



# **Place, Train and Sustain: Addressing Physical and Neuropsychological Disabilities in the Workplace**

**Final Report**

**4<sup>th</sup> February 2011**

**Section 64 Project  
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# Place, Train and Sustain: Addressing Physical and Neuropsychological Difficulties in the Workplace

## 1 Introduction

- 1.1 The 'Place, Train and Sustain' project is a Department of Health funded project administered by the United Kingdom Acquired Brain Injury Forum (UKABIF) and undertaken by the Momentum (formerly Rehab UK) Vocational Rehabilitation Service.
- 1.2 The Momentum Vocational Rehabilitation Service provides supported vocational rehabilitation to adults aged 16 years or over who have an Acquired Brain Injury (ABI). Acquired Brain Injury is '*a non-degenerative injury to the brain occurring since birth which includes traumatic brain injuries, such as open or closed head injuries, or non-traumatic brain injuries, such as those caused by strokes and other vascular accidents, tumours, infectious diseases, metabolic disorders (e.g. liver and kidney diseases or diabetic coma), and toxic products taken into the body through inhalation or ingestion*' (UKABIF, 1999).
- 1.3 The three year project ran from April 2008 to March 2011 with data collection and analysis ending in January 2011.
- 1.4 The overall objective of the project is to investigate whether vocational outcomes for brain injured adults can be improved by the Momentum's Brain Injury Vocational Rehabilitation Service adopting a 'Place and Train' approach to vocational rehabilitation instead of the 'Train and Place' model which has dominated service delivery to date. The 'Train and Place' model is characterised by a primary emphasis on assessing and intervening with the physical and neuropsychological effects of the person's brain injury within the vocational rehabilitation centre. However within the 'Place and Train' approach the focus is upon directly assessing how any residual physical and neuropsychological effects of brain injury disable the individual within the workplace and, in particular, in regard to their specific work duties.

## 2 The Evidence Base for a ‘Place and Train’ Approach to Vocational Rehabilitation after Acquired Brain Injury

- 2.1 Research evidence for the efficacy of a ‘Place and Train’ approach to the vocational rehabilitation of brain injured persons began to emerge in the 1990’s, primarily from North American rehabilitationists such as Wehman and then Haffey and Abrams.
- 2.2 Wehman and his colleagues at the University of Virginia highlighted that the then traditional ‘classroom’ approaches to brain injury vocational rehabilitation, as practised by such rehabilitationists as Ben-Yishay in Israel (Ben-Yishay *et al.* 1987) and Prigatano in USA (Prigatano *et al.* 1984) emphasised remediation of cognitive, behavioural and emotional difficulties within the rehabilitation centre rather than the workplace. Wehman *et al.* (1988) convincingly argued that there was little evidence that such classroom approaches enabled brain injured persons to generalise their newly learnt skills to their place of employment.
- 2.3 Wehman *et al.* (1990) therefore developed the Supported Employment approach to vocational rehabilitation. This was characterised by a Job Coach providing rehabilitation within the work environment from the time of placement until the client’s work performance stabilises (defined as the client needing Job Coach support less than 20% of time). Within Wehman’s Supported Employment approach the role of the Job Coach is wide ranging. It encompasses one-to-one on-site training of the client; vocational counselling and support of the client as well as skills training and co-working with colleagues. Within Wehman’s framework the Job Coach also assists the client with job searching, job applications/interviews, employment induction and travel.
- 2.4 The published work on Supported Employment makes clear that the approach commonly used a range of work place interventions including behavioural training; cognitive compensation; skills training; social adjustment and environmental adaptation. Examples of behavioural training mentioned were anger management and assertiveness training. Cognitive compensation work included involving both clients and their work colleagues in the development and implementation of effective strategies to circumvent client difficulties in such areas as distractibility, verbal memory and problem solving. Most of all Wehman’s work appears to emphasise the importance of skills training. He refers to examples in both occupational (e.g. training in telephone skills in administrative work) and educational contexts (e.g. training in note taking and revision skills).

Importantly, Supported Employment also recognises the need to assist the client to adjust interpersonally to the expectations and culture of the work environment. In addition Supported Employment demonstrates to employers the productivity gains that can be achieved through reasonable adaptations to the physical environment of the workplace and /or the client's job specification.

- 2.5 The Supported Employment Model (Wehman et al, 1988 & 1990) recognises the importance of matching the individual's abilities and interests to the job demands when placing the person in employment or establishing a work placement. It also stresses that ongoing assessment and intervention within the workplace, involving the client and their employer/ colleagues, is vital to optimise both the client's vocational outcome and the likelihood of that outcome being sustained.
- 2.6 An evaluation of the Supported Employment Approach, based on 43 people with severe traumatic brain injury, found that over 70 per cent were competitively placed in employment at six months (Wehman et al., 1993). Later in an analysis of interventions and costs associated with using the Supported Employment Approach with 73 individuals with severe traumatic brain injury Wehman reports an average of 245 hours of intervention over an average of 18 weeks to achieve job stabilisation, plus an average of 2.24 hours per week of support to enhance job retention over the first year, at a total cost of \$10,189 (Wehman et al.,2003).
- 2.7 Haffey and Abrams, contemporaries of Wehman, working at the Sharp Memorial Rehabilitation Centre in San Diego, developed a specialist 'Work Re-entry Program (WRP) for survivors of moderate or severe traumatic brain injury. The Work Re-entry Program included the following:
- Vocational assessment and job analysis
  - Voluntary and paid work placements
  - On-site Job Coach Support involving two visits per week into the work place for a maximum period of two months.

If required individuals were also provided with off-site individual or group work support focusing on their psychological and occupational adjustment. WRP outcomes included full/part time paid employment; ongoing supported employment; therapeutic earnings and voluntary work. An evaluative study of 130 programme participants found that 68% achieved one of these outcomes. This compares with 38% of a control group which received out patient rehabilitation only and which did not differ significantly in terms of age, educational or occupational background or injury variables (Haffey & Abrams, 1991). 71% of participants were found to have sustained a positive outcome at one year

follow up. A cost effectiveness study of the program over a five year period found that the average cost per participant as \$4377. The study also found that, on average, this cost was recouped in just 20 months through savings in state benefits and taxes paid.

- 2.8 In the UK vocational rehabilitation services specifically tailored to persons with acquired brain injury have only developed within the last 20 years. A number of pioneering studies showed that prior to this brain injured people either received no vocational rehabilitation or vocational rehabilitation which did not take into account their many and varied needs. These studies generally found that with this inadequate level of provision around 30 per cent of people with a severe or very severe injury managed to return to work (Weddell et al, 1980; Brookes et al, 1987; Johnson, 1989).
- 2.9 For example Johnson (1989; 1998) evaluating the effectiveness of Manpower Services Commission schemes followed up 64 people with very severe traumatic brain injuries at three years six months and ten years post injury. At initial follow up 38% were employed full time; 3% were employed part time and 3% were in education. The first follow up found that positive vocational outcomes were associated with support and training of the individual in the workplace in the first 2 to 3 years after their brain injury. At further follow up at 10 years post injury of 62 of the original subjects there was no significant change in occupational status from that found at initial follow up (34% employed full time; 10% employed part time and 0% in education). Johnson (1998) therefore concludes that it is the provision of support and training to the brain injured person and their colleagues, within the person's workplace and within the first two years post injury, that primarily determines the long term employment prospects of the very severely head injured.
- 2.10 With regard to stroke, Kersten *et al.* 2002 found that only around 30% of those with cerebro-vascular accident of working age continue to work. A survey by the charity *Different Strokes* of 3,000 younger stroke survivors found that 75% of respondents wanted to return to work. As part of the same survey a smaller sample of respondents gave their reasons for not having returned to work as follows: *can no longer do previous job* (62%); *not fit enough to work* (60.7%); *afraid of losing benefits* (31.9%); *can't drive / use public transport* (30.6%); *forced to retire by employer* (18.5%). The survey found that 42% of 503 respondents who expressed a wish to return to work had worked since their stroke (Different Strokes, 2006). The National Stroke Strategy (2007) reports that every year approximately 110,000 people in England have a stroke and that 25 % of strokes occur in people who are under the age of 65.

- 2.11 A postal survey in 2000 by The Encephalitis Society ([www.encephalitis.info](http://www.encephalitis.info)) based on 400 returned questionnaires found that almost twice as many adults were unemployed after encephalitis as were prior to the illness. Two-thirds of those who were in employment before their illness reported that they were not working at the time of the survey (Dowell, E., Easton, A., & Solomon, T. (2000). *The Consequences of Encephalitis*. The Encephalitis Society). A later postal survey of all adult members of The Encephalitis Society which received 717 responses, found that 43.8% of respondents felt they could not undertake paid work as a result of their encephalitis. The study also found that 73.5% of adults with encephalitis considered that their earning potential had been affected by the condition. (Stapley, Atkin and Easton, 2008).
- 2.12 Tyerman, Tyerman and Viney (2008) report that by 2003 there were 13 specialist brain injury work preparation services across the UK contracted by the Department of Work and Pensions. The majority of these services now provide comprehensive programmes which include vocational assessment, work preparation, voluntary work trials and supported work placements. The focus of the majority of these specialist programmes being the rehabilitation of the brain injured person's occupational difficulties within the work environment.
- 2.13 In recent years the published employment outcomes from such services have shown that they have been able to double the vocational outcomes of severely brain injured persons reported by the studies in the 1980's.
- 2.14 For example the *Working Out Programme*, provided within the NHS since 1992, predominantly for severely brain injured persons who cannot return to their pre-injury employment, reported 2007 cumulative outcomes for paid employment or vocational training of 64% this breaking down into full time paid employment 28%; part time paid employment 25%; supported employment 4% and vocational training 7% (Tyerman & Tyerman, 2008). An earlier evaluation of the programme found that outcomes were well maintained at one and two year follow up (Tyerman & Young, 2000).
- 2.15 In the independent sector Rehab UK reported 72% positive vocational outcomes for 232 severely brain damaged persons consecutively referred to its vocational rehabilitation centres in London, Birmingham and Newcastle between 2000 and 2002 seeking either a return to their previous employment or to alternative employment. Sample composition was 62% traumatic brain injury; 22% cardiovascular brain injury (predominantly stroke and brain haemorrhage); 4.3% brain tumour; 4.3% other neurological conditions (mainly encephalitis and meningitis) and 2.6% hypoxic brain injury. This overall positive outcome rate breaking

down into: 41% paid competitive employment; 16% voluntary work and 15% mainstream education or training (Murphy et al, 2006).

- 2.16 The 2006 Rehab UK vocational outcome study was based on a traditional approach to vocational rehabilitation. This involved Job Coaches sourcing, overseeing and monitoring client's work placements in real world employment settings. The Job Coach's role also extended to encouraging client's to use compensatory strategies to overcome physical and neuropsychological difficulties impacting upon their work as well as liaising with employers/colleagues to implement 'reasonable adjustments' (Disability Discrimination Act 1995) to the work place environment and duties to enable the client to competently fulfil their job role. At the time of the 2006 study however the vast majority of the assessment of the client's physical and neuropsychological difficulties post injury was undertaken within the then Rehab UK vocational rehabilitation centres. There was limited assessment of the impact of these effects upon the client's job performance from direct observation in the work place.
- 2.17 The primary aim of the present project is to investigate whether the vocational outcomes attained in the 2006 Rehab UK study can be improved upon by adopting a '*Place and Train*' approach within Momentum's vocational rehabilitation practice. Here, the primary emphasis is on assessing the impact of any physical, cognitive, emotional and behavioural sequelae of the brain injury 'on the job'. The aim is to achieve this through the use of a new observational measure specifically developed for this purpose. It is anticipated that the results of the workplace based observational measure will then be used to identify the main potential barriers to successful work placement completion. Moreover it is expected that it will also inform the focus of the Momentum intervention within the work placement.

### **3 Innovative Elements of the Project**

- 3.1 It is considered that the project has a number of innovative elements. Firstly the focus on investigating whether concentrating assessment and intervention within the work place (i.e. Place and Train Model) is able to produce improved vocational outcomes for service users with an acquired brain injury. To address this central question the results of the project will be evaluated against the results of the Rehab UK 2006 study which was based upon a more 'traditional' approach to vocational rehabilitation. This traditional approach emphasised intervening with service users' acquired physical and neuropsychological difficulties within the rehabilitation centre. Following this their skills profile would be matched to work placement opportunities (i.e. Train and Place Model).

- 3.2 In line with the above focus on exploring the potential benefits of a 'Place and Train' approach to vocational rehabilitation with individuals who have sustained brain injury the project produced two parallel documents. The first '*Returning to Work After A Brain Injury: A Guide for Employers*' focuses on informing employers of how they may address the needs of employees experiencing the persistent effects brain injury. The second document '*The Momentum Guide to Job Coaching within Acquired Brain Injury Vocational Rehabilitation*' was produced for Momentum job coaching staff as a training guide to the 'Place and Train' approach to brain injury vocational rehabilitation.

## **4 The Overall Objective and Specific Aims of the Project**

- 4.1 The overall objective of the present project is to investigate whether vocational outcomes for individuals with brain injury can be improved by Momentum adopting a 'Place and Train' approach to vocational rehabilitation.
- 4.2 In addition to the above broad objective the project sets out to achieve the following much more specific aims:
- 4.2.1 Proportionately 20% more clients will achieve a positive employment, education or training outcome from the 'Place and Train' approach compared to the vocational outcomes achieved in the previous study of the efficacy of the Momentum vocational rehabilitation service (Murphy et al, 2006).
- 4.2.2 Relative to the results of the 2006 service evaluation participants in the present 'Place and Train' project will on average achieve a positive vocational outcome at least 6 weeks earlier resulting in an appreciable cost saving in provision of the Momentum vocational rehabilitation service.
- 4.2.2 Participants of the project, together with their employers/work placement providers will demonstrate high levels of satisfaction with the 'Place and Train' vocational rehabilitation provided by the Momentum Service.

## **5 The Momentum Brain Injury Vocational Rehabilitation Service**

- 5.1 The Momentum Service is designed to include elements of other well established vocational rehabilitation services which have demonstrated their efficacy through publishing their outcomes in the brain injury

literature. The development of the Momentum Service has been influenced by both the milieu-orientated rehabilitation model of Ben-Yishay (Ben-Yishay et al 1987) and the Supported Employment Model (Wehman et al, 1988).

5.2 The Momentum Service is based on a psychosocial model of vocational rehabilitation and the interdisciplinary teams of Job Coaches, Rehabilitation Tutors and Assistant Psychologists are led by Chartered Clinical or Occupational Psychologists. The service is based at the Momentum Centres in Birmingham and Newcastle. The service operates an open referral system which includes self and family member referrals, as well as referrals from neurorehabilitation professionals, Disability Employment Advisers and General Practitioners.



### **The Momentum Birmingham and Newcastle Vocational Rehabilitation Teams**

5.3 Admission assessment for the Service is conducted by the Clinical / Occupational Psychologist through semi-structured clinical interview of the applicant and a close family member together with a review of any relevant medical records. To be admitted to the Service applicant must be aged 16 or over, be medically stable and be able to remain free of the effects of alcohol and non-prescription drugs whilst at the Momentum Centre and work placement. Applicants who are assessed to present an

unacceptable risk of physical harm to themselves or others are referred to neuropsychiatric services on the understanding that they can be re-referred to the vocational service once these issues have been successfully addressed.

- 5.4 The Service typically has 4 or 5 intakes of clients each year of between 8 and 16 clients. Each client entering the Service will undertake modules which reflect their individual needs. The size of therapy groups generally ranges between 6 and 12 clients.
- 5.5 The Vocational Service is delivered in two consecutive phases. An initial centre-based rehabilitation phase provided over a fixed term of 12 weeks (Element A). This is followed by a work trial phase (Element B) which is of open ended duration and involves service users undertaking work placements in real world work environments.
- 5.6 Element A, in keeping with the work of Ben - Yishay and his colleagues, emphasises group based rehabilitation to maximise the therapeutic effects of clients identifying their common consequences of brain injury and developing mutual support.
- 5.7 Element A comprises a number of group based modules designed to facilitate client's understanding of and adjustment to their brain injury. In addition group based interventions are specifically provided to help self-awareness of cognitive and social skills difficulties as well as of better recognition and management of increased stress, anxiety and depression after brain injury. Depending on the needs of the individual client Element A is able to provide IT skills training and assistance with basic literacy and numeracy as well as offering vocational guidance based upon the client's profile of abilities as demonstrated across the range of activities they have undertaken within the Momentum Centre. In addition to group based psychological work, individual sessions with qualified psychologists are also available to clients requiring such intervention to optimally manage their psychological brain injury related problems.



Clients involved in a team building construction exercise as part of their centre based vocational rehabilitation (Element A)



A Psychological Adjustment to Brain Injury session in Element A of the vocational service

5.8 The second component of the Service (Element B) follows the Supported Employment Model focussing on providing the client with ‘real world’ work placements. Element B is open to clients who have retained their pre-injury occupation (job retention) and to clients who have lost their pre-injury work, education or training on account of their brain injury and are looking for alternative vocational options. It should be noted that irrespective of whether the client is in a job retention situation or not, work placements are negotiated with employers on a voluntary basis so enabling clients to maintain their statutory unemployment and disability

benefit payments. For both job retention clients and clients seeking an alternative vocational option Element B aims to provide the individual with several consecutive work placements in order to assist them to come to realistic decisions about the vocational option most suited to their post injury pattern of abilities and disabilities. Generally work placements are arranged to last for between 6 and 12 weeks and are planned around a set of individualised goals agreed at the outset of the work placement between the client, the employer and Momentum. Usually a client will have somewhere between 3 and 6 individualised goals per placement. Throughout Element B clients continue to attend a Momentum centre at least one day a week between 10.00 a.m. and 3.00 p.m. to undertake focussed job searching, application and speculative letter writing and practice interview technique.



### **A client on an administrative work placement (Element B)**

- 5.9 Most clients will attain some form of employment, education or training outcome within Element B, either through a work placement, job application or a speculative approach. However some clients may successfully complete two or more work placements in a specific job role and receive positive references from the work placement provider but not secure an outcome. Such clients are deemed to be 'work ready' at such a point and enter the final phase of the service in which they continue to access the service for support with identifying and pursuing appropriate opportunities without undertaking further work placements.
- 5.10 Follow up support is available for up to 5 years after the clients' discharge from the Service. On discharge from the Vocational Service clients are informed of this entitlement. They are also informed that they should

contact the Service directly if they begin to experience any consistent difficulties in the work, educational or training outcome they have achieved.



**A client and their Job Coach meeting up on work placement (Element B)**

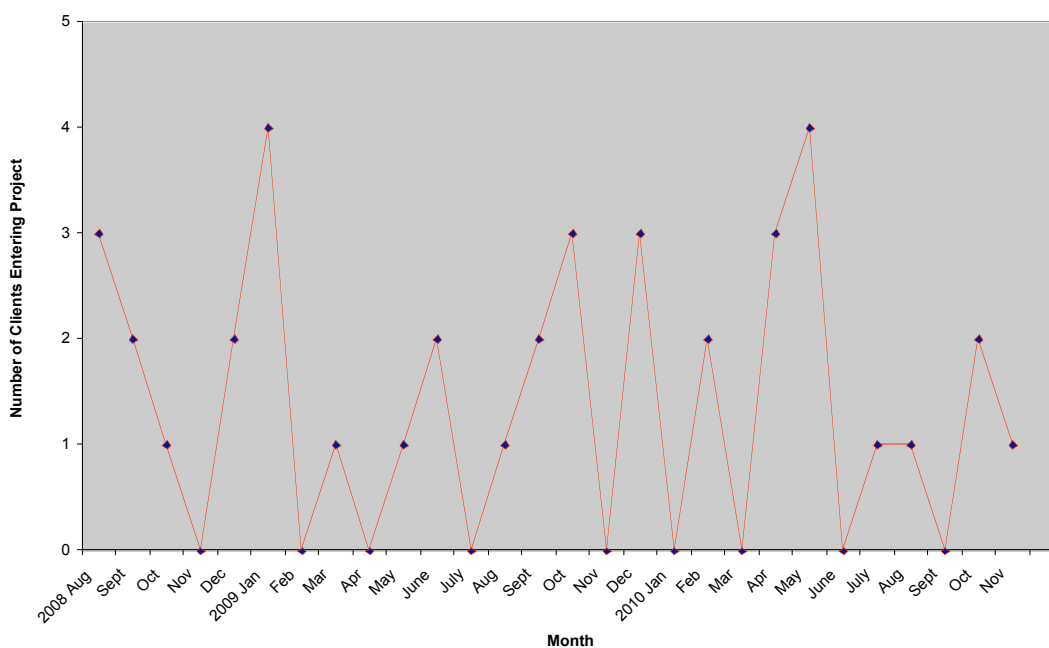
## 6 The Place, Train and Sustain Project

### 6.1 Project Participants

#### 6.1.1 Entry of clients into the project

Thirty-nine clients of the Momentum Vocational Rehabilitation Services in Newcastle and Birmingham were entered into the project during its three year duration. All clients were informed that if they chose to participate they would be entering a pilot project which required identification of, and intervention with, disabilities they demonstrated within their workplace. All participants provided written consent prior to entry to the project. The Birmingham centre entered 18 clients (14 male and 4 female) and the Newcastle centre 21 clients (15 male and 6 female). Graph 1 shows the entry of clients into the project between August 2008 and November 2010.

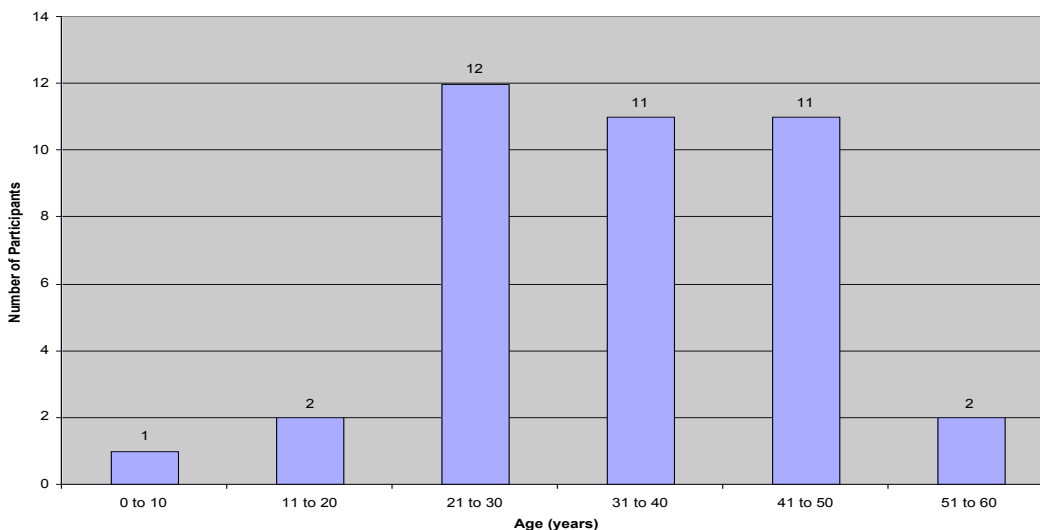
Graph 1: Development of Project Participation Between August 2008 and November 2010



## 6.1.2 Age of clients at brain injury

Chart 1 below summarises the age at which project participants acquired their brain injury. As can be seen 34 of the 39 participants (87.2%) sustained their brain injury between the age of 21 and 50 years. Only one participant acquired their brain injury as a child. This was a female client who had a medulloblastoma tumour surgically removed at the age of 10 years. Two participants, one female and one male, sustained severe traumatic brain injuries as a result of road traffic accidents at the ages of 14 and 16 years respectively.

Chart 1: Age at Brain Injury



## 6.1.3 Age of clients at entry to the project

Chart 2 shows the age of clients at the point they entered the project. The vast majority (90%) of clients were aged between 21 and 50 years old when they commenced the project. Three clients (7.7% of the sample) were aged 51 years or over when they entered the project, the eldest entrant being 64 years. All of these three clients had sustained a stroke within the preceding four years.

Chart 2: Age at Project Entry

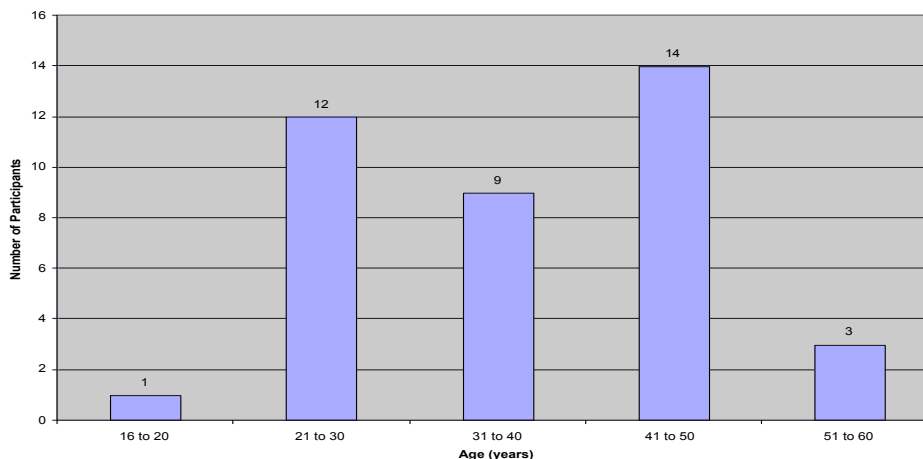
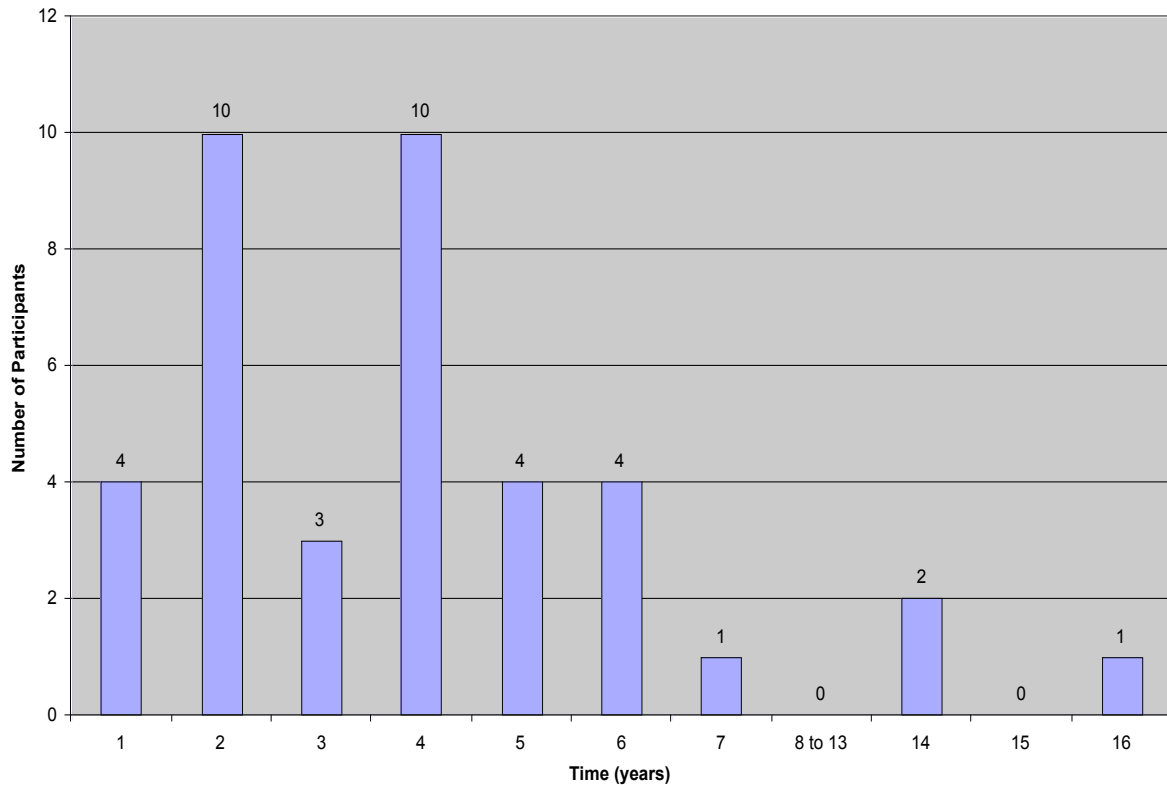


Chart 3: Time Post Injury at Project Entry



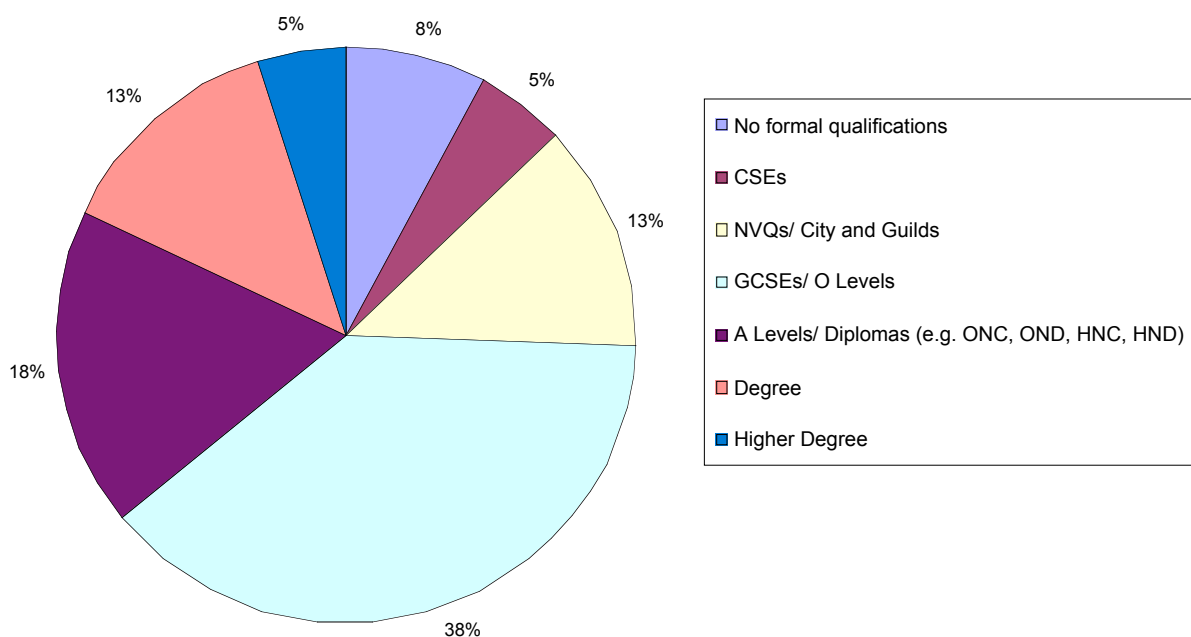
#### 6.1.4 Time Post Injury at Project Entry

Just over two thirds (69.2%) of the clients were within four years of their brain injury when they commenced the project. This proportion rose to 92.3% for project clients who had sustained their brain injury at some point within the preceding seven years. Of the three clients who entered the project after 14 years or more (see Chart 3 below) two had undergone neurosurgical removal of a brain tumour and the remaining client was referred by his employer for job retention in a relatively new post after having suffered a right hemisphere stroke 14 years earlier. All of these three clients had achieved educational qualifications at diploma or degree level prior to their brain injury, one client having successfully completed her degree after her brain tumour. Moreover all three had undertaken either voluntary or paid work since their brain injury but had not been able to sustain their positions.

#### 6.1.5 Highest Level of Pre-Injury Educational Attainment

As can be seen from Pie Chart 1 below 56% of project clients had attained qualifications up to and including GCSE/'O' Level (i.e. CSEs; NVQs ;City and Guilds; GCSEs/'O' Levels). However 8% of clients in the project had attained no formal qualifications prior to their brain injury. A degree or higher degree had been achieved by 18% of participants.

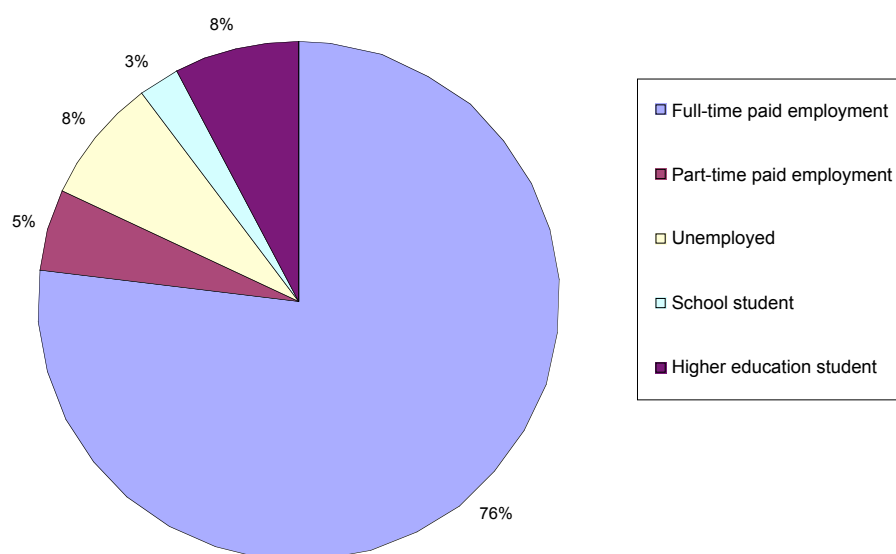
**Pie Chart 1: Highest Educational Attainment Achieved Before Brain Injury**



### 6.1.6 Pre-Injury Vocational Status

Pie Chart 2 below summarises the vocational status of the project clients at the time of their brain injury. It is noteworthy that 76% of the clients were engaged in full time paid employment at the time of their brain injury and that only 5% were undertaking part-time paid employment. Three clients were in higher education and one was still a school student at the time of injury. Eight per cent of clients were unemployed and claiming unemployment benefit when they suffered their brain injury.

**Pie Chart 2: Vocational Status Before Brain Injury**



The range of work and education that project clients were pursuing when they sustained their brain injury is summarised in Table 1 below.

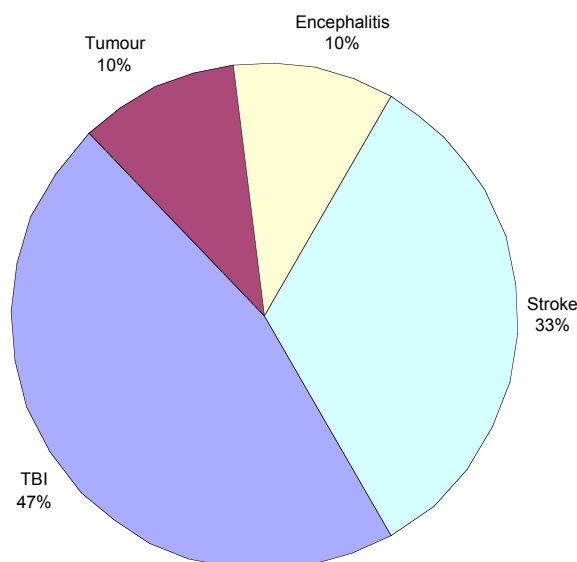
**Table 1: Participant's Pre-Injury Jobs and Courses**

Participant No.	Pre-Injury Job or Educational Course
1	Administrative Assistant
2	Contracts Director - Construction Industry
3	Head Chef - Armed Forces
4	Chemical Sales Manager
5	Water and Gas Mains Support Business - Self Employed
6	Unemployed - Previous work experience as a Tiler
7	School Student
8	Unemployed - Previously work experience as HGV Driver
9	Workshop Foreman
10	Inventory Clerk - Pharmaceuticals Industry
11	Customer Services Representative - Call Centre
12	Museum Assistant
13	Principal Environmental Protection Officer
14	Corporate Broker Insurance Industry
15	Quality Assurance Supervisor - Food Industry
16	Higher Executive Officer - Civil Service
17	Office Manager - Electrical Company
18	Retail Assistant & Self Employed Hairdresser
19	Higher Education – Degree Course in Visual Arts
20	Crane Driver
21	Unemployed – Previous work experience as Chef/Restaurant Manager
22	Senior Sales Assistant - Garden Centre
23	Retail Sales Supervisor
24	Retail Store Manager
25	Production Spot Welder - Car Plant
26	Carpet Fitter
27	Carpenter - Self Employed
28	General Assistant - Car & Scooter Hire Company
29	Cemetery Foreman
30	Production Manager – Car Industry
31	IT Project Manager/Analyst
32	Warehouse Administrator
33	Higher Education - HNC Civil Engineering
34	Senior Software Developer
35	Computer Repairs - Self Employed
36	Care Worker
37	Administrator - National Blood Service
38	Apprentice Electrician
39	HGV Driver

### 6.1.7 Nature and Severity of Brain Injury

Pie Chart 3 below show that nearly half (47%) of the project participants had sustained a traumatic brain injury (TBI). Of the 18 traumatic brain injury participants 14 sustained their brain injury from a road traffic accident; 1 from a fall; 1 from an assault; 1 from a work accident and 1 from a penetrating head injury. A stroke was the cause of the brain injury for a third of participants (33%) and of these thirteen participants three had experienced a haemorrhagic stroke. The remaining participants had sustained their brain injury through either encephalitis or brain tumour. All four brain tumour participants had had their tumour surgically removed, been medically stable for a minimum of three years and had a prognosis of medical stability prior to their entry to the project.

Pie Chart 3: Nature of Acquired Brain Injury in Project Sample



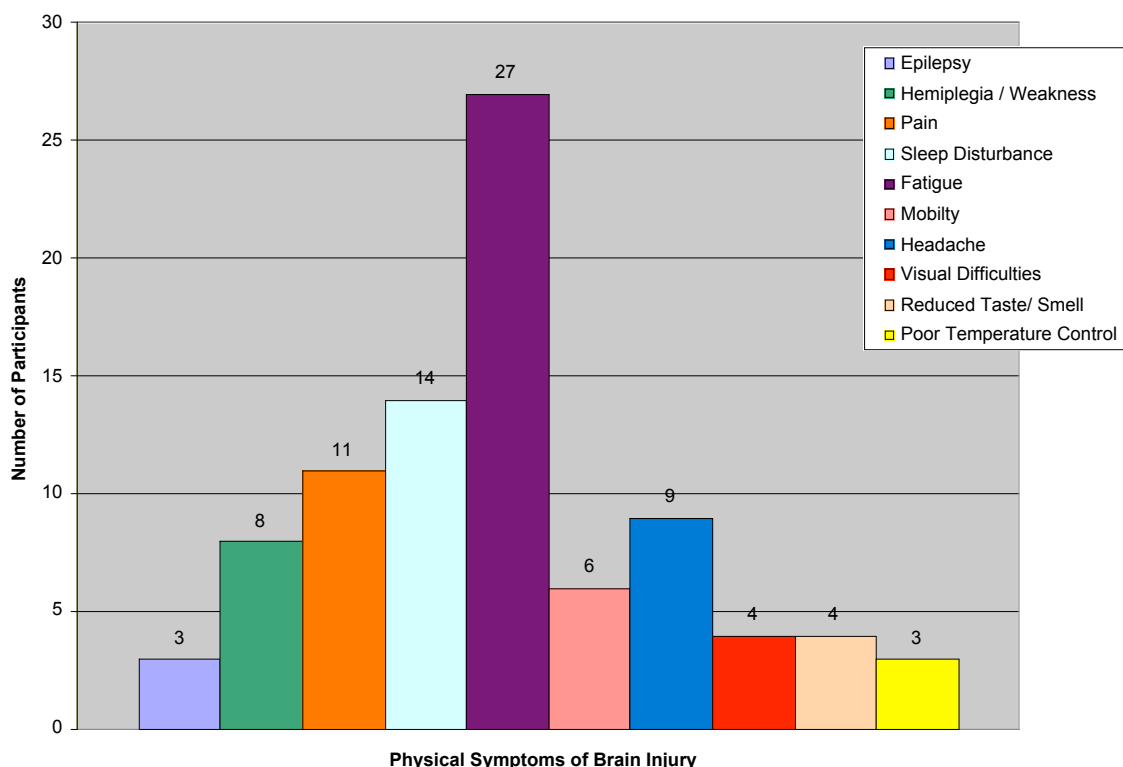
Severity of brain injury was classified by initial Glasgow Coma Scale score (Teasdale & Jennett, 1974) for those who had sustained a traumatic brain injury. From the available background medical documentation it was found that of the 18 traumatically brain injured participants 13 had sustained a severe brain injury and 5 a moderately severe injury. For participants with a non-traumatic aetiology the severity of their brain injury was gauged by the length of their hospital admission. With regard to the 13 participants who had suffered a stroke the duration of hospital admission ranged from 1 week to 7 months with the average duration being just less than 2 months. Average duration of hospital admission for the four encephalitic participants was 3.5 months (range 1 to 5 months).

Of the four participants who had had a brain tumour the length of hospital stay for one was unknown but the remaining three had been hospitalised for between 2 and 3 months.

### 6.1.8 Physical Symptoms

The prevalence of physical symptoms within the participant sample, as identified from clinical interview of the participant with a close family member and review of their medical notes, is shown in Chart 4. It can be seen that the most common residual physical symptoms within the group were fatigue, sleep disturbance, pain, headache and a reduction in the senses of taste and smell.

Chart 4: Prevalence of Physical Symptoms within Participant Sample

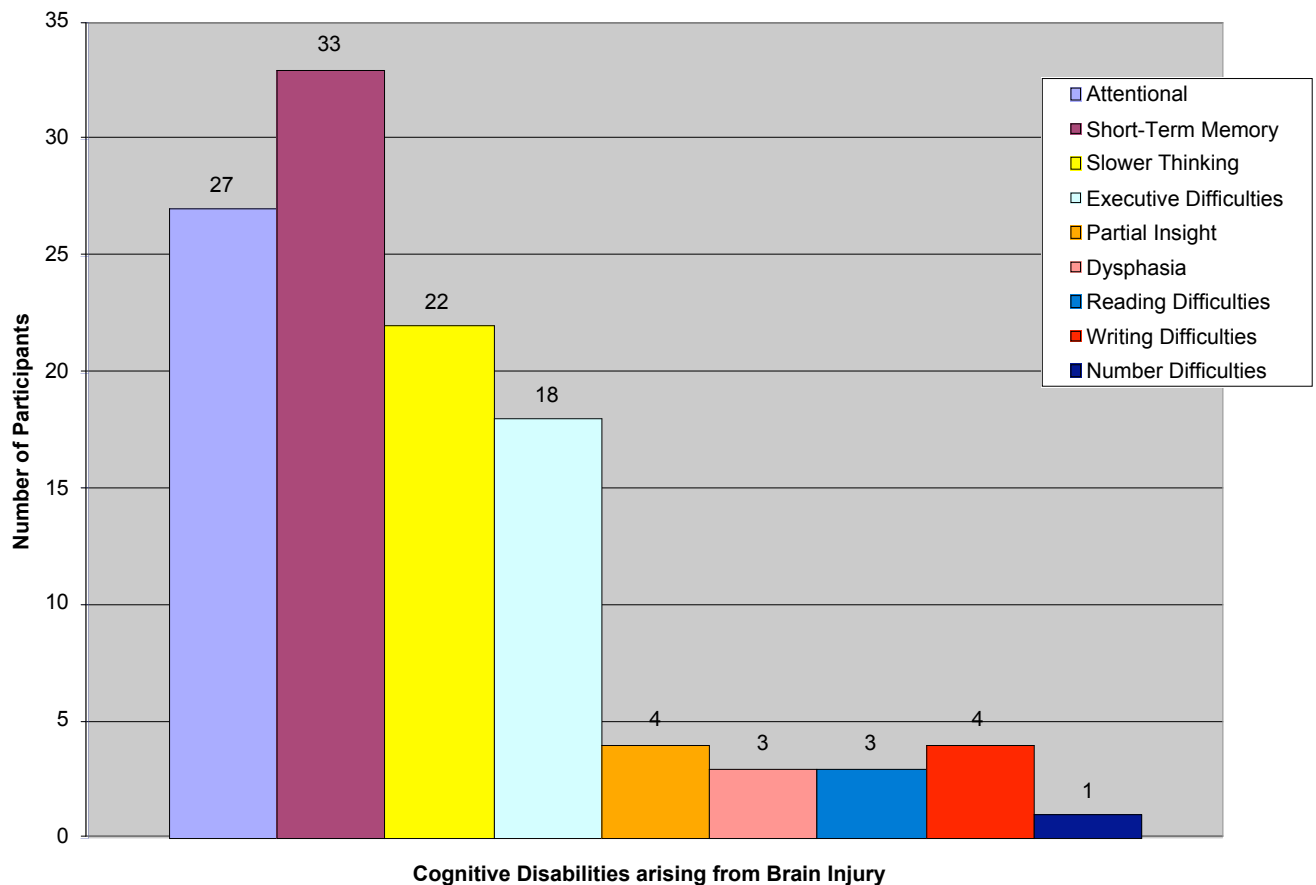


### 6.1.9 Cognitive Disabilities

Cognitive problems which were disabling everyday functioning at the time of entry to the project were assessed by clinical interview of the participant and a member of their family, together with a review of any psychometric assessments of cognitive abilities where these were available. The prevalence of cognitive disabilities within participants at their entry to the project is summarised in Chart 5. It can clearly be seen that the most frequently presenting cognitive disabilities relate to attention, short-term (recent) memory, slower thinking and executive (i.e. planning, organisation and problem solving) abilities. It is also worth noting that only 4 of the 39 participants were formally assessed to have

partial insight into their current brain injury symptoms and disabilities. The level of insight of each participant was assessed by comparing their self report of their current physical and neuropsychological symptoms with that of their close family member. On this basis only 10.3% were judged to have appreciable limitations in their self awareness (i.e. partial insight) as denoted by not reporting one or more of the three symptoms their family member reported as most frequent.

**Chart 5: Prevalence of Cognitive Difficulties within Participant Sample**

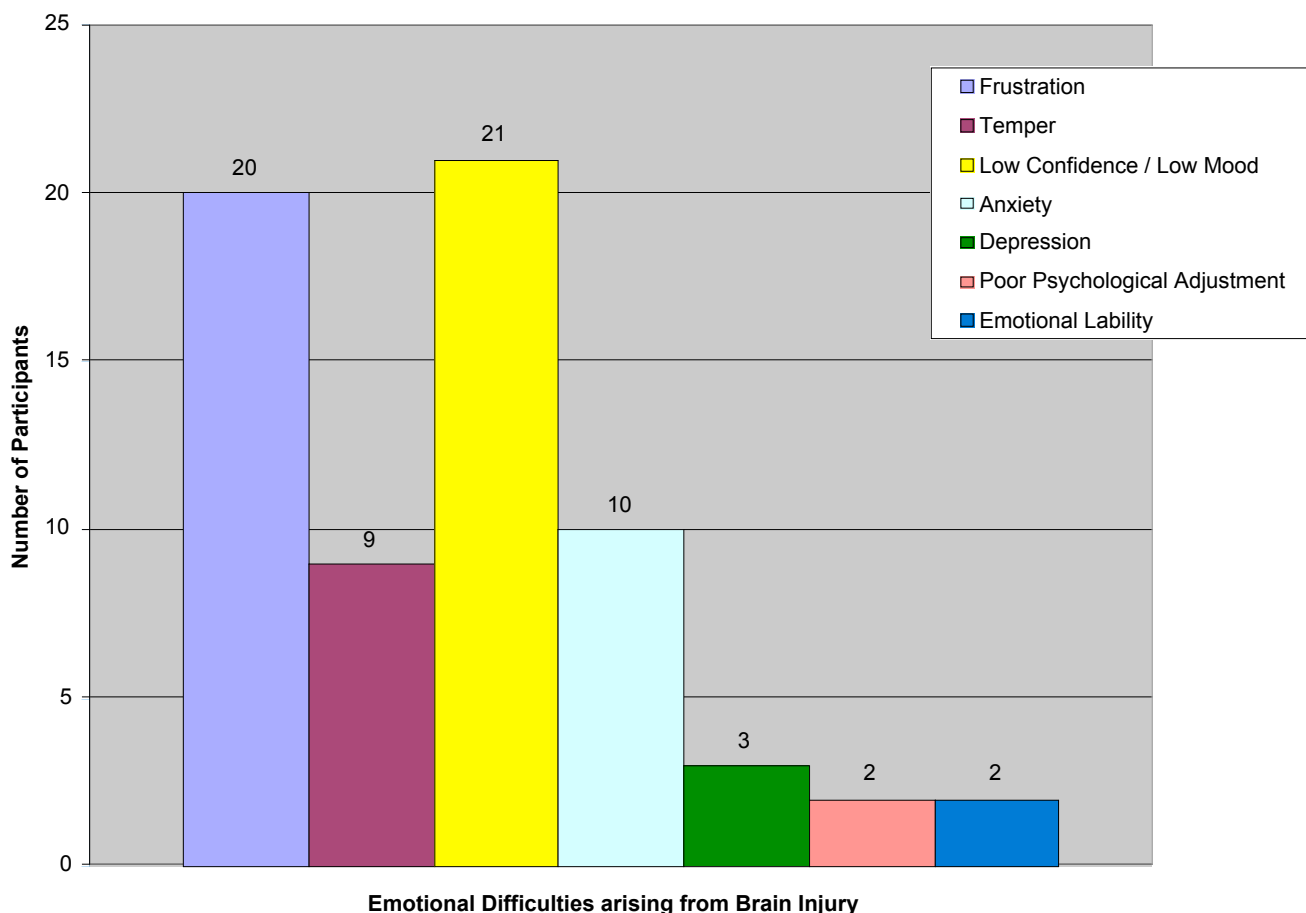


### 6.1.10 Emotional Difficulties

Chart 6 below shows the prevalence of emotional difficulties within the group of individuals entered into the project. Emotional difficulties considered to be primarily emanating from the brain injury were again assessed through client/family member clinical interview and review of the client’s background medical and neurorehabilitation notes rather than standardised measures. This is because standardised measures of emotional functioning are invariably limited to assessing current or recent emotional functioning rather than change in emotion following a trauma such as brain injury. Using this assessment process the emotional

difficulties most frequently reported were low confidence or low mood and frustration at activities they now found more difficult to do. Often associated with these difficulties were temper control problems (these invariably related to verbal expression of temper) and anxiety problems, usually generalised or social anxiety but occasionally involving panic attacks.

**Chart 6: Prevalence of Emotional Difficulties within Participant Sample**



It can be seen from Chart 6 that the frequency of clinical depression and poor psychological adjustment to brain injury are both found to be below 10 per cent. This is perhaps not completely surprising given that assessment of these issues was based on clinical interview of the participant and a close family member. However feedback from Momentum staff indicates that up to a third of participants requested individual psychological therapy sessions on account of depression and adjustment difficulties. This suggests an appreciable increase in these difficulties between initial assessment interview and completion of the 12 week centre based vocational rehabilitation phase. This emergence of depression and psychological adjustment difficulties within initial centre based rehabilitation may reflect further development of participant's

insight into the impact of their residual symptoms upon their work related abilities.

#### 6.1.11 Behavioural Changes

As already mentioned clients assessed as presenting an unacceptable risk of physical harm, either to themselves or others were referred to neuropsychiatric services rather than be admitted to the Momentum Vocational Service. Whilst recognising this it should also be noted that a small subgroup of clients entered the project with behavioural changes which, in their consistency and nature, would generally be considered (Judd, 1999) to represent behavioural syndromes secondary to frontal lobe damage. Two male participants presented initially with marked behavioural passivity characterised by poor, but not a complete lack of, initiation; partial insight and pervasive low mood. A further two male participants entered the project marked behavioural impulsivity involving consistent verbal and physical impulsivity; poor self monitoring of their own behaviour and associated agitation and poor temper control.

### 6.2 Assessment and Intervention with Project Clients

- 6.2.1 The early months of the project prior to August 2008 were largely devoted to developing the Momentum Work Placement Pack (WPP) (Appendix 1). The WPP was formed to ensure that all work placement documentation required by a Momentum Job Coach was collated in one pack. The initial administrative section of the WPP contains general information about the work placement; health and safety documentation; insurance cover confirmations, and Momentum / Work Placement Provider Partnership Agreement Forms. In addition the WPP contains all the documentation needed by the Job Coach and employer to assess, monitor and feedback progress regarding the client's performance over the duration of the work placement. Lastly the WPP includes the client's attendance records for the work placement as well as quality assurance questionnaires to enable both clients and employers to provide Momentum with confidential feedback on the standard of the Vocational Rehabilitation Service provided into the work place.
- 6.2.2 The vocational rehabilitation provided to project participants differed from that to other contemporary users of the Birmingham and Newcastle Services only in that the project participants received a comprehensive assessment within their work placement of the impact of any residual physical and neuropsychological symptoms on their work performance. From this direct observational assessment, the *Momentum Assessment of Workplace Behaviours* (MAWB), a primary potential barrier to the individual successfully completing the work placement was identified.

Then a specific job site intervention developed to address this likely barrier to the individual's progress. Service users out with the project, like project participants, had their work placements established through their Job Coach and placement provider completing the detailed and systematic process of the Momentum Work Placement Pack. However unlike project participants they did not receive a *MAWB* assessment or any specific work place intervention derived from the findings of this assessment. For both project participants and other service users the Momentum Job Coach would negotiate '*reasonable adjustments*' to the individuals work duties and their physical work environment if the Job Coach's assessment indicated this was appropriate with reference to the Disability Discrimination Act (Thurgood, 1999).

- 6.2.3 The *Momentum Assessment of Workplace Behaviours (MAWB)* was specifically developed for the project as an observational measure of participants functioning whilst undertaking their work duties within their work place. The *MAWB* was specifically designed to include subscales relating to physical, cognitive, emotional and behavioural functioning so as to be sensitive to the influence of ongoing neuropsychological symptoms, as well as physical symptoms, upon the brain injured person's work performance. It should also be noted from the rating scale used that the *MAWB* is constructed to identify both the individual's limitations and assets with respect to their workplace functioning. The rating scale used within the *MAWB* is adapted from that used by the Work Personality Profile (Bolton and Roessler, 1986a, 1986b). A copy of the *MAWB* can be found within the Momentum Work Placement Pack (Appendix 1).
- 6.2.4 The *MAWB* was completed by the Job Coach from direct observation of the participant undertaking the core duties required of their work placement. These core duties associated with the participants work placement were identified through completion of the Job Analysis section of the Momentum Work Placement Pack. Completion of the *MAWB* was undertaken within the initial fortnight of the participants work placement and typically necessitated the Job Coach making several visits to the work place to complete the observations.



**The Momentum Newcastle Job Coaches**

- 6.2.5 The findings of the *MAWB* observational assessment were then discussed with the full vocational team to identify the primary workplace disabilities revealed by the assessment. The vocational team discussion then identified the compensatory strategies and workplace adaptations that would most likely enable the client to circumvent the impact of their disabilities when performing their work roles and duties.
- 6.2.6 The Job Coach then discussed the primary workplace disabilities and the suggested targeted intervention with the client and the employer. At this initial three-way meeting the primary workplace disabilities and a workplace intervention to address them were agreed. The initial three-way meeting also agreed a time-framed goal or goals by which the effectiveness of the intervention could be evaluated. Within the project there was an emphasis on specifying participants' work placement goals in quantitative rather than qualitative terms where possible. This allowed any functional progress achieved by the individual within the placement to be more clearly measured.



### **On work placement in Element B of the vocational service**

- 6.2.7 A summary of participants' primary workplace disabilities, the interventions conducted and the progress achieved is provided in Table 2 in Appendix 2. It can be seen that within Table 2 the progress the participant achieved within their work placement is colour coded (blue indicating quantitative progress; green denoting qualitative progress and red no appreciable progress).
- 6.2.8 In order to further understand the workplace assessment and intervention process used within the project the vocational rehabilitation undertaken with one participant, Paul (Client 9 in Table 2 Appendix 2) will now be looked at in more detail.

### **6.3 Paul: A case example of the 'Place and Train' approach**

Paul is a 32 year old senior mechanic, with some experience of teaching car mechanics, who sustained a very severe traumatic brain injury four years earlier. Unemployed on accessing the vocational service, his Job Coach was able to find him a work placement which involved him assisting in teaching car mechanics to apprentices at a local technical college. Initial clinical interview and his functioning within centre-based rehabilitation revealed moderate difficulties with recent memory and short temperedness.

Paul, his Job Coach and his employer discussed the potential impact of these residual symptoms upon the teaching assistant work being offered by the work placement. The likelihood that he may well become frustrated, irritable and even short-tempered with students on occasions was fully recognised. As a result the work placement was set up such that all of Paul's contact with students was supervised by a college lecturer or the Momentum Job Coach.

The *MAWB* assessment conducted by the Job Coach during the initial fortnight of the work placement confirmed concerns arising from Paul's behaviour within the Momentum rehabilitation centre: the observational assessment finding that the client did verbally express his frustrations to students about their performance in a manner which the Job Coach and employer considered aggressive. Through the Job Coach and employer discussing this matter with Paul it was clear he had some insight into the inappropriateness of such behaviour and was motivated to develop greater self control over his short temper. Moreover through this discussion it was discovered that the students who were frustrating the client were those who struggled most with lecture based learning and who most needed spoken instructions reinforced with additional 'hands-on' learning.

The agreed work placement intervention therefore involved the Job Coach, with guidance from the supervising lecturer, training the client to incorporate more demonstrative practical based teaching with his well preserved lecturing skills. Weekly training sessions with the Job Coach to facilitate this broadening of Paul's teaching style, in conjunction with individual sessions of anger management with the Vocational Service's clinical psychologist, enabled Paul to control his verbal expressions of frustration to the students. Throughout the work placement all incidents in which Paul provided students with aggressive verbal feedback were monitored, with Paul being advised about the episode and asked to reflect on how he may have provided feedback more appropriately.

Initially such incidents occurred, on average, three times a week but after two months of the intervention such episodes were absent. Supervision of Paul's teaching duties, however, continued for a further month to ensure he could maintain self-control of his increased frustration and short temperedness. As no further incidents were observed during this month Paul's rehabilitation then focussed on gradually increasing the hours he taught students independently. Progress was reviewed via brief weekly meetings with his Job Coach and employer.

Within a further two months the employer was sufficiently satisfied with Paul's teaching performance to recommend him for a paid position teaching car mechanics at another college. Paul successfully secured this position, with references from the work placement. After sustaining this employment for six months Paul progressed to full time work as a mechanic with a large car dealership.

## **6.4 Brain Injury Awareness Training**

6.4.1 Within the Momentum Vocational Service it is standard practice to offer the employer a free training session on the possible physical and neuropsychological effects of brain injury as well as on the specific retained abilities and acquired disabilities of the client entering the work placement. Such Brain Injury Awareness (BIA) training is usually delivered over a one to two hour session in the work place to the managers and staff who will be working with the client. Unless clients have significant residual difficulties with self –confidence or social anxiety they are encouraged to contribute as fully as possible in the BIA training for their work placements. Ideally the BIA training is delivered after the job analysis and *MAWB* observational assessment have been completed and prior to the initial three way meeting to agree the client's personal goals for the work placement. Whilst it is routine practice to offer employers and work placement providers free BIA training a proportion of employers and providers do not take up this offer.



**Learning new skills and gaining confidence through work placement**

## 6.5 Evaluation of the Project

### 6.5.1 Client Satisfaction

6.5.1.1 All participants were asked to complete a *Client Satisfaction Survey* (Please see the Momentum Work Placement Pack in Appendix 1) for the work placement they undertook on the project. All participants were asked to complete a *Client Satisfaction Survey* in confidence by their Job Coach within two weeks of completing the work placement. The *Client Satisfaction Survey* involved participants rating their satisfaction with Momentum's management of their work placement and with the level of work place based support provided.

### 6.5.2 Employer Satisfaction

6.5.2.1 All employers providing a project work placement were asked to complete an *Employer Satisfaction Survey* (Please see the Momentum Work Placement Pack in Appendix 1) to provide feedback on Momentum's performance with regard to establishing and managing the work placement; provision of work based training and support to the client and their colleagues; the usefulness of any brain injury awareness training provided to the company. Employers were asked to complete the *Employer Satisfaction Survey* within two weeks of the work placement ending. If the survey was not undertaken within this time the employer was forwarded the survey by email and asked to return it as soon as possible.

### 6.5.3 Vocational Outcome

6.5.3.1 The project's primary evaluative measure was the vocational outcome attained by participants by 31.01.11. Participant's vocational outcome was classified under one of the following categories:

- Paid competitive employment full time
- Paid competitive employment part time
- Voluntary employment Full Time
- Voluntary employment Part Time
- Education Full Time
- Education Part Time
- Made Redundant
- Withdrew from Vocational Rehabilitation
- Continuing in Vocational Rehabilitation

6.5.3.2 Full time working was taken as working 35 hours or more per week and anything less was classed as part time working. The redundancy outcome could of course only be applied to participants who retained employment at the time of their entry to the project. A participant was assigned the 'Made Redundant' outcome if redundancy was actioned by the employer when the participant was undertaking work based rehabilitation with them or after such rehabilitation with the employer had ceased and the participant was engaging other vocational opportunities via the Momentum service. It should also be noted that the 'Withdrew from Vocational Rehabilitation' category did not include transfer or signposting to other services, neurorehabilitative or otherwise, and was instead only assigned when participants chose to discontinue their vocational rehabilitation with Momentum and continue to receive financial support from state benefits and/or their personal insurance arrangements.

6.5.3.3 With regard to vocational outcome the job title of any employment outcome was recorded. For educational outcomes the level and title of the course was documented. The project also noted whether outcomes were attained via work placement or from application to advertised opportunities. Lastly the duration in months from project entry to outcome was recorded for all positive outcomes.

#### 6.5.4 Follow Up

6.5.4.1 The level of follow up support provided to the client after attainment of a positive vocational outcome was also measured. The number of telephone contacts from either the client or the employer that were requesting further advice or guidance were recorded. When it was apparent that telephone contact was in itself insufficient to resolve the presenting issue or issues follow up meetings involving the client, employer and Momentum were provided and the number of these meetings was recorded. It should be noted that when follow up issues were significant enough to require meetings there was generally also a need for a level of telephone and email contact between the follow up meetings but these contacts were not recorded.

#### 6.5.5 Sustainability of Vocational Outcome

6.5.5.1 Lastly the project looked at whether those participants who attained a positive vocational outcome at any time after August 2008 had sustained this at the end of January 2011. All participants who had achieved a positive outcome were therefore contacted directly early in 2011 to ascertain if they were continuing in the work, education or training they

had attained through the Momentum service; whether they had progressed from the outcome achieved with Momentum or whether the outcome had not been sustained.



**Back at work... and smiling!**

## **7 Results**

### **7.1 Targeted Work Place Based Interventions**

7.1.1 Table 2 in Appendix 2 summarises participant's primary disabilities as assessed by their Job Coach using the *Momentum Assessment of Workplace Behaviours (MAWB)*, the work place intervention delivered and the progress achieved within the work placement. The progress column is colour coded to indicate the nature of the progress achieved over the duration of the work placement. The blue colour coding denotes that the participant achieved *quantitative* progress against their primary workplace disability. The green colour coding indicates that qualitative progress regarding the main work place difficulty was achieved. Lastly the red colour coding relates that the participant was unable to demonstrate appreciable progress regarding their main assessed work based disability over the course of the work placement.

7.1.2 From this breakdown it is found that the targeted work place interventions with 21 of the 39 participants (54%) were established in such a way as to be able to demonstrate *quantitative* progress over the course of the work placement. The work based interventions with a further 15 participants

(38%) were able to show *qualitative* progress and 3 participants (8%) were unable to demonstrate progress with respect to their primary work disability over their work placement.

## 7.2 Client Satisfaction Survey

7.2.1 A *Client Satisfaction Survey* from the Momentum Work Placement Pack (Appendix 1) was completed by 28 of the 39 participants, a response rate of 71.8%. Of these 28 respondents 27 (96. 4%) answered positively to the yes or no question '*Do you feel overall that you received sufficient support from Momentum regarding your work placement?*' The average satisfaction ratings of the 28 respondents, on a scale of 1= Poor to 5 = Excellent, with respect to various aspects of Momentum's involvement in their work placement are shown below.

<b>Client Satisfaction Survey Question</b>	<b>Average Satisfaction Rating (Scale 1 = Poor to 5 = Excellent)</b>
How satisfied were you with the way your work placement was negotiated and set up?	4.50
How satisfied were you with the way your goals for the work placement were established?	4.39
How satisfied were you with how your performance throughout the work placement was evaluated?	4.25
Please rate Momentum's performance in assisting in training you in your work duties.	4.39
Please rate Momentum's performance in providing psychological support to you within the work placement.	4.53
Please rate Momentum's performance in responding to any staff concerns about your work placement.	4.53
Please rate Momentum's performance in providing clear advice and support to staff about your vocational rehabilitation.	4.57

## 7.3 Employer Satisfaction Survey

7.3.1 An *Employer Satisfaction Survey* from the Momentum Work Placement Pack (Appendix 1) was completed by 25 of the 39 employers / work placement providers involved in the project, a response rate of 64.1%. To the yes or no question ‘*Do you feel overall that you and your staff received sufficient support from Momentum regarding this client’s work placement?*’ all 25 of the employers / work placement providers responded positively. The average satisfaction ratings, on a scale of 1= Poor to 5 = Excellent, of these 25 employers / work placement providers are shown below.

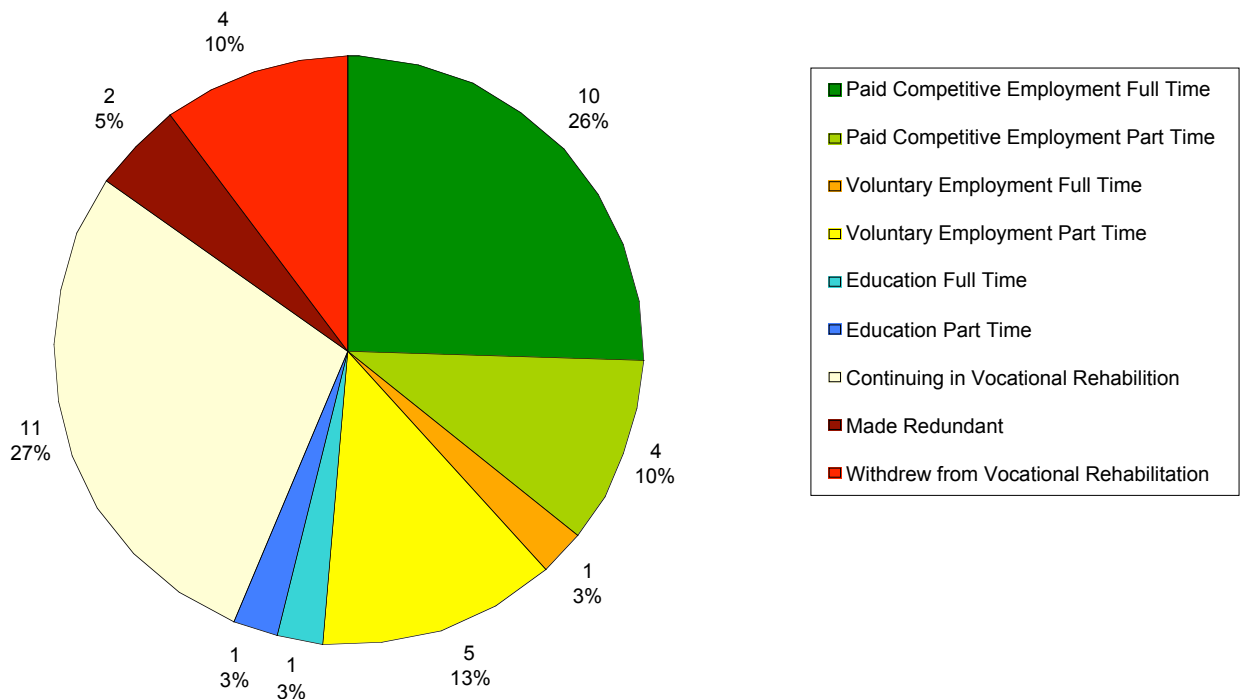
<b>Employer Satisfaction Survey Question</b>	<b>Average Satisfaction Rating (Scale 1 = Poor to 5 = Excellent)</b>
How satisfied were you with the way the work placement was negotiated and set up?	4.48
How satisfied were you with the way the client’s goals for the work placement were established?	4.48
How satisfied were you with how the client’s performance throughout the work placement was evaluated?	4.28
Please rate Momentum’s performance in assisting in training the client in their work duties.	4.23
Please rate Momentum’s performance in providing psychological support to the client in the work place.	4.56
Please rate Momentum’s performance in responding to any staff concerns relating to the client.	4.60
Please rate Momentum’s performance in providing clear advice and guidance to staff about the client’s rehabilitation.	4.56
How do you rate the general brain injury awareness training you were provided?	4.20
How do you rate the brain injury awareness training you received for this specific client?	4.28

7.3.2 With respect to the Momentum Brain Injury Awareness Training, employers / work placement providers were asked the yes / no question 'Was your experience of the client on work placement consistent with the brain injury awareness training you received regarding the client?' Of the 25 employers / work placement providers who returned a questionnaire 24 (96%) responded positively.

## 7.4 Vocational Outcomes from the Project

7.4.1 Pie Chart 4 below shows that 58% of participants achieved a positive vocational outcome from the 'Place, Train and Sustain' project. Paid competitive work (full time) accounted for nearly half of the positive outcomes achieved. Voluntary work (part time) made up nearly a quarter of the projects positive vocational outcomes. Interestingly educational outcomes, whether full or part time, only accounted for 6% of total outcomes.

Pie Chart 4: Vocational Outcome of Project Participants



7.4.2 Less positively 11 of the 39 participants (27%) had not been able to attain a vocational outcome by the project end date of 31.01.11 and were continuing in vocational rehabilitation with the Momentum service. Seven of these participants entered the project in year three between April and

July 2010; three were earlier entrants to the project having joined in years 1 or 2. The remaining participant was the last individual to enter the project, starting in early November 2010.

- 7.4.3 Negative outcomes accounted for 15% of the project sample. Four participants withdrew from the Momentum Vocational Service – three for financial reasons and one citing stress from their ongoing compensation claim as the reason for withdrawal. Two participants, both attempting to return to their pre-injury employment, were made redundant during vocational rehabilitation. In both cases the participants were attempting to return to pre-injury employment positions and despite the employer agreeing some adaptations in terms of physical environment and job processes / duties both clients were unable to meet competency targets by the end of their work placements which ran for 3 months in one case and 6 months in the other.
- 7.4.4 Reviewing the withdrawals for financial reasons finds that they occurred from varied circumstances. One withdrawal was due to poor communication at initial assessment, between the client, employer and Momentum about the impact of a part time return to employment with the same employer upon certain aspects of the participant's employment insurance. In a second case withdrawal followed concerns, mainly from the participant's family but also from the employer, that the participant's progression to work site based rehabilitation, to determine competence in alternative duties with the same employer, would invalidate pre-existing employment insurance. All parties, including the insurance company, had agreed at the outset of the vocational rehabilitation that the process would involve intervention with the participant at the premises of the existing employer. Although there was no communication from the insurance company that the participant's insurance policy would be compromised the participant nevertheless decided to withdraw from their vocational rehabilitation. In the final case the participant withdrew when statutory financial support of approximately £60 per week through Job Centre Plus to assist travel to the Momentum centre and work placement elapsed after the standard 18 week period.
- 7.4.5 Table 3 below details the positive vocational outcomes attained by 22 of the 39 project participants. In the table employment outcomes are described by the job title of the participant's outcome whereas educational outcomes are described in terms of the level and title of the educational course the participant was admitted to.

**Table 3: Positive Vocational Outcomes Attained by Participants**

<b>Participant Number (n = 22)</b>	<b>Description of Outcome</b>
1	Administrative Assistant
5	Gas Main Technician
6	Groundsman
8	Signer with British Institute for Deaf
9	Associate Lecturer Automotive Engineering
10	Administrator
12	Museum Assistant
15	Recreational Assistant
16	Executive Officer in Civil Service
17	Administrator with Stroke Association
18	Retail Assistant in University Art Shop
19	Retail Assistant
20	Estates & Fisheries Assistant
21	IT Technician with Birmingham Academy of Music & Sound
23	MSc in Art Birmingham City University
24	Care Assistant with Older Adults
26	Gardener
27	Window Cleaner
29	Groundsman
32	Diversional Therapy Assistant
34	I T Project Manager
38	Apprenticeship in Tiling

7.4.6 The relationship between age at entry to the project and vocational outcome was considered. The project sample was divided into participants aged under 45 years at project entry (n=24) and those aged 45 years or older when they started in the project (n=15). Comparing the two age groups found that 66% of the younger age group and 40% of the older age group attained a positive vocational outcome. The difference between the two age groups was most marked with respect to attaining full time paid employment with 33.3% of the younger participants achieving this outcome but only 13.3% of the older participants. Of the older participants, 40% were remained in vocational rehabilitation at the end of the project compared to 20.1% of the younger age group.

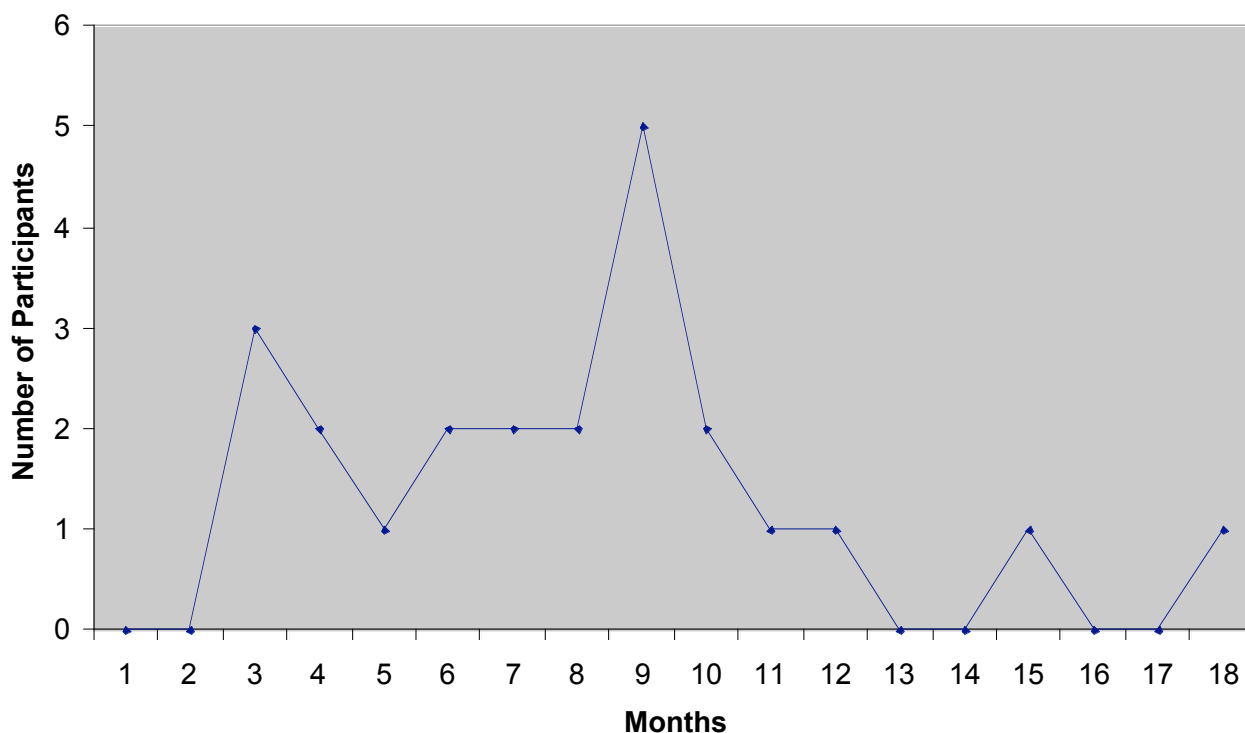
## 7.5 Positive Outcomes from Work Placement

7.5.1 Of the 20 employment outcomes attained by project participants 18 (90%) were achieved through the individual having successfully completed a work placement with the employer. The two remaining employment outcomes and the two educational outcomes were achieved through an open application process in which the participant was supported by their Momentum Job Coach.

## 7.6 Time to Attain a Positive Vocational Outcome

7.6.1 Graph 2 below shows that the time taken by participants to achieve a positive vocational outcome, whether in terms of employment or education, ranged from 2 to 18 months. The average duration with the service prior to attaining a positive vocational outcome was 38 weeks (approximately 8.5 months). From viewing the collated data, longer duration to positive outcome does not appear to be associated with either the nature of the brain injury sustained or the number of physical, cognitive and emotional disabilities identified at admission assessment.

**Graph 2: Time to Attain Positive Outcome (n = 22)**



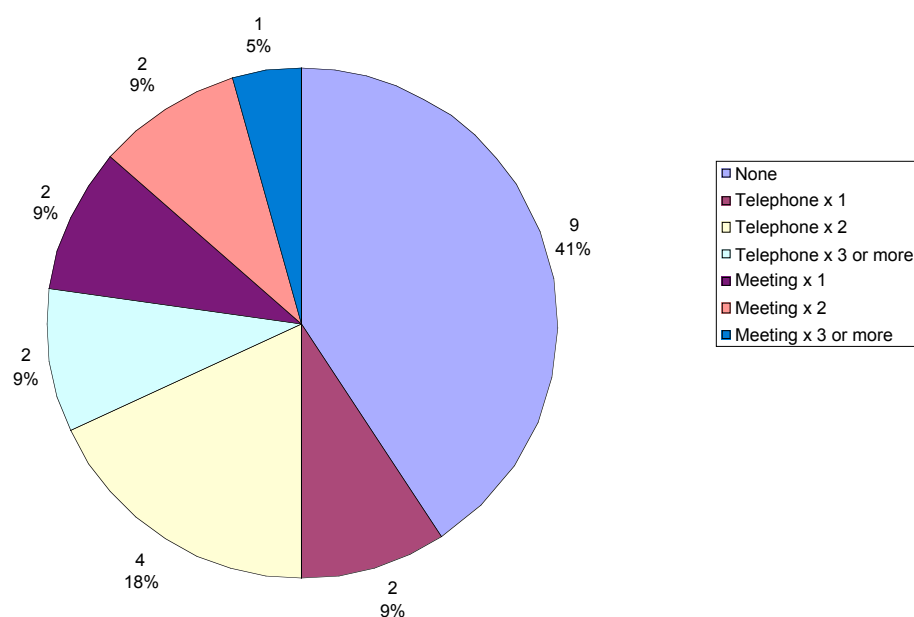
## 7.7 Average Duration of Vocational Rehabilitation

7.7.1 Average duration with the Momentum service for the full participant sample of 39 clients was 43 weeks (approximately 9.5 months). Inclusion of participants 'Continuing in Vocational Rehabilitation' at the end of the project as well as those who withdrew from the service and those who were made redundant therefore increases average participant duration with the vocational service by a little over a month.

## 7.8 Level of Follow Up Provided

7.8.1 It should be noted that only follow up support requested by either the participant or their employer was recorded in the project. Pie Chart 5 below shows the follow up support provided to the 22 participants who achieved a positive vocational outcome. As can be seen no follow up support was provided to a significant proportion (41%) of these successful participants as no requests, either from the participant or the employer, had been received by Momentum by the end of the project (31.01.11). However 59% of successful participants did request and receive some form of follow up: 36% follow up advice and guidance over the telephone and 23% were provided with one or more follow-up meetings involving the participant, the employer and Momentum staff in order to resolve problems that had arisen since the positive outcome had been attained.

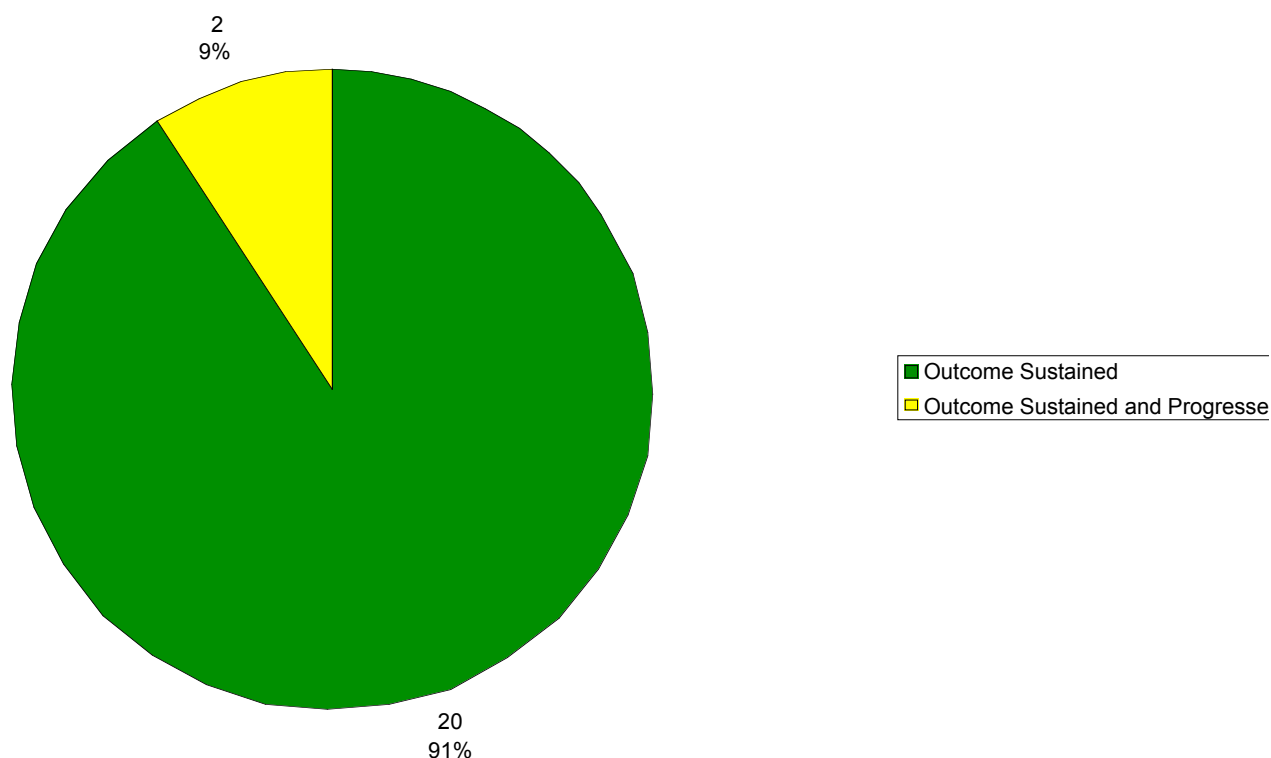
Pie Chart 5: Level of Follow Up Provided



## 7.9 Sustainment of Positive Vocational Outcome

7.9.1 Probably the most surprising and pleasing result is the finding that 20 of the 22 participants who achieved a positive vocational outcome through the project had sustained that outcome when contacted at the end of the project in January 2011. Moreover the remaining 2 participants had progressed from a paid employment outcome to more demanding and better paid work or higher education after sustaining the outcome achieved with Momentum for at least three months. Looking at the duration over which positive outcomes had been sustained by the time the project ended in January 2011 finds that 10 participants had sustained their outcome for between 13 and 23 months; 7 had sustained their outcome for between 6 and 12 months; 5 had sustained their outcomes for between 1 and 5 months.

Pie Chart 6: Sustainment of Positive Vocational Outcome (n = 22)



## **8 Discussion**

8.0 The brain injury vocational rehabilitation literature is dominated by studies of the severely and very severely traumatically brain injured: a state of affairs fully recognised by Tyerman & Meehan, 2004. Evaluating the findings of the present project, which includes participants with various forms of acquired brain injury, is therefore somewhat constrained by this. It is however considered acceptable to compare and contrast the outcomes achieved by the present heterogeneous sample of participants with this literature base as the majority of participants in the current project are assessed as having sustained a severe or very severe brain injury (6.1.7 above).

### **8.1 Vocational Outcomes from the ‘Place and Train’ Project**

8.1.1 Given the prospective design of the current project and the importance of looking at the progress achieved by all participants within the project’s data collection period (August 2008 to January 2011) it is necessary to report the proportion of participants who were continuing in vocational rehabilitation at the end of the project (31.01.11). As can be seen from Pie Chart 4 in Section 7.4 above participants continuing in vocational rehabilitation at the end of the project constituted 27% of the ‘Place and Train’ participants. This seemingly high proportion may partially be explained by the relatively late entry of some individuals to the project. Five of the thirty–nine participants (12.8%) entered the project after June 2010 (see Graph 1 Section 6.1.1 above) so limiting the time available for achievement of a positive outcome.

8.1.2 However to directly compare the proportion of positive vocational outcomes achieved in the present ‘Place and Train’ project with that observed in the 2006 study it is necessary to exclude participants continuing in vocational rehabilitation at project end as an outcome group. The 2006 retrospective study only recorded positive and negative vocational outcomes from the more ‘Train and Place’ orientated vocational service delivered at the time and did not include service users continuing in vocational rehabilitation at the end of the study period. Applying this direct comparison of positive and negative outcomes as a proportion of the samples participating finds that the overall proportion of positive vocational outcomes in the present ‘Place and Train’ project is 78.6% compared to 72% in the Rehab UK 2006 study.

- 8.1.3 Using the same proportional analysis the specific positive outcomes attained in the two projects can also be directly compared. This finds that in the present project 50% of outcomes were to paid competitive employment compared to 41% in the Rehab UK 2006 service evaluation. For a voluntary work outcome the figures are 21.4% and 16% respectively. For an education or training outcome the pattern is reversed with this outcome having been more prevalent in the 2006 study, 15% compared to 7.2% in the current project.
- 8.1.4 With regard to negative outcomes the overall rate identified in the current project of 21.4% compares relatively favourably with that found from evaluations of traumatic brain injury vocational rehabilitation (Haffey and Abrams, 1991; Tyerman and Tyerman, 2008) as well as with the overall negative outcome rate of 28% reported in the 2006 Rehab UK study. However it is noted that withdrawals from rehabilitation in the present 'Place and Train' project (14.3%) are slightly higher than the 13% found in the 2006 Rehab UK study. The reasons for withdrawal from the earlier study have not been reviewed but with respect to the current project it is of some concern that 3 out of 39 participants withdrew from their vocational rehabilitation because of financial reasons. Scrutiny of these cases highlights the importance of all parties communicating openly about how any vocational rehabilitation plan impacts upon the individual's employment insurance and, in particular, the pressing need for close but transparent communication between the vocational rehabilitation provider and the insurance company from the outset of the individual's employment rehabilitation.
- 8.1.5 Whilst the limited size of the participant sample in the present project is acknowledged the increased proportion of service users who have sustained a brain injury attaining paid or voluntary work in this 'Place and Train' project relative to the much larger earlier study is encouraging. The results do not meet the project aim of 'Place and Train' managing to provide 20% more people with a positive vocational outcome than achieved in the 2006 study (see paragraph 4.2.1). However the increase of 14.4% in overall positive outcomes suggests that the 'Place and Train' model adopted in the current project may be more effective in delivering positive occupational outcomes to brain injured adults than the centre-based 'Train and Place' approach used in the 2006 study.
- 8.1.6 The commonly reported finding in the brain injury literature that a return to full time paid employment is more likely to be achieved by younger individuals (Brooks *et al.* 1987; Haffey & Abrams, 1991; Crepeau & Scherzer, 1993; Dikmen *et al.*, 1994; Ponsford *et al.* 1995) is supported by the findings of the present project. Having acknowledged this it is however

clear from the current project that an appreciable proportion (40%) of brain injured adults aged 45 years or older was able to attain paid or voluntary work, although this was more likely to be on a part-time basis.

- 8.1.7 Within the project there was an emphasis on trying wherever possible to evaluate participant's progress on work placement in *quantitative* rather than *qualitative* terms. As can be seen from Table 2 in Appendix 2 this was achieved for 21 of the 39 participants. However quantitative work placement progress was not found to be associated with any higher vocational outcome at the end of the project than qualitative progress within the work environment.

## **8.2 Vocational Outcomes achieved from Work Placement**

- 8.2.1 Whilst it is recognised that this project is only based on 39 participants, the high proportion of employment outcomes achieved as a direct result of work placement (90% - see paragraph 7.5) is an especially pleasing finding. This is because the majority of persons presenting to the service are unable to return to their pre-injury employment and in most case have lost this employment by the time they are referred to Momentum. For this majority the service aim is to provide work placement experiences that enable the individual to explore employment options they may not have considered despite these options matching their post injury skills profile.

- 8.2.2 That such a high percentage of those attaining an employment outcome are doing so from being employed by their work placement provider is a finding which exceeds the expectations of the project. Although it is important not to overstate this one finding given the relatively small sample size it will be equally important for future investigations to tease out how much of this encouraging result was due to the 'Place and Train' approach adopted with participants. An initial step in this process would be to retrospectively look at the outcomes attained by the present 'Place and Train' participants relative to those achieved by individuals using the service within the project period but who did not receive the 'Place and Train' elements (i.e. the Momentum Assessment of Work Behaviours and consequent work based intervention) within their vocational rehabilitation. It will of course be of interest if such a future project could explore whether those service users who only received the more limited 'Train and Place' vocational rehabilitation were able to achieve as high a employment outcome rate directly from work placement as found by the 'Place and Train' participants in this project.

- 8.2.3 Allowing for the limited sample size in this project, the high proportion of 'Place and Train' participants achieving an employment outcome from their work placement suggests that the 'Place and Train' approach of basing vocational rehabilitation on assessment of functioning and consequent intervention within the work place is contributing to the projects overall positive vocational outcome rate of 78.6% (see paragraph 8.2); a rate which compares favourably with the overall positive outcome rate reported in other evaluations of brain injury vocational rehabilitation (Johnson, 1989 & 1998; Haffey & Abrams, 1991; Wehman *et al.* 1993; Murphy *et al.* 2006; Tyerman & Tyerman, 2008). It is however important to note that all these studies are evaluations of traumatic brain injury vocational rehabilitation.
- 8.2.4 This suggested efficacy of the 'Place and Train' approach is strengthened by the fact that scrutiny of participant's employment circumstances shows that 15 of the 18 persons who achieved voluntary or paid employment from their work placement were attaining new jobs with new employers. Only 2 of the 18 were returning to their pre-injury employment position and the remaining participant successfully transferred to an alternative paid position with their pre-injury employer.

### **8.3 Duration of Vocational Rehabilitation.**

- 8.3.1 Comparing average duration in vocational rehabilitation in the current project with that reported in the Rehab UK evaluative study (Murphy *et al.*, 2006) finds that, on average, the 'Place and Train' participants achieved an outcome, positive or negative, within 43 weeks (see paragraph 7.7) whereas the corresponding duration in the 2006 study was 50 weeks. The 'Place and Train' project has therefore, very encouragingly, achieved its specific aim of reducing the average length of time clients use the service by more than 6 weeks (see paragraph 4.2.2).
- 8.3.2 From the costings for providing the Momentum vocational rehabilitation service up until August 2010 it is calculated that this average reduction in length of vocational rehabilitation by 7 weeks equates to a saving of £4,655 per client. In August 2010 it was however necessary to significantly reduce the service provision cost due to pressures on statutory funding. Using the recently reduced service provision cost an average decrease of 7 weeks in vocational rehabilitation duration would nevertheless amount to a cost saving of £2,345 per client.
- 8.3.3 The finding of the present project, working with individuals with various forms of acquired brain injury, that a positive vocational outcome is on

average achieved after 8.5 months is very similar to the previous findings of research with people who have sustained a severe or very severe traumatic brain injury. For example Johnson (1987a) working with individuals who had sustained a very severe traumatic brain injury found that those who made a successful return to work received rehabilitation for an average duration of 8 months. This is similar to the average duration of support reported by Wehman *et al.* (1990). In a later study Wehman *et al.* (1993) report that his Supported Employment Programme (SEP) was able to place 70% of service users with a severe traumatic brain injury into competitive employment after 6 months. It should be noted however that this shorter duration to paid employment was achieved with an average of nearly 14 hours of Job Coach intervention into the workplace per week – a level of Job Coaching provision far exceeding the typical 2 to 3 hours of per week provided to participants of the current project.

## **8.4 Sustainability of the Vocational Outcomes Achieved**

8.4.1 The finding that all 22 participants who attained a positive vocational outcome had sustained this outcome for a period up to 23 months is the most encouraging result of the present project. It is also worth noting that this level of sustainment was achieved with a relatively low level of follow up support which was initiated by the participant or the employer. Sale *et al.* (1991) studied 38 consecutive separations from employment within the Supported Employment Programme (SEP) and found that most occurred in the first six months after placement. In this project 77% of participants who attained a work or educational outcome sustained that outcome for 6 months or more whilst 45% had sustained their outcome for between 13 and 23 months at the project end date (31.01.11). Whilst there is clearly a need for more investigation into the extent to which individuals who have sustained brain injury are able to sustain the outcomes they achieve from UK vocational rehabilitation services there are some very positive reports within the literature. Most notably the finding from the *Working Out Programme*, providing for people with severe traumatic brain injuries who are unable to return to their pre-injury occupation, that 50 % of service users were sustaining paid employment after 2 years (Tyerman, Tyerman & Viney, 2008).

## **8.5 Client Satisfaction**

8.5.1 Feedback from participants via their completion of a *Client Satisfaction Survey* showed high levels of satisfaction with respect to Momentum's establishment and management of their work placements as well as with

the practical training and psychological support provided to both participants and employers/ colleagues within the work place (see 7.2 above).

- 8.5.2 Looking in detail at the responses of the one participant who reported insufficient support from Momentum regarding their work placement found that their dissatisfaction related to their feeling that they received inadequate support as their Job Coach could not always be contacted at the Momentum centre between the regular scheduled visits to the participant in their work.
- 8.5.3 Overall however the results of the 28 *Client Satisfaction Surveys* returned find that average satisfaction ratings on the 1= Poor to 5 = Excellent scale ranged from 4.25 to 4.57 indicating a high level of participant satisfaction with the way their work placements were set up, managed and evaluated. Ideally it would have been valuable to compare client satisfaction ratings from this project with those from the previous 2006 Rehab UK service evaluation but unfortunately when the earlier client feedback was reviewed it was found to be in a format which could not be directly related to the responses of the *Client Satisfaction Survey* used in the present project. The specific aim of the 'Place and Train' project demonstrating high levels of participant satisfaction has nevertheless been achieved (see 4.2.3 above).

## 8.6 Employer Satisfaction

- 8.6.1 Likewise it is considered that the specific aim of demonstrating high levels of employer satisfaction with the 'Place and Train' approach has been fulfilled (see 4.2.3 above) as all 25 responding employers reported they felt that overall that they and their staff had received sufficient support from Momentum regarding the participant's work placement. Moreover the average satisfaction ratings from the 25 employers on the 1 = Poor to 5 = Excellent scale ranged from 4.20 to 4.60.
- 8.6.2 Nine of the twenty-five responding employers wrote additional comments on the *Employer Satisfaction Survey*. Six of these additional comments were positive. Two comments related to 'good' and 'very good' Job Coach support. Two comments were about 'excellent' and 'very informative' Brain Injury Awareness training. The remaining two positive comments are repeated here in full. Firstly '*I think this is a great placement scheme and further promotion of this with local businesses would be great. We would happily support this in terms of testimonials!*' Secondly '*Even though [the client] may not appreciate fully the benefits of Momentum's support he has gained a lot from what they offer in support and in finding*

*suitable placements*'. The three negative additional comments from employers related to 'liking more information on how the person had their brain injury'; 'more involvement of the employer in setting up the work placement' and lastly 'more guidance on the level of difficulty of the work tasks they should be giving the participant'.

## **8.7 Learning Points from the Project**

- 8.7.1 The level and nature of the vocational outcomes achieved are considered very encouraging given both the assessed severity of brain injury within the participant sample (see 6.1.7 above) as well as the range and frequency of neurophysical and neuropsychological disabilities presenting (see charts 4 to 6 above).
- 8.7.2 The overall positive outcome rate of 78.6% is likewise judged to be a pleasing finding, particularly given that 64 % of participants entering the project did so when more than 2 years post injury. Earlier studies of return to work after traumatic brain injury have found that if employment has not been re-established within 2 years of injury it is unlikely to be achieved thereafter (Oddy et al, 1985; Brooks et al, 1987; Johnson, 1987a).
- 8.7.3 The proportion of the sample attaining and sustaining a positive outcome strongly suggests that the 'Place and Train' approach to brain injury vocational rehabilitation which was used in this project is clinically and cost effective. This analysis is strengthened when it is considered that the project has been conducted in the aftermath of the October 2008 economic crisis with UK unemployment reaching 2.5 million towards the end of the project period. In the July to September quarter the unemployment rates in regions served by the project were as follows: East Midlands 8.0%; West Midlands 8.7% and the North East of England 9.0% (Office for National Statistics. [www.statistics.gov.uk](http://www.statistics.gov.uk)).
- 8.7.4 Although the sample size of this project is relatively limited at 39 participants the positive findings suggest that the Momentum vocational service can further increase its general effectiveness by more fully adopting a 'Place and Train' approach (see 4.1 above). It will therefore be a priority within the organisation that the findings of this project are considered in full and that appropriate recommendations concerning the further development of the 'Place and Train' approach within the Momentum vocational service are specified and implemented.
- 8.7.5 It is perhaps fitting to end this discussion of the merits of the 'Place and Train' model to brain injury vocational rehabilitation, over those of a 'Train and Place' approach, by reviewing the words of Johnson (1989) as they

indicate that whilst a 'Place and Train' model has not as yet been fully and comprehensively put into practice within Momentum this pioneer of vocational rehabilitation for people with a brain injury recognised the value and importance of this approach some 20 years ago. Johnson, writing about the failure of the then Manpower Services Commission schemes to provide appropriate support to individuals who had sustained head injuries attempting a return to work, emphasised how his clients' neuropsychological difficulties often meant they found new situations difficult and generally made them '*less likely to transfer their learning from the training situation (such as an Employment Rehabilitation Centre) to a new one (a job)*'. Very pertinently, in the context of this investigation, Johnson concludes '*For this reason retraining someone in the context of their job is more likely to be successful. The priority is for training schemes that can be carried out within the workplace and for support and incentives to employers to help head-injured people return to their previous work*'. The findings of this project very clearly support Johnson's emphasis on delivering vocational rehabilitation within the workplace although they also indicate that many people with brain injury who cannot return to their previous occupation can secure and sustain a new occupation with such a 'Place and Train' model of vocational rehabilitation.

## **9 Interviews with Project Participants**

9.0 In order to gain greater insight into client's experiences of the Momentum Vocational Service, both positive and negative, structured interviews were conducted with two of the project participants in November 2010. The format of the structured interview is provided in Appendix 3.

### **9.1 Catherine**

9.1.1 Catherine, now aged 29, was diagnosed with encephalitis six years ago. At the time she was living with her boyfriend in London and working full time as a Higher Executive Officer in the Civil Service. Catherine was interviewed in November 2010 about her vocational rehabilitation with Momentum.

9.1.2 When asked about the onset of her encephalitis Catherine stressed that she has few memories of the weeks before he was taken into hospital. She however recalled that she had been ill in bed over Christmas some time before and on consulting her GP been told she had flu and to take paracetamol to help reduce her high temperature. Her next memory is of waking up in hospital with her boyfriend at her bedside. From what he later told her she had, in the fortnight prior to her admission, been so

fatigued that she had not been able to get out of bed. She had also had a constant high temperature and extremely poor appetite. Catherine was hospitalised for some four months following her encephalitis before she was discharged, with some outreach Occupational Therapy, back to the flat she shared with her boyfriend. During her first week in hospital Catherine began to experience epileptic seizures and despite medication she was still having 2 or 3 seizures a day after her discharge home.

- 9.1.3 Catherine explained how in her first weeks back at her flat she realised how tired she became, even after tasks which she would not previously have found physically taxing, such as washing up and ironing. Moreover Catherine soon realised that she was struggling with everyday tasks, such as cooking meals, shopping and managing her finances. Concerned about their daughter's epilepsy and these very obvious changes in her functioning, her parents urged her to return to the family home in County Durham. Reluctantly Catherine agreed adding *'At the time I really didn't want to leave my boyfriend and live back with Mum and Dad – it seemed such a backward step, but I knew I wasn't right'*.
- 9.1.4 On moving back North Catherine's primary aim was to recover as quickly as possible from the effects of her encephalitis so she could rejoin her boyfriend in London and return to her previous job. Catherine however reports that although she was referred directly to Momentum Newcastle by her Occupational Therapist in London it was six months before she could start the vocational service – mainly due to delays with administration and funding. Catherine explained how this had been a particularly frustrating period for her. In particular she related how she had little to occupy her time during this period and reflected how, perhaps because of this, she gradually became increasingly anxious about the daily activities she was continuing to struggle with. Commenting on the lack of structure to her days over these months Catherine added *'this allowed me to get into things I shouldn't have been doing at that time ... such as going out too much and drinking too much ...I caused my parents a lot of worry'*.
- 9.1.5 Thirteen months after her encephalitis diagnosis Catherine started with the Momentum vocational service. When asked about her experiences of the initial centre based rehabilitation Catherine stressed the social and psychological benefits of being with others who, like herself, were continuing to struggle with the effects of brain injury – both physically and in terms of adjusting to the impact of ongoing symptoms upon everyday living. Catherine commented *'My parents didn't really know what was going on with me so being around people who had similar difficulties was really helpful to me – that sense that you are not alone'*.

- 9.1.6 As Catherine was eager to establish if she could still competently undertake a Higher Executive Officer (HEO) position within the civil service, without attempting this in front of her current colleagues, her Job Coach negotiated with employer to establish a 12 week work placement as an HEO within the Newcastle based Government Office North East. When asked to reflect on this first work placement Catherine remarked '*It gave me the reality I needed – I realised that I couldn't just walk back into my current job*'. The work based observation of the Job Coach, and the monitoring of Catherine's performance by her line manager, clearly found that both the quantity and the quality of her work was appreciably reduced compared to her work in London prior to her encephalitis.
- 9.1.7 Through undertaking this first work placement Catherine also realised that she needed to work closer to where she was living on account of her continuing fatigue. She then continued with centre-based rehabilitation at Momentum Newcastle until her job coach secured her a three month work placement as an HEO in County Durham. This work placement was however adapted to take into account Catherine's residual fatigue, poorer recent memory, and slower thinking / reading speed. In this work placement Catherine was not expected to read and summarise lengthy government documents and her duties were restricted to more standard administrative tasks such as drafting letters, overseeing staff diaries and responding to email/telephone enquiries. Specific targets in terms of work output and accuracy were agreed at the outset of the work placement but despite the provision of additional rest breaks and a quieter, less distracting office space Catherine struggled to meet the targets. At the subsequent case review meeting the employer offered to extend the placement for a further three months in order to provide Catherine the opportunity to improve her performance. However after discussion with both her employer and Momentum Catherine decided to downgrade to an Executive Officer (EO) position which had become available within the same office and which offered more flexible working hours.



**Catherine on holiday in 2006**

- 9.1.8 Catherine has now sustained this full-time paid employment for five months, requiring only one follow-up meeting with her job coach and line manager. When asked in December 2010 what she had learnt from her vocational rehabilitation Catherine replied *'I've learnt so much about myself – that I have to accept what I have and I've accepted I have to work at a lower level'*.

## 9.2 Charles



- 9.2.1 Charles, a 37 year old Senior Software Developer with a leading North East computer company, was interviewed with his partner Lesley in December 2010 about his experience of the Momentum vocational rehabilitation service.
- 9.2.2 Charles was able to relate that his brain injury was due to Post Limbic Encephalitis but that he has little memory of his initial symptoms or of when his encephalitis occurred. He therefore relied on Lesley to provide any background information.
- 9.2.3 Lesley described how she started to become aware of Charles being more forgetful and more verbally aggressive towards her in November 2006. She recalled how she had initially thought these were temporary

changes in Charles' behaviour only to gradually realise after these behaviours persisted, and indeed worsened, over the next few months that she was observing a permanent change in Charles' personality. Lesley related how these marked changes in Charles placed a considerable strain upon their relationship and how in January 2007, after suffering severe headache for over a week Charles received a diagnosis after meeting with a Consultant Neurologist and undertaking various physical tests.

- 9.2.4 Charles started with the Momentum vocational service three years after his post limbic encephalitis was diagnosed. When asked about his experience of the centre based rehabilitation Charles was very straightforward: *'When I started with Momentum and from speaking to the other clients with brain injuries my reaction was I don't need to be here. When I look back now I realise that for those first months with Momentum I didn't accept that my memory and other faculties had been affected by the encephalitis'*. At this point Lesley confirmed Charles's account adding that at that time he had in her opinion been *'in total denial of his problems'*. Charles continued *'It was only after I started my first work placement that I began to accept my memory difficulties and that I was finding it harder to solve problems'*.
- 9.2.5 Charles' first work placement had involved working for 3 months as an administrative assistant in a local hospital department. His main duties involved updating a number of computer spreadsheets regarding hospital appointments and waiting times. Discussing his experience of this placement he emphasised how he had, at first, been quite frustrated at not returning straight away to the Senior Software Developer post which had been retained for him. He however added *'but the work at the hospital showed me that I had trouble sticking to a task'*. Charles went on to describe how in the early weeks of the work placement he had tried to modify some of the spreadsheets, as he thought he could improve them, without talking first to his supervisor. Summarising this first work placement Charles reflected: *'From the work at the hospital I could see why I couldn't go back to my job as a computer programmer – that I was having real difficulties learning new stuff and I was always trying to make tasks bigger than what I'd been asked to do'*.
- 9.2.6 It was however also very obvious from Charles' account of the hospital work placement that he had very much enjoyed working as part of a small team. Charles stressed how much he had liked interacting with the other staff and using his retained computer skills to help them with any I.T. difficulties they were having. Charles remarked how his work as a computer programmer invariably meant he was sat in front of a screen all

day and how the hospital placement had *'taught me how much I miss working with people'*.

- 9.2.7 Charles continued by saying how this realisation that he wanted much more interaction with people in his work than his current post provided led to him sitting down with his employer and Momentum Job Coach to explore alternative positions within the company. From a review of Charles' skills profile after his brain injury the employer agreed Charles could attempt the role of Project Manager where the main duties were liaising with staff in a number of different departments to monitor the progress, resource requirements and timescale of various I.T. projects.
- 9.2.8 Following four months of Job Coach support with this new role, mainly focussing on using memory aides such as a notebook and dictaphone more consistently, Charles gained a transfer to this new position. Summing up his vocational rehabilitation Charles ended by saying *'You've got to be true to yourself – you've got to know your limitations as well as what you can still do'*.



**Charles and his wife Lesley**

- Ben-Yishay, T. Silver, S.M., Piasetsky, E., Rattok, J. (1987). Relationship between employability and vocational outcome after intensive, holistic cognitive rehabilitation. *Journal of Head Trauma Rehabilitation*, 2, 35-48.
- Bolton, B. & Roessler, R. (1986a). *Manual for the Work Personality Profile*. Fayetteville, AR: Arkansas Research & Training Centre in Vocational Rehabilitation, University of Arkansas.
- Bolton, B. & Roessler, R. (1986b). The Work Personality Profile: Factor scales, reliability, validity and norms. *Vocational Evaluation and Work Adjustment Bulletin*, 19, 143-149.
- Brooks, N., McKinlay, W., Symington, C., Beattie, A. & Campsie, L. (1987). Return to work within the first seven years of severe head injury. *Brain Injury*, 1, 5-19.
- Crepeau, F., & Scherzer, P. (1993). Predictors and indicators of work status after traumatic brain injury: A meta-analysis. *Neuropsychological Rehabilitation*, 3, 5-35.
- Different Strokes (2006) Work after Stroke Project. In *Getting Back to Work After Stroke*. The Stroke Association and Different Strokes (2006).
- Dikmen, S. S., Temkin, N.R., Machamer, J.E., Holubkon, A.L., Fraser, R. T. & Win, R. H. (1994). Employment following traumatic head injuries. *Archives of Neurology*, 51, 177-186.
- Haffey, W. & Abrams, D. (1991) Employment outcomes for participants in a brain injury brain injury work re-entry programme: Preliminary findings. *Journal of Head Trauma Rehabilitation*, 6 (3), 24-34.
- Johnson, R.P. (1987b). Return to work after severe head injury. *Int.Disabil. Studies*, 9, 49 - 54.
- Johnson, R.P. (1989). Employment after severe head injury: Do the Manpower Services Commission schemes help? *Injury*, 20, 5-9.
- Johnson, R.P. (1998). How do people get back to work after severe head injury? A 10 year follows-up study. *Neuropsychological Rehabilitation*, 8, 61-79.

Judd, T. (1999). *Neuropsychotherapy and Community Integration: Brain Illness, Emotions and Behaviour*. Kluwer Academic / Plenum Publishers, New York.

Murphy, L., Chamberlain, E., Weir, J., Berry, A., Nathaniel-James, D. & Agnew, R. (2006) Effectiveness of vocational rehabilitation following acquired brain injury: Preliminary evaluation of a UK specialist rehabilitation programme. *Brain Injury*, 20, 1119 -1129.

National Stroke Strategy (2007) Department of Health. 284536/ DH Publications Orderline, P.O. Box 777. London. SE1 6XH.

Oddy, M., Coughlan, T., Tyerman, A. et al. (1985). Social adjustment after closed head injury: a further follow-up 7 years after injury. *Journal of Neurology, Neurosurgery and Psychiatry*, 48, 564.

Ponsford, J.L., Olver, J.H., Curran, C. & Ng, K. (1995) Prediction of employment status two years after traumatic brain injury. *Brain Injury*, 9, 11-20

Prigatano, G. P., Fordyce, D.J., Zeiner, H.K., Roueche, J.R., Pepping, M. and Wood, B.C. (1984). Neuropsychological rehabilitation after closed head injury in young adults. *Journal of Neurology, Neurosurgery and Psychiatry*, 47, 505-513.

Sale, P., West, M., Sherron, P. & Wehman, P.H. (1991). Exploratory analysis of job separations from supported employment of persons with traumatic brain injury. *Journal of Head Trauma Rehabilitation*, 6, 1-11.

Stapley, S. Atkin, K. and Easton, A. (2008). Making sense of chronic pain among people who have had encephalitis and developing service support that meets their needs.

<http://www.encephalitis.info/images/iPdf/Research2/ResearchReport.pdf>

Teasdale, G., & Jennett, B. (1974). Assessment of coma and impaired consciousness. A practical scale. *Lancet*, 2, 81-84.

Thurgood, J. (1999). The employment implications of the Disability Discrimination Act, 1995 and a suggested format for developing reasonable adjustments. *British Journal of Occupational Therapy*, 62, 290-294.

Tyerman, A. & Meehan, M. (Eds.). (2004). *Vocational assessment and rehabilitation after acquired brain injury. Inter agency guidelines*. London: Royal College of Physicians.

Tyerman, A. & Tyerman, R. (2008) Proceedings of the 16th European Congress of Physical and Rehabilitation Medicine, Brugge, Belgium, 3-6 June 2008. (pages 269-271) by Edizioni Minerva Medica, Turin.

Tyerman, A. Tyerman, R. and Viney, P. (2008) Vocational Rehabilitation Programmes. In A. Tyerman & N.S. King (Eds.) *Psychological Approaches to Rehabilitation after Traumatic Brain Injury* (pp. 376 – 402) Blackwell Publishing Ltd.

Tyerman, A. & Young K. Vocational rehabilitation after severe traumatic brain injury: II Specialist interventions and outcomes. *Journal of the Application of Occupational Psychology to Employment & Disability*, 2000; 2; 13-20.

Weddell, R., Oddy, M. & Jenkins, D. (1980). Social adjustment after rehabilitation: a two year follow-up of patients with severe head injury. *Psychological Rehabilitation*, 10, 257-263.

Wehman, P., Kreutzer, J., Wood, W., Morton, M.V. & Sherron, P. (1988). Supported work model for persons with traumatic brain injury: Toward job placement and retention. *Rehabilitation Counselling Bulletin*, 31,298-312.

Wehman et al. (1990) Return to work for persons with traumatic brain injury: A supported employment approach. *Archives of Physical Medicine and Rehabilitation*, 71, 1047-1052.

Wehman, P., Kregel, J., Sherron, P., Nguyen, S., Kreutzer, J., Fry, R., et al. (1993). Critical factors associated with the successful employment placement of patients with severe traumatic brain injury. *Brain Injury*, 7, 31-44.

Wehman et al. (1995) Return to work for persons with severe traumatic brain injury: A data-based approach to program development. *Journal of Head Trauma Rehabilitation*, 10 (1) 27-39.

Wehman et al. (2003) Supported employment for persons with traumatic brain injury: A preliminary investigation of long term follow-up costs and program efficiency. *Archives of Physical Medicine & Rehabilitation*, 84,192-196.



# Appendices

## 11.1 Appendix 1:

**The Momentum Work Placement Pack (WPP)**

## 11.2 Appendix 2:

**Table 2:  
Summary of Participants Primary Workplace  
Disabilities, Interventions and Progress**

## 11.3 Appendix 3:

**Structured Interview of Client Experience of  
Momentum Vocational Rehabilitation Service**



## WORK PLACEMENT PACK

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**Tel: 0121 616 3900**  
**Fax: 0121 616 3909**

### WORK PLACEMENT

## GENERAL INFORMATION

Client Name: \_\_\_\_\_

<b>Organisation's Name:</b>	
<b>Full address:</b>	
<b>Contact Name(s)</b>	
<b>Contact numbers):</b> <b>Telephone:</b>  <b>E-mail:</b>  <b>Fax:</b>	
<b>Business activity:</b>	
<b>Type of placement offered</b> e.g. shadow, supported, independent	
<b>Placement job title:</b>	
<b>Length of placement:</b>  <b>No of Days:</b>  <b>Days on placement:</b>  <b>Hours/times of attendance</b>	
<b>Level of supervision available:</b>	
<b>Travel expenses paid by employer? Y/N</b>	

### OBJECTIVES:

- 1.
- 2.
- 3.



## JOB ANALYSIS

Client Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Job Title: \_\_\_\_\_

- CORE WORK ROUTINES (e.g.: routines performed frequently)
  
- EPISODIC WORK ROUTINES (e.g.: routines performed less than five times a week)
  
- JOB RELATED ROUTINES (e.g.: break times, using facilities etc.)
  
- USEFUL SKILLS/COMPETENCIES

I am aware that I will be required to attempt and complete all duties outlined above. Any additional duties will be agreed between the client, placement provider and Momentum.

Signed (Client) ..... Date .....

<b>1. General</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
1.1 Is there a completed, current Health & Safety Law Poster on display? (If No, gain a commitment to purchase – legal requirement)			
1.2 Does the organisation have a written Health & Safety Policy and is this regularly reviewed and updated? (Not applicable if under 5 employees)			
1.3 How will the organisation acquaint our client with its Health & Safety Policy?			
1.4 Are registers of Risk Assessment kept? (If No, make organisation aware this is a legal obligation)			

<b>2. Insurance</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
2.1. Confirmation of Employer's Liability cover (If No, need signed declaration to say that the company will Cover any claim). If Crown Exempt, note it in comments.			
2.2 Confirmation of Public Liability cover			
2.3 Confirmation that insurer will be notified that client is on Premises			

<b>3. H&amp;S Contacts</b>	<b>Comments</b>
3.1 Within the organisation, who has overall responsibility for Health & Safety?	
3.2 Who is responsible for Accident Investigation?	
3.3 Who is responsible for Risk Assessment?	

<b>4. COSHH Regulations</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
4.1 Is the organisation aware of its obligations under the COSHH Regulations? (If No, bring attention to COSHH booklet)			

<b>5. Accident Procedure &amp; First Aid</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
5.1 Is there a first aid kit? Where is it kept?			
5.2 Who is responsible for refills?			
5.3 Is there an accident book? Where is it kept?			

5.4 To whom should accidents be reported?			
5.5 Who is responsible for first aid?			
5.6 Is the organisation aware of its obligations under RIDDOR 95?			
<b>ALL ACCIDENTS/DANGEROUS OCCURRENCES MUST BE REPORTED TO MOMENTUM AS SOON AS REASONABLY PRACTICABLE. THE HOST COMPANY IS RESPONSIBLE FOR REPORTING ACCIDENTS AS DEFINED UNDER RIDDOR TO THE H.S.E. OR LOCAL AUTHORITY.</b>			

6 Fire/Emergency Procedures	Yes	No	Comments
6.1 Has a fire risk assessment been carried out and are any recommendations being implemented?			
A COPY OF THE WRITTEN RISK ASSESMENT IS REQUIRED. ALTERNATIVELY IT IS THE RESPONSIBILITY OF PERSON COMPLETING THIS PACK TO ASSESS THE SUITABILITY OF PLACEMENT IN TERMS OF RISK. PLEASE COMPLETE GENERAL OBSERVATION SECTION BELOW.			
6.2 Does the company carry out fire/evacuation drills? If yes, how often? (Please give date of last drill)			
6.3 Does the company carry out regular fire alarm tests? If yes, how often? (Please give date of last test)			
6.4 Is other equipment checked regularly (i.e. fire extinguishers, fire blanket, hose)?			
6.5 What date were the fire extinguishers last checked?			
6.6 Are all fire exits clearly identified and kept clear?			
6.7 Are fire procedure notices displayed?			
6.8 How will the organisation make our client aware of the evacuation procedures?			
6.9 Where is/are the nearest assembly point(s)?			

7 Use Of Protective Equipment	Yes	No	Comments
7.1 Will the work activities carried out by trainees require the use of PPE? If so, is this identified within the risk assessments carried out by the organisation?			
7.2 If Yes: Is the issue free?			
7.3 Are records kept of issue?			

7.4	Is training given?			
7.5	Is the PPE suitable, approved and CE marked?			
7.6	Are there any Special Conditions?			

8.	Welfare Facilities	Yes	No	Comments
8.1	Does the organisation provide adequate toilet/washing facilities? (Min: cold/hot water; hand-dryers; adequate toilet facilities)			
8.2	If the client is expected to wash-up, are protective gloves provided?			
8.3	What provision is made for the safe storage of clients' belongings?			
8.4	Is there a quiet room/office available for a client to relax in if necessary?			

9.	Manual Handling (i.e. lifting, pulling, pushing, putting down, carrying or moving by hand or bodily force)	Yes	No	Comments
9.1	Will training be given in manual handling and by whom?			
9.2	Which aspects of the job/work (i.e. tasks, duties) involves manual handling?			
9.3	If manual handling is a large percentage of the job, have assessments of these manual handling operations been made? When and by whom?			
<p><b>Under the Manual Handling Operations Regulation 1992, where it is not reasonably practicable to avoid the need to undertake manual handling operations at work, which involve a risk of there being an injury, an assessment of the manual handling operation needs to be carried out. Further details available from your local Health &amp; Safety Executive.</b></p>				

<b>10. Display Screen Equipment</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
10.1 Will the client be using display screen equipment as a significant part of their work and if so will a specific risk assessment be carried out on their workstation?			
10.2 Does the workstation satisfy the minimum requirements for:			
10.3 Display Screen?			
10.4 Keyboard?			
10.5 Furniture?			
<b>Further advice on assessment of work stations is available from the Heath &amp; Safety Executive.</b>			

<b>11. Electricity</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
11.1 Does a competent person on a regular basis visually inspect portable electrical appliances i.e. Pat tested?			
11.2 Are there any areas off limits due to electrical hazards? If Yes, where?			

<b>12. General Working Environment</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
12.1 Is there safe access to and exit from the workplace? (if any problems, please specify)			
12.2 Is there adequate ventilation and extraction?			
12.3 Is there adequate lighting?			
12.4 Are there any areas restricted due to particular dangers? If Yes, where are these situated in relation to work area, and how will our client be made aware of them?			
12.5 Are there any overhead dangers due to any of the following:			
12.6 Scaffolding?			
12.7 Ladders?			

<b>General Working Environment Cont ...</b>			
12.8	Mechanical movements, (hoists, cranes)?		
12.9	Others? Please specify		
12.10	Are there any areas where mechanical equipment is used? (i.e. fork lift trucks)		
12.11	Are there any hazards associated with compressed air/gas?		

<b>13. Unusual Hazards</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
Will there be exposure to any of the following:			
13.1 Radiation (i.e. welding)?			
13.2 Asbestos (i.e. building repairs)?			
13.3 Vibration?			
13.4 Machinery?			
13.5 Others (please state)?			
13.6 If Yes to any of the above, please state where/how provision is made against this risk?			

<b>14. Noise</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
14.1 Are noise levels too high? (see guidance notes below)			
14.2 Are there any areas in which ear protection is needed, if so where and are these readily available for the client?			

**NOTE: As specified in the Noise at Work Regulations 1989. Ear protection should be used as a last option, prior to its issue assessment should be made and if possible efforts made to firstly eliminate, reduce or control the source of the noise. Further details available from your Health & Safety Executive.**

**SUMMARY OF REQUIRED ACTION POINTS IDENTIFIED DURING AUDIT)**  
**GENERAL OBSERVATIONS (in relation to client group)**  
**(e.g.: floor: uneven/type, obstacles, shelving, disorganised work areas, type of environment)**



## **PROHIBITION NOTICE**

**The following list comprises of machinery and/or processes that clients of MOMENTUM are not to operate until authorized full training has been received from the Employer. It also covers areas where access is prohibited.**



We confirm that the workplace inspected meets with Momentum's minimum standard to allow a client from Momentum to participate in a work placement at this address. This placement is subject to any required actions as listed on the front page of this document and takes notice of any items on the Prohibition Notice if issued.

Signed.....  
On behalf of the Organisation

Name.....

Date.....

Signed.....  
On behalf of Momentum

Name.....

Date.....

# **PARTNERSHIP AGREEMENT**

## **Health and Safety**

It is the responsibility of the Host Company to ensure the supervision of our client regarding their health, safety and welfare (in accordance with the Health & Safety at Work Act) at all times during the work experience programme.

Relevant aspects of Health and Safety should be included in your induction programme for our client(s). These are to include; accident reporting procedure, evacuation procedure, fire exits, evacuation meeting points, fire extinguishing appliances, first aid assistance and any information relating to hazardous equipment and substances.

In the event that an accident does involve our client it shall be the responsibility of the Host Company to follow all necessary steps as required by statutory procedures and to **inform MOMENTUM immediately**.

## **Equal Opportunities**

MOMENTUM supports equal opportunities and expects the Host Company to ensure that our client(s) are treated within the appropriate working practices.

## **Attendance**

In the event of any absences, the client must inform both the Host Company and MOMENTUM. It is also expected that the host company would inform MOMENTUM of any failure to attend (including lateness) or changes to the agreed attendance hours.

## **Disciplinary Procedure**

The client will be instructed that he/she must comply with the procedures of the Host Company. In the event that disciplinary action is required, the Host Company should inform MOMENTUM immediately.

## **Employers Assessment of our client**

The Host Company will nominate an appropriate employee who, every fortnight, will discuss our client's performance against the agreed objectives during a meeting with our Job Coach. The Host Company will also be asked to complete a Feedback Questionnaire at mid point of the placement and at the end of the work placement. It is important that our clients receive meaningful feedback, and therefore it is expected that the Host Company will use the measure of assessment that would be used for any other employee.

## **Record of Attendance**

To enable Momentum to monitor the attendance of the client at the workplace, the host company will check for accuracy and will sign the Attendance Record that our client will present to the nominated person(s) within the company.

### Termination of Agreement

Either party may terminate this work experience placement at any stage of the placement. Either party may terminate the contract immediately in the event of any breach of the terms as agreed.

Signed  
(On behalf of the Host Company)

Date

Job Title

Signed  
(On behalf of MOMENTUM)

Date

Job Title



# WORK PLACEMENT ASSESSMENT PACK

## Contents:

- Momentum Assessment of Workplace Behaviours (MAWB)
- Mid-placement review: Employer's feedback
- End of placement review: Employers feedback.
- End of placement review: Client self-assessment.
- Record of Client Attendance (8 weeks)
- Momentum Quality Assurance Questionnaire: Employer Satisfaction Survey
- Momentum Quality Assurance Questionnaire: Client Satisfaction Survey