, the customer base and the community."*

In a qualitative study of Healthcare, Hospitality and Retail Administrators, Hernandez et al. (2008) also reported benefits to them as employers to be low absenteeism rates and long employment tenures. Sitlington and Easterday (1992) interviewed 84 employers from a wide range of industry sectors about employing people with a learning disability. They were asked to identified factors that would positively influence their hiring people with a learning disability and identified the probability of regular attendance, and probability of staying in the job longer, by the worker as a major benefit.

Costs of job turnover and staff absence

Few research studies have tried to put figures on employer costs in this area. One small study calculated the total costs of recruiting a post, and then compared the time selected workers with a learning disability remained in employed to equivalent non-disabled workers (Cimera, 2009, P7). If a worker with a learning disability stays in work twice as long as an average comparable worker, or a matched control worker, they will have saved the employer two rounds of recruitment cost. In a small study, Cimera (2009) found significant costs associated with hiring replacements for workers who leave, it taking 14.88 person hours, involving multiple managers, and costing $227.66 for each successful new worker search. As no media adverts were placed in this study, the costs were still low compared to organisations that do. Workers with a learning disability in the study had been in continuous employment longer than non-disabled comparators and generated a total of $2343 savings for their employers.

Employers are likely to incur costs if an employee with a disability is late for work, has bouts of sickness leave, or does not arrive at work when they should. The employer costs stem from finding a replacement employee or paying other staff overtime to cover. A net cost to an employer comes from the difference in amounts paid to alternative staff, or the cost of supervisor time required to obtain a replacement staff member to cover. Relative costs were

calculated by applying the cost of recruitment to the difference between the time spent in the job by learning disabled and non-disabled workers. Days worked by people with a learning disability were 1711 days compared to 492 days for non-disabled co-workers. Research suggests that there are higher costs incurred by employers through lateness, sick leave and absence by non-disabled workers than employees with a learning disability (Cimera, 2009). In the study period, people with a learning disability had no whole day absences, compared to 1-6 days missed by non-disabled comparators. They were late 3 times, compared to 20 times for non-disabled comparators. In reality, cost of absences and sickness were zero as no additional staff were brought in, and no overtimes was paid, but there were consequences due to some staff staying longer and tasks being delayed or deferred. The only supervisor cost for organising replacement workers was associated with the absence of a non-disabled worker.

Table 1: Summary of comparative costs of recruitment, sickness and days off

Cost area	Performance: Learning disability/ co-worker	Net saving for person with learning disability	Net cost for non-disabled co-worker
Length of stay in job	3.48/1	$23431	-
Lateness episodes	3/20	-	-
Absence/ Sickness episodes	0/8	-	$5.462

Source: Cimera (2009)

1: Based on cost of hourly rate cost of recruitment and interviewing
2: Based on $ per hour for staff time organising replacement

Graffam et al. (2002a) looked at the costs of employing people with a disability (including people with a learning disability) compared to “average employees” for 643 Australian employers. These were selected from employers receiving government funded disability employment services. Recruitment costs were lower ($141 vs $1079, a net saving of $938), again due to reduced job turnover. Sickness rates were comparable at 8.3 days for people with disabilities compared to 9.7 days for non-disabled co-workers but yielding net cost savings of $473.

It is clear that people with a learning disability have a strength in staying in jobs longer than others. It is important to recognise that rates of job separation are relative and that rates of job loss should ideally be evaluated in relation to specific industry and job role average job separation rates. It is also important to note that people lose jobs for many reasons, some having nothing to do with their ability or performance. West et al. (2015) studied 47 people with disabilities who had left employment, the largest group had a learning disability (28%). 39% of job separations were generated by the employer, 22% employee resignations, and 13% mutually agreed separations. Looking at terminations, 54% were primarily due to poor work performance. To put this in context, the job separations represented only small percentage of overall jobs sustained.

Conclusion

People with a learning disability generally stay in work longer, are sick less and are reliable time-keepers. Job terminations cost employers significant sums. While a small study, Cimera’s estimates were well crafted using records to provide direct comparisons with non-disabled workers. Taken with the consistent message from other studies that people with a learning

disability are diligent and loyal employees, we can be reasonably sure that by employing people with a learning disability employers are more likely to generate cost savings through staying in jobs longer, with reduced recruitment and training costs when compared to other workers. This is reinforced by Gaffam's study, also using real world costs and non-disabled co-worker comparators. The Gaffam et al. (2002) study is of people with disabilities generally. However, people with a learning disability make up a significant proportion of Australian funded employment service caseloads and so we find it relevant to the learning disability case. The amount of any savings will of course be dependent on the nature of the recruitment process for any given employer, and the costs for that employment sector (e.g. where they advertise and how, the intensity of interviewing practice, and the extent of training for new staff needed). Whatever the relative costs involved, higher retention rates will inevitably lead to savings to employers from employing people with a learning disability.

1.3 Job Carving and assisting the productivity of others

Efforts by supported employment providers to "job carve" or adapting working practices to the needs and abilities of a person with learning disabilities may lead to more efficient working for the company more generally. There is some research evidence that employers of people with a learning disability benefit from job carving (creating a real job from lower skilled elements of other jobs, thereby freeing up more costly staff to be more productive). Olson, Cioffi, Yovanoff and Mank (2001), in a study of 126 employers, found that people with a learning disability freeing skilled workers was "somewhat or very important" as an incentive for 59.2% of employers to hire people with a learning disability.

Conclusion

Much has been written about job carving, techniques and its benefits, and there are many anecdotes about its effectiveness but we have found little in the way of hard research that evidences this. Logically it would seem to be an important approach for people with significant learning disabilities, very much in keeping with the notion of employers being keen to derive wider productivity benefits than from the work of the person alone. More research is clearly needed here.

2. Productivity and workforce cohesion benefits

2.1 Does employing people with a learning disability improve staff morale?

We have seen in the previous section that for some employers, wider company benefits, such as wider staff productivity, morale and cohesiveness are an important benefit to employers of a decision to hire people with a disability, especially a person with a learning disability where some offsetting of other supports needed may be helpful. Porter and Kramer (2006) have commented that better social connections among workers generally will increase the morale and commitment of the workforce and contribute to a more productive workforce emerging. In this section we explore the evidence that employing people with a learning disability does deliver these types of benefit to employers. Hernandez et al. (2008) found hiring people with disabilities helped other employees be more accepting of diverse groups. This in turn sent positive messages about independent living and community inclusion for clients with disabilities in the healthcare and retail sectors.

In a study of 128 employers in the US, Solovieva et al. (2011) found that the most frequently mentioned indirect benefits from using work-based accommodations to employ people with disabilities were improved interactions with co-workers (40% of employers); increased overall company morale (35%); and increased overall company productivity (30%). Most of the employer respondents estimated the direct benefits of having made an accommodation at more than $1000. The authors note that: *"Intangibles, such as company morale, interact with more concrete measures of productivity, such as attendance, to challenge the accuracy of any measure of the value of making an accommodation. While it is difficult to assign a dollar value to indirect benefits, they help define the work environment and corporate culture. Together, direct and indirect benefits signify value for the business, co-workers, and individuals with disabilities for whom accommodations are critical to successful employment."* 6% of the employees that were a focus of this study experienced cognitive disabilities. We have established that people with learning disabilities do not commonly require work-based accommodations unless they are for job coaching, transport or job reorganisation and so this sample would be biased away from people with a learning disability.

In a more specific study, Lysaght et al. (2012) cites a study by Lin (2008) that looked at the factors leading to social integration in workplaces. The study found that workers with learning disabilities were able to contribute most successfully to the team when work tasks were tailored to their skills, and when they were provided with clear job expectations. Perceptions of these workers by co-workers were positive, largely due to their ability to perform a valued role within the organization, and due to their impact on social climate. In the cases studied, workers were involved in work tasks that brought them into frequent contact with other workers and the public. Workers and supervisors in these settings saw the workers with learning disabilities as contributing positively to both the work output and social climate of the workplace.

Another unique contribution of workers with learning disabilities lies at the social level where their presence can help to "humanise" a workplace and contribute to the social connectedness of workers. In interviews with co-workers of people with learning disabilities in one workplace, Lysaght et al. (2012) again draws on Lin (2008) who had collected a number of comments from co-workers disclosing feelings of affection for the workers with a disability. One co-worker reported that the people with learning disabilities in her workplace were *"more as extended*

family than as a worker" and stated that *"they bring something special to this place "* (p47). Another co-worker stated: *"Those three guys in particular who work in the mailroom have taught me a lot, a lot about life. There are a lot of people in this building and this institution who have, you know, very high credentials... those three guys have taught me, in some cases just as much about life and important things about life as anybody else has... It's the beauty of their presence in this building. If everyone was like them in the world it would be very great"* (p47).

Kregel and Tomiyasu (1994) found that employers viewed people with Developmental Disabilities (which includes people with a learning disability) as having a positive effect on their entire workforce. One mechanism is that co-workers can become invested in the success of the individual, this leading to greater social integration of the individual and also to better relationships and cooperation between co-workers themselves. Olson, Cioffi, Yovanoff and Mank (2001) found that 72.2% of employers regarded the impact on company morale as an important factor in deciding to employ people with a learning disability. Morgan and Alexander (2005) found that employers reported the major benefits of employment of people with Developmental Disabilities included having a more diverse workforce, better co-worker partnerships (all rated by over 20% of employers) and improved attitudes in the company (10% of employers). Employers with experience of hiring identified twice the number of advantages of hiring people with Developmental Disabilities that employers with no experience.

Kregel (1999) in an overview of progress has noted that *"workers with developmental disabilities have a positive impact on the overall productivity and profitability of the business or company that employs them. Many employers continue their commitment to workforce diversity as a strategy for increasing the productivity and competitiveness of their company. Workers with developmental disabilities are hardly a burden to business or industry. On the contrary, the presence of workers with disabilities actually increases the ability of a company to contend with its competitors."* Kregel (1999, p4)

Conclusion

Commentators and researchers observe that many individuals with developmental disabilities/ learning disabilities make highly effective employees, exhibiting reliability, dependability, good relationships with co-workers, loyalty to the company, the characteristics valued most by employers. Their employment appears to add significant value to the company over and above any direct contribution through work performance itself. It is these wider benefits to the employer that can make such a placement worthwhile to an employer, especially where greater supervision and training are required elsewhere.

3. Reputation and customer reaction benefits

That customers and the public are obviously important to employers and the reaction to seeing people with learning disabilities in companies and engaging with them may logically have a positive, or a negative, effect on business and profits. Their presence may also attract more disabled people to the business as customers. Morgan and Alexander (2005) note that companies are aware that consumers are not negative toward employees with disabilities generally and that only 10% of employers who had employed workers with disabilities were worried about negative attitudes of consumers when they made hiring decisions. Solovieva et al. (2011) found that provision of accommodations to employ people with disabilities (including smaller numbers of people with a learning disability) led to 17% of employers reporting "improved interactions with customers" the figure rising to 29% for smaller businesses. Thirty-two percent of employers estimated the value of these indirect benefits at more than $1000 from using an accommodation to assist a disabled person to get, or keep, a job, this acting as a direct incentive to the "bottom line" or off-setting any costs of adaptations themselves.

Siperstein et al. (2006) examined the views of 803 consumers towards companies that hire people with a disability. Of those responding, only 2% had people with a learning disability in mind when they reported, which is an interesting finding, itself testifying to the continuing lack of penetration of people into the labour market. However, 75% had had direct experience of a person with a disability in a work environment and had positive experiences as a result. 92% of the consumers interviewed felt more favourable towards companies that hired people with disabilities. 87% specifically agreed that they would prefer to give their business to companies that hire people with disabilities. Almost all the respondents believed that companies hiring workers with disabilities cared about their workers. Only a small proportion of those surveyed conceived of disability as meaning a learning disability, but many respondents had a non-specific idea of what disability meant which included any worker with a work challenge, suggesting that the responses are relevant to people with a learning disability. This may also be relevant for a study by Spataro (2005) who identified positive reputational effects for employers from hiring people with visible disabilities. These effects include improving the company's image with customers and investors and building sustainable relationships through client-employee contacts. Olson, Cioffi, Yovanoff and Mank (2001) found that employers believed employing people with a learning disability brought other benefits for them, including enhancing their organisation's public image (62.5% of employers). They found also that customer satisfaction was an important reason for employing a person with a learning disability for 60% of employers.

Conclusions

Employers have reported improved public image and enhanced diversity as potential benefits of hiring workers with disabilities generally, and this seems to extend to people with a learning disability. While these effects remain largely uncosted in the literature, the work of Solovieva et al. suggests that there might be tangible cost outcomes. Even without cost benefits, it seems clear that the public is positive about efforts to include people with a learning disability and that this fits well with modern goals of corporate social responsibility and brand image.

4. Costs that may impact on a decision to hire a person with a learning disability

4.1 Additional support supervisors

People with a learning disability in work are subject to normal supervision. This is a costly resource and, if people with a learning disability require significant additional support from supervisors to provide the same level and quality of output as other workers, this will lead to additional costs to an employer. We showed earlier that studies of employer attitudes do show that additional supervision and training cost is a concern for employers that do not have the experience of employing someone with a learning disability (Olson et al., 2001; Peck and Kirkbride, 2001).

This concern is less marked among employers that have employed people with a learning disability (Cavanagh et al., 2017) (Blanck 2008; Butterworth and Pitt-Catsouphes, 1997; Shafer et al., 1987) but still occurs (Nietupski et al., 1996; Geng-qing Chi and Qu, 2005; Harrison and Tomes, 1990). Research on supervision input to people with a learning disability in work show that, on balance, they can require more supervisor time when compared to matched, non-disabled workers. Cimera (2009) calculated the average cost of supervision per worker supervised in three case studies and people with a learning disability were found to receive 21% and 12% greater supervision time, and 1% lower than non-disabled staff comparators respectively. He estimates the cost of that additional supervision to be low at between $0.02-$0.34 additional cost per hour. Cimera (2009) notes that, when all savings are taken into account, there were net savings to the employer for all workers with a learning disability.

Schneider and Dutton (2002) in a study of 100 employers and 100 government Disability Employment Advisors found that the costs and risks of employing disabled people are perceived to vary according to the type of disability. They reported that there was general agreement that people with learning disabilities need longer training than most workers (78%).

Conclusion
It remains likely that some people with a learning disability will require some additional supervision and additional training time. We have little data on the additional costs that might represent. We note again, however, that employers have been open to providing extra supervision and training time and effort to help integrate people with a learning disability into the workforce (Nietupski et al., 1996; Shafer, Hill, Seyfarth, & Wehman, 1987).

4.2 Cost of reasonable adjustments in the workplace

Since the introduction of anti-discrimination legislation in some countries (in the US the ADA and in the UK the DDA), there is often a requirement to make reasonable adjustments (or accommodations) in work and work patterns, equipment to help a person be do a job, or physical changes to help people access work sites and buildings. This can result in a monetary cost to employers. It is worth noting that not all reasonable adjustments cost the employer. Changes in tasks or processes can also be cost neutral. It is also true that people without a disability can sometimes be granted an adjustment to meet a short-term problem or family circumstances. It is possible to calculate the cost of one, or a number, of accommodations for disabled and non-disabled workers. This cost is commonly averaged over the time worked by the person for comparison purposes. This average cost can also account for accommodations

used by multiple people with a disability. Cimera (2009) has shown that for his cohort of people with a learning disability, accommodations were required around training and learning aids. However, none of these accommodations created a cost for the employer as they were provided by an external supported employment service free of charge to the employer (clearly there is a cost from the taxpayer perspective). Hernandez et al. (2008) found that employers reported the cost of accommodating workers with disabilities was minimal and largely related to people with physical and sensory disabilities.

Despite employer concerns that they might be liable for high-cost accommodations in employing a person with a learning disability, actual costs are usually low and reasonable. Blanck (1996) studied a wide variety of disability-related accommodations at Sears, Roebuck and Company and found that 72% of employers reported no costs, to their accommodations that 27% cost less than $500. Accommodations with a cost over $1,000 were uncommon, they were usually technology based, and often found to benefit employees with and without disabilities. While people are individuals and can have a learning disabilities and other disabilities, in general accommodations associated with people with a learning disability tend to be cost neutral to employers as they largely relate to task modifications, particularly for training and supports for learning. These are commonly provided by supported employment organisations in some countries.

The Job Accommodation Network (JAN)(1994) reported that in the US in 1994, the majority of workplace accommodations cost less than $500, with a median cost of $250. Employers were asked to assign a dollar value to the savings resulting from accommodations and 38% reported $1–$5,000, 33% reported $5,000–$20,000, 25% reported $20,000–$200,000, and 3% reported no discernible value. The median benefit was $29 for every $1 spent on accommodations (Cantor, 1998). The report for 2016 (JAN, 2016) shows that 59% of employers reported that accommodations cost them nothing, 36% incurred a one-time cost, 4% reported a small on-going annual cost and 1% required a combination of one-time and annual costs. The typical one-time expenditure by employers was $500, compared to an amount they would have paid for an employee without a disability at around $400.

Solovieva et al. (2011), in a survey of 128 employers on the benefits they received from making workplace accommodations, found that 24% indicated that any accommodation was made with no one-time, and no annual, cost. More than half of responders (55%) reported a one-time cost for the accommodation (mean=$2698, median=$500). There were 18% who indicated an annual cost (mean=$14,628, median=$2000). Overall, the one-time cost mean was $1480 with a median of $50, and the annual cost mean was $2674 with a median of $0. Again, the majority of those receiving accommodations had physical disabilities and only 6% reported having cognitive disabilities. Interestingly, the largest accommodation types were purchase of equipment (21%), and changing work routines (21%). Lower cost options more relevant for people with a learning disability included educating co-workers (7%) and providing an interpreter and job coach (4%).

Solovieva et al. (2011) found that the most frequently mentioned direct benefits from implementing workplace accommodations were: retained a qualified employee; increased worker productivity; and eliminated the cost of training a new employee. Richardson (1995), in a study of 20 employers, confirmed this low cost finding, showing that 65% of her respondents disagreed that considerable expense was necessary to accommodate workers with disabilities.

Graffam et al. (2002) calculated employer rated costs and benefits associated with workplace

modifications and changes to staff training and supervision through employing a person with a disability (including a learning disability). This showed that of 2,024 employer records of financial effects of accommodations, 65% rated these to be cost neutral, 15% identified an overall financial cost and 20% identified an overall financial benefit. Overall, benefits exceeded costs, with a majority of modifications being cost neutral. The authors note that: *"Whenever considering employer benefits and costs of employing a person with a disability, it is important to take into account more than the productivity and reliability of the individual employee, which is generally good. It is also important to take into account more than the effects on workplace conditions, staff training, and supervision, which are typically quite positive"* (p257).

Goldstone and Meager (2002) have looked at the differences between accommodation costs for new recruits and for the retention of existing staff. They found that costs for existing staff were a little higher but still not excessive. For recruitment, 70% of employers reported no direct cost of the accommodation and only 11% reporting a cost of over £500. For retention, 55% of employers reported accommodations at no cost, with 27% reporting a cost of over £500.

Additional data confirms that the "reasonable adjustments" required by people with a learning disability specifically are relatively low cost. Olson, Cioffi, Yovanoff and Mank (2001) identified the most common accommodations needed by people with a learning disability to enter employment to be: extra attention (36% of employers); a job coach (26.8%); longer to do a job (13.4%); flexible hours (8.9%). These are generally low cost employer responses when compared with premises adaptations and physical equipment. Job coaching can be a more expensive adaptation but in the UK, in many circumstances, the provision of a job coach can be paid for through the Access to Work scheme, with varying levels of employer contributions. Needels and Scmitz (2006, p115) reflect that employers appear to be more willing to absorb the costs of workplace aids and adjustments rather than to allow flexible work practices. They note also that encouraging employers to be more flexible would not only benefit people with a disability but would also be likely to benefit non-disabled employees.

Conclusion
The costs of workplace accommodation are generally not excessive for people with a disability generally, many being cost neutral. The nature of accommodations for people with a learning disability tend to be lower because of the nature of their support needs. Employers report that often the financial benefits of employing a person with a learning disability will exceed the costs of any reasonable adjustments/accommodation. In the UK the Access to Work scheme is available to offset the cost to the employer of putting in place reasonable adjustments. It would seem that the benefits of providing flexible routines and working practices to accommodate people with a learning disability may be helpful to the wider workforce and promote more cohesive teams that employers seem to value that we have noted in previous sections.

4.3 Health and safety risks

There are common concerns among employers that people with learning disabilities are less likely to follow health and safety rules and as a result more likely to have accidents, or cause accidents that effect other staff or the public, leading to direct costs to overcome damage or increased insurance premiums for the company. Agran and Madison (1995) note that a work environment can be potentially dangerous if employees do not know how to prevent accidents. The researchers surveyed a sample of employers to identify potential causes of accidents and the types of injuries sustained by supported employees the focus was vocational rehabilitation

facilities and sheltered workshops. Results indicated that a sizeable number of people with a learning disability sustain injuries, with sprains or strains were the injuries reported most frequently. The most frequently reported causes of accidents were carelessness or improper positioning. Agran and his colleagues confirm that workers with disabilities are at least at the same level of risk as their non-disabled peers. Dewey (1996) suggests that training in health and safety can be helpful to reduce problems and represented a need in the US.

The shift to more community based facilities may have underpinned better health and safety performance. Blanck (1998) and Olson et al. (2001) have shown that workers with a learning disability do not represent a safety risk in the workplace. Harrison and Tomes (1990) found that roughly half of their employer group with an experience of hiring people with a learning disability report no problems in relation to safety and co-worker acceptance. Olson et al. (2001) identified that, for their employers, workplace safety was not an important factor in hiring people with a learning disability (52% of employers).

Richardson (1995) in a study of 20 employers showed that 75% of the respondents did not observe people with disabilities as more likely to have accidents on the job than people without disabilities. Graffam et al. (2002) looked at the comparative statistics for people with a disability/average non-disabled co-workers of health and safety episodes and found the average number of episodes to be much lower for people with a disability than for non-disable co-workers (0.37/2.24). Graffam et al. (2002) calculated the costs associated with these health and safety episodes at around a third the cost for disabled people ($64/$180). Worker compensation subsequent to an accident was also lower for people with a disability (0.2/0.81) and much lower when the actual costs are factored in ($82/$1564). They calculated any accumulated insurance costs from accidents and health and safety violations and again this was lower for people with a disability than for non-disabled co-workers ($40/$826). Having generated data from records as well than estimates, they found that people with a disability provided a net saving to employers through better attendance, good health and safety adherence, and staying longer in the job.

Further costs can come from employees having accidents at work, with resulting insurance claims, potentially leading to raised premiums for worker insurance. This cost can be calculated in respect to people with a learning disability and compared to claims by non-disabled comparators. Research has shown that there is no significant difference in health and safety incidents between people with a learning disability and non-disabled worker. Looking purely at costs, Cimera (2009) showed that workers with a learning disability had no accidents in his study, the same as for non-disabled comparators. Research also shows that employing a person with a learning disability does not result in an increase in health insurance rates or workers' compensation claims (Blanck, 1998; Olson et al., 2001; Shafer et al., 1987).

Lysaght et al. (2011) also explored injury incidence and patterns a for workers with intellectual disabilities over an 8-year period. The study carried out a retrospective analysis of workplace insurance claim records for workers with and without disability in a Canadian social enterprise supplying work crews to manufacturers and packagers in the local community and running its own industrial packaging company. Workers with intellectual disability sustained fewer injuries and experienced fewer absences due to injury than workers without disability. This showed that lost-time injury rates for this business were not significantly different from those reported by other employers. The full-time equivalent numbers studied were 255 FTE workers with a learning disability, and 320 workers without a learning disability. Over the period, 36 injuries were claimed by workers without, and 9 by workers with, learning disabilities, 3.5/100 FTE

worker with learning disabilities and the rate for contract workers was 10.3/100 FTEs, a significantly difference. The comparable "lost-time injuries" (where time-off was required) were 0.4% lost-time injury per FTE worker with, and 2.8% without, a learning disability. The authors note that the injury rates reported in this company were not substantially different from other counterparts in the same industry, allowing them to assume that workers with learning disabilities would be at no higher or lower risk in this company than in others performing the same type of work.

Conclusion

Workers with a learning disability do not seem to represent a greater safety risk in the workplace than their non-disabled co-workers. In the wider community of people with a disability the risks of health and safety breaches are again low. While employers tend to raise concerns over the likely health and safety performance of disabled people, particularly those employers without experience of employing people with a learning disability, and that their concerns seem to be inflated. It is important to assist employers in understanding that people with a learning disabilities do not represent a significant risk or additional cost if they are employed through sensible support processes.

5. Employer views of the support they need to employ people with a learning disability

It is important to stress that many of the studies show outcomes in the context of supported employment agencies (or the equivalent) providing employers and workers with key services. Employers are unlikely to experience the best outcomes from people with a learning disability without this support. Evidence suggests that employees with a learning disability are more likely to receive higher ratings of their work performance when employers perceive a good job-employee match (Gates, 2000; Lagerveld et al., 2010). Smith et al. (2004b) found that employers rated workers with an intellectual disability as satisfactory when they met job expectations.

Sitlington and Easterday (1992) reported that employers would be more likely to employ people with a learning disability if they had on-going availability of a person to call for assistance and they have the availability of a person for on-site training. Kregel and Unger (1993) found that employers valued supported employment and job coach support, reporting that *"from the employer's perspective, supported employment is viewed as a program that capitalizes on the strengths of workers with disabilities and is easily integrated into the workplace. Furthermore, the presence of the job coach at the worksite is viewed by the employers as a positive experience."* (Kregel and Unger, 1993, p22)

In order to achieve successful performance on the job, several elements are necessary; the worker with a learning disability must be matched to the job to ensure that his or her skills, interests, and needs are satisfied and that work performance is satisfactory to the employer (Chicochio and Frigon, 2006). There must also be adequate support to assist the worker in performing the job and to help them to engage actively into the social life of the workplace. Scheid (2005), in a study of 117 employers, reported that their employer respondents thought that using job coaches, or having disability professionals provide assistance to them and employees, to be the most helpful way to assist them to employ more people with a learning disability.

Conclusion

To get good outcomes, employers need good supported employment and supportive government policies, such as for Access to Work availability. While it is not impossible for people with a learning disability to find and get a job, and for a good employer to provide the support they might need independently, the overall employment rate figures suggest that it is rare. Good supported employment remains a rare commodity in the UK. If employers are to realise the benefits of employing people with a learning disability then job coach supported employment need to be more widely available. They are needed to deliver the advocacy, job matching and tailored training that employees need, and to assist employers with the advice and on-going point of reference that they report as being so valuable to their efforts in creating a diverse workforce.

Conclusions

Employers face a difficult set of decisions in employing people with a learning disabilities. Employers must consider their company skill requirements, their staff turnover rates and associated costs, costs of workplace "reasonable adjustments", flexibility and constraints in their ability to change key production processes, supervisor and co-worker considerations, customer reaction, legal requirements under the Equality Act and other relevant legislation, a corporate social responsibility agenda and their own existing experience of hiring people with a learning disability. Added to this are then many myths about the employment abilities of people with a learning disability. Employers need a business case to employ people with a learning disability- anti-discrimination legislation is alone not enough. This is as it should be. Legislation, and the available of appropriate funded support, helps to level the playing field between competing workers. However, employers need good workers who can take their place within the company on merit rather than through any sense of charitable action, and they need to be convinced that people with a learning disability are valuable workers.

In advocating for a greater role for people with a learning disability in the workplace we find ourselves disadvantaged by the lack of an extensive research literature on the financial costs and benefits to employers of employing people with a learning disability. The drive from equality legislation has led to a focus of disability more generally than people with a learning disability of other specific disabilities, and this has led to much generic research. However, from this review we do find that we have enough information to flesh out a business case for employers for the employment of people with a learning disability.

We cannot say that all people with a learning disability will make perfect workers in a wide range of jobs. This is true for all people. People with a learning disability are individuals they will fit into particular jobs and with particular employers better than others. The key to their employment is, therefore, in understanding their talents and support needs and finding the correct combination of employer tasks, work environment and working culture - in effect we need to find jobs for people and not people for jobs. People with a learning disability can learn complicated tasks and working processes, but they can do this most effectively if they are taught on the job. This requires a particular support model if the enterprise is to be successful- job coach supported employment. We have seen that employers have more concerns about employing this client and it is helpful that supported employment as an approach that recognises that employers also need significant help to welcome in a person with a learning disability. Most importantly, we do have enough useful data to show that in many areas people with a learning disability deliver valuable work performance and can be valuable employees. With the right support and job matching, people with a learning disability can meet employer criteria for work. This is a very important message that we need to share, particularly when there are calls to reduce the National Minimum Wage for people with a learning disability in an attempt to get more of them jobs. Being a worker that can do the job well is a better business proposition that having a poor worker in the company for a cut rate wage. This requires the right sort of support for employer and employee, not a sub-minimum wage offer.

We know that some people may need more input from supervisors and take a little longer to learn a job. This might seem to be a recipe for a person not getting a job. However, we have also found that employers are willing to provide this additional time because they are able to obtain reliable, dedicated employees, increased workforce diversity, and maintain a positive image of corporate social responsibility through being flexible.

The data we have confirms that people with a learning disability generally do stay in work longer, are sick less and are reliable time-keepers. This is powerful employment card as people losing or leaving jobs costs employers significant sums. The combination of being reliable and staying in a job longer, combined with estimates of what it costs to find, interview, recruit and train new staff can lead to significant employer savings. This a strong reason for employing people. Further, our research reveals that workers with a learning disability help promote good relationships with, and between co-workers, they are loyalty to the company, a characteristic valued most by employers. When in employment people with a learning disability appears to add significant value to the company by increasing morale, increasing productivity among others, improved attitudes and greater diversity. This is over and above any direct contribution through work performance itself and can help a company's bottom line. It is these wider benefits to the employer that can make such a placement worthwhile to an employer, especially where greater supervision and training are required elsewhere.

The public appear to be positive about company efforts to include people with a disability as workers. This fits in well with modern goals of corporate social responsibility and company brand image. Employers do report improved public image and enhanced diversity as potential benefits of hiring workers with disabilities generally and people with a learning disability can help employers in this area. and this seems to extend to people with a learning disability. Even without a lot of clear cost benefits data on this issue, it seems clear that the public is positive about efforts to include people with a learning disability and has benefits for employers.

Employers do worry that employing a person with a learning disability will cost them significant through providing workplace accommodations. The reality is that many "reasonable adjustments" are cost neutral. The nature of accommodations for people with a learning disability also tend to be lower because of the nature of their support needs, which are more likely to be the use of a job coach, changes in routines or having some flexibility in the way they work. The UK's Access to Work scheme is a valuable asset, helping us to help employers overcome any fears of costly accommodations. available to offset the cost to the employer of putting in place reasonable adjustments. The cost of accommodations should not remain a significant barrier to people with a learning disability entering work.

Another significant concern for employers is that people with a learning disability will be unsafe in work, injure themselves or others, and raise the costs of the employer in insurance premiums, claims and in reputational damage. Our data shows that workers with a learning disability do not represent a greater safety risk in the workplace than their non-disabled co-workers. In fact, the evidence we have presented suggests that they are less of a risk that non-disabled co-workers. They do not cost employers more in insurance and claims. It will be important for us to convince employers that people with a learning disabilities do not represent a significant risk or additional cost if they are employed through sensible support processes.

It is important to underline that much of the good outcomes we have reviewed in this paper is underpinned by evidenced based support practices. It is no accident that we have such low employment rates. We have not had the right support systems in place to achieve better one. It is a mistake to see the employer as any kind of primary barrier to people's employment. Employers just want good workers and seem willing change their procedures if that will get them. Employers and people with a learning disability need good supported employment and supportive government policies, to be able to deliver good jobs for people. If employers are to realise the benefits of employing people with a learning disability then job coach supported employment needs to be more widely available.

We know from the data reviewed here that once we employers have the experience of employing people with a learning disability, they are likely to have a significantly more positive view of workers with a learning disability going forward. This is the kind of virtuous circle that we need to finally jump start our terribly low employment rate for people with a learning disability and to give them a significant additional stake in society.

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