

The importance of group projects: Experiences of therapy led project groups from the perspective of acquired brain injury survivors

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# ABSTRACT

There is a lack of literature exploring project groups as a method of therapy after Acquired Brain Injury (ABI). This investigation intended to explore this gap using a micro-level approach, aiming to produce personal and individual experiences. Interviews with three male ABI survivors were analysed using Interpretative Phenomenological Analysis (IPA). The analysis suggested that the men experienced the group as a tool for overcoming ABI, an opportunity for increased social support and also a chance for the men to help others. Moreover, it suggested the importance of therapy led project groups for ABI survivor's selves, and finally suggested that the group facilitates the reflection, maintenance and progression of the self after brain injury. Taifel's (1974) social identity theory surrounds the experiences of the men, demonstrating that the group and its' processes are central to group therapy. The project group is mostly a positive and valuable experience for each man. This report supports existing research that therapy led project groups are a useful treatment for male ABI survivors.

KEY ACQUIRED BRAIN IF WORDS: INJURY	GROUP THERAPY	SOCIAL REHABILITATION
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### Introduction

Every ninety seconds someone in the United Kingdom is admitted to hospital with Acquired brain injury (ABI) (Headway the brain injury association, 2015). Survival after ABI is becoming increasingly common due to medical advancement and improvement in aftercare (Flanagan, Cantor, & Ashman, 2008). Consequently at least one million people are estimated to be living in the United Kingdom with ABI (Headway the brain injury association, 2015). The Royal College of Physicians (2004) state brain injury can arise from trauma due to head injury or damage after surgery, vascular malformation such as stroke or subarachnoid haemorrhage, cerebral anoxia, and infection or inflammation of brain tissue. Consequently, life after ABI produces major complications involving the patient and their families' lives (Ponsford & Schoenberger, 2010; Kreutzer, Marwitz, Godwin, & Arango-Lasprilla). Motor function, language and communication, cognition, behaviour, sensory processing and emotional or psychological disturbances are just some of the common areas that can be impaired after brain injury (Faul, Xu, Wald, & Coronado, 2010). These impairments impact on the quality of each patient's life and levels of independence (Bradt, Magee, Dileo, Wheeler, & McGilloway, 2010). Treatment and therapy is usually implemented in an intensive hospital setting at first and gradually reduces as the patient improves (Johnstone & Stonnington, 2012). However, it is still maintained to continue reducing the effects of these impairments and attempt to restore normality within the patient's life (Headway the brain injury association, 2015).

One critical area of focus is trying to manage the cognitive, emotional and behavioural aspects of brain injury (Cicerone, et al., 2011). Williams and Evans (2003) argue these impairments can become more problematic in the future than the impairment of motor function, arguing that when one exists they all are present together. Therefore, there is an increased urgency to provide treatment and therapy to patients experiencing these deficits during the post-acute period (Andelic, et al., 2010). Difficulties that occur from this type of impairment include problems with memory, concentration, initiation, forward planning and problem solving (Royal College of Physicians, 2004). Due to the nature of these impairments, treatment and therapy is generally a long and challenging process (Levine, et al., 2011). Moreover, limitations can also arise from patients' mental capacity which then affects personal awareness towards their problems, consequently affecting their ability to participate effectively with the treatment (British Psychological Society, 2002). This is because it is thought as the brain injury increases in severity, the capacity for self-awareness decreases in each individual patient (Lezak, 1978). This can also lead to denial towards problems as the survivor is unable to identify their impairments (Fordyce, 1986). Nevertheless, treatment and therapy does still proceed.

Cognitive Rehabilitation Therapy is made up from a group of interventions that aim to help a person regain their capability to perform cognitive tasks (Kesler, Lacayo, & Jo,

2011). These cognitive tasks are based on aspects such as patients' memory, concentration or initiation (Ponsford, Sloan, & Snow, 2012). This is done by retraining old skills and teaching new coping strategies to overcome the deficits (Backhaus, Ibarra, Klyce, Trexler, & Malec, 2010). Before a person's progression can be recorded, an intense neuropsychological assessment is made to identify any cognitive strengths and weaknesses that person has (Tsaousides & Gordon, 2009). From the results, a treatment plan is created that is individually tailored to the ABI survivor. Tsaousides and Gordon (2009) conducted a study to measure the effectiveness of CRT for Brain Injury survivors in which they compared different studies use of CRT and the results. They found that CRT is a useful measurement of cognitive ability. Additionally they found sufficient evidence supporting its efficacy and effectiveness, leading to improvements in patients cognitive ability and functioning. Salazar, et al. (2000) also conducted a study that evaluated the efficacy of CRT for patients with Traumatic Brain Injury. They did this by using two CRT groups; an intensive, eight week, in hospital group and a limited, at home, once weekly group, using a total of one hundred and twenty brain injured participants. They measured success based on whether the participants were back in work one year after they began their CRT treatment. The results found that the benefits of intensive CRT were similar to limited CRT. This therefore suggests that CRT is not restricted to an intensive treatment plan and can still be effective if completed once a week (Cicerone, et al., 2011).

Rath, Simon and Langenbah (2003) conducted a quantitative study involving an innovative and unique group treatment of cognitive deficits in outpatients with traumatic brain injury (TBI) and a more conventional treatment group. With the groups both based around CRT, they focused primarily on problem-solving deficits that occur after TBI, consequently concentrating on emotional self-regulation and logical thinking deficits. They measured each outpatient's executive function, self-appraisal of problem-solving, self-appraisal of emotional self-regulation and clear thinking, and finally objective observer ratings of role played situations. They then compared the results of these between the results of the innovative therapy group and the more conventional therapy group to assess its effectiveness. The results found that the innovative group was more successful in comparison to the conventional group and although it did not provide a cure for the problem-solving deficits that were present in the participants with ABI, the group provided strategies in order to overcome them. These included coping strategies such as brain storming possible solutions, writing pros and cons lists to possible solutions or trying a second solution if the first one didn't work. This study provides evidence that impairments after brain injury may be difficult to treat however promoting coping strategies may be a more effective solution, as this means survivors are able to manage their problems independently. Anson and Ponsford (2006) also found that group therapy after brain injury can increase adaptive coping immediately after intervention however, psychological disturbances experienced by ABI survivors are not affected during or after interventions. Moreover, group therapy can be used as a technique for learning coping strategies to overcome

recurring problems, however it is not a method of finding cures (Wolters, Stapert, Brands, & Van Heugten, 2010).

Miotto, Evans and Souza de Lucia (2009) conducted a study to measure the effectiveness of a group based attention and problem solving treatment (APS) for people living with deficits from ABI. APS is a branch of CRT as it aims to improve cognitive deficits through rehabilitation. Thirty participants with frontal lobe damage took part in the study, sixteen with left frontal (LF) lobe damage and fourteen with right frontal (RF) lobe damage. Each participants baseline of executive and functional measures were recorded before they took part in the group based APS. The results found that there were significant improvements to the participants executive and functional functional measures, suggesting that the group based APS was effective treatment for the cognitive and behavioural deficits following ABI.

Notably, Rath et al. (2003) and Miotto et al. (2009) provided treatment performed within a group environment to ABI survivors within their experiments. However, the results of both these studies do not focus on the group based aspect of the design and, therefore in this instance no assumptions can be made about the effectiveness of group therapy as a treatment for brain injury. Respectively, a study was conducted by Foxhall and Gurr (2010) focusing more elaborately on the advantages and disadvantages with group therapy after ABI. The method included a literature review of components that were believed to be effective when trying to improve cognitions and group interventions. Observations were then made about a therapy group within an inpatient brain injury rehabilitation centre that completed CRT to look for these The participants consisted of four brain injury survivors who were components. already members of this therapy group. They found that this particular therapy group not only provided an increased opportunity for social interaction and peer support, but it improved cognitive deficits within the group setting, enhancing the participants ability to use coping strategies. In consideration of these results, it is easy to make the assumption that the group environment enriches ABI survivors' social abilities and support, and also improves the ability to learn coping strategies. Similarly, therapeutic group environments have been found to be more successful that individual approaches within post-traumatic stress recovery, which can be linked to brain injury (Quiros, 2010; Bryant, Marosszeky, Crooks, & Gurka, 2000).

Bertisch, Rath, Langenbahn, Sherr and Diller (2011) produced research that suggests group therapy can strengthen and increase the positives gained from individual therapy for ABI survivors who have cognitive and behavioural deficits. Similarly to the results of Foxhall and Gurr (2010), Langenbahn, Sherr, Simon and Hanig (1999) suggest that this is because group therapy enables an opportunity for increased peer support and feedback, it also facilitates the sharing of ideas and coping strategies and enables ABI survivors to feel they are helping others, which in turn reduces feelings of isolation. This is consistent with Jetten, Haslam, Haslam and Alexander (2012) who

argue giving support facilitates receiving support. Furthermore, group membership reduces personal comparison with other ABI survivors of limitations they may have from the injury which can have detrimental effects on self-worth. (Flanagan et al., 2008; Rath, et al., 2003; Silver, McAllister, & Arciniegas, 2009)

There is an overwhelming amount of quantitative research in the field of ABI Rehabilitation, and much less qualitative research in comparison. Although quantitative research is objective and provides statistical evidence of the effectiveness of treatment or therapy after brain injury, it does not always provide a complete picture because it fails to include ABI survivor personal experiences (Tyerman & Humphrey, 1984). Much of the literature based on head injury neglects personal perspective, irrespective of the fact a great deal of ABI survivors report much more importance about feelings towards their experiences, than the biological changes of their bodies (Russell, 2001). Martin (2014) completed an interpretative phenomenological analysis regarding the experiences of life goals within a residential setting from the perspective of an ABI survivor. By using a qualitative approach this enabled the researcher to establish a more individual and personal method to the investigation. Additionally, the choice of Interpretative Phenomenological Analysis (IPA) as opposed to other methods of analysis contributed to making the data much richer and more meaningful. This is because IPA allows for interpretation and meaning making of participants' experiences (Smith, Flowers, & Larkin, 2009).

Howes, Benton and Edwards (2005) completed a qualitative study about participants' experiences of life after ABI. They wanted to explore the experiences that women with acquired Traumatic Brain Injury (TBI) have had. By taking a qualitative approach this allowed the researchers to operate on a micro-level and capture individual beliefs and responses. Six participants took part in semi-structured interviews consisting of 5 broad questions that were used to assist further discussion. All six participants were female ABI survivors to narrow down the sample respondents and increase the amount of similar characteristics between them. The data was analysed using IPA as this was considered to be the most appropriate form of analysis for this research question and method. A total of four super-ordinate themes were produced from the data; awareness of change, emotional reaction, the struggle to make sense and adaption and acceptance, however, one limitation with this study is that it only included womens experiences meaning the results cannot be generalised to men.

The study within this report was built on previous research in four key respects. First, it was important to also use a qualitative approach. This was because, the research aimed to explore the experiences of a project group from the perspective of ABI survivors and the only way in which this could be done in enough depth with individual meaning was through a qualitative approach, like in Howes et al. (2005) study. Second, only women were included within their study and therefore only men participated within the study in this report to gain a male perspective. Third, IPA was

selected, because it allows for the meaning making and interpretation of individual experiences to be made which was central to the research question (Howes, et al., 2005). Fourth, instead of using such a broad topic area such as overall experiences of ABI like in Howes et al. (2005), the conclusion was made to make it more specific. This was done by building on current quantitative research based on the treatment and therapy of ABI survivors within a group environment (Anson & Ponsford, 2006; Bertisch, et al., 2011; Flanagan, et al., 2008; Foxhall & Gurr, 2010). A CRT based project group took place weekly within a local brain injury day centre, therefore this fitted well with the previous research, additionally there seemed to be an absence of qualitative research in this topic area. The research question was composed based on a compilation of all these factors.

The importance of Group Projects: Experiences of Therapy Led Project Groups from the Perspective of Acquired Brain Injury Survivors within a Brain Injury Centre.

#### Method

#### Rationale and approach

The study aimed to research three Acquired Brain Injury survivors' insights and personal experiences of a therapy led project group within a brain injury day centre. The basic aims of the project group were to increase peer support, practice planning and organisation, to help others and to raise awareness of brain injury. The study was based on numerous quantitative studies in this area that focused on group therapy for ABI survivors (Anson & Ponsford, 2006; Bertisch, et al., 2011; Flanagan, et al., 2008; Foxhall & Gurr, 2010). However, due to the qualitative approach in this study, rich and personal data was collected unlike most other studies in this area. Interpretative Phenomenological Analysis was used to analyse the data which enabled for participants experiences to be made sense of.

### Study Design

The data was collected using semi-structured interviews. First, this was because there was an interest in gaining insightful and meaningful data and individual interviewing allows for this. Second, by making the interview semi-structured, it ensured a basic topic area was covered and kept the interview on subject. However, it still gave the participants room to expand on their answers, again, making it more personal. Third, one to one interviewing as opposed to other techniques such as focus groups seemed the most appropriate method. This was due to the fact all the participants have experienced ABI and therefore, sensitive topics may have been covered during the interviews which may have been uncomfortable to talk about in a bigger group.

Once the data was collected it was analysed using Interpretative Phenomenological Analysis (IPA). The research question aimed to find out the importance of each participants experience, and that is what IPA also aims to achieve. By exploring the data using IPA it allowed for meaning making of each personal experience of ABI and therefore each of the participants interpretations of their experiences were interpreted by the researcher to produce the results.

### **Participants**

There were three participants in the study. All three were male ABI survivors who regularly attend a weekly project group based at a local therapy led, brain injury day centre where the researcher volunteers. Before the service users were approached, an inclusion/exclusion criteria was constructed with guidance from the Occupational Therapist based in the centre. This was to identify anyone who was not practically suitable for the chosen method or anyone who would not be able to consent for themselves. The final criteria excluded anyone with; receptive aphasia, expressive aphasia, anterograde amnesia and anyone who was unable to concentrate for over fifty minutes. However, anyone that had retrograde amnesia was considered to be at no disadvantage and therefore they were still included when participants were approached to take part. A list of all service users who attend the weekly project group was assembled, and anyone who did not fit the criteria was removed. The remaining service users were discreetly approached and asked to take part in the study during a normal day within the centre, it was at this point they were given the information sheet and consent form. The consenting participant's names were put in a hat so that final three could be pulled out and chosen at random.

Participant one was twenty five years of age and at the time of the interview had been a part of the group for approximately three months. It had been six years since his Brain Injury. Participant two was fifty years of age when he took part in the interview, he had been taking part in the group for approximately seven months and it had been eight years since his Brain Injury. Finally, Participant three was also fifty years of age at the time of the interview. However, he had been a part of the project group for the longest amount of time out of the three participants, approximately a year. Similarly out of all three participants, it had been the longest amount of time since his brain injury, which was over nineteen years ago.

#### Interviews

A total of six open questions were put together for a semi structured interview. In brief, they aimed to find out what the project group entailed, if participants had any expectations before taking part in the group, if they experienced any changes in independence since the group, changes in self since the group, new skills as a result

of the group, and finally, the differences these things may have made to each participants life.

#### Procedure

All interviews took place between 10.00 and 13.00 on a Thursday, over a two week period. A quiet room within the brain injury day centre was used to conduct each interview this was in order to avoid any noise from elsewhere in the building that may disturb the interview itself or any data recorded. The room consisted of two opposing sofas to ensure the participants felt comfortable and at ease. The interview was conducted as follows. First, the interviewer welcomed the participant to the room and reiterated the following interview was to be recorded using a digital voice recorder. They were also reminded that the interview would last no longer than forty minutes and therefore the interviewer will be monitoring the time throughout and they should try to avoid distraction if possible when this occurs. The participant was then handed the interview questions and asked to read through them, if they had not already done so. Each participant was thanked for taking part and asked if they had any final questions. The recording device was then switched on, set to record, and the interview began.

Throughout the interview, pauses, probes and prompts were used appropriately and the interviewer was equipped with a note pad and pen to record any thoughts they may have during the interview to aid the analysis process. When the interview had covered all the questions and it was a suitable time to stop, the audio recorder was stopped and participants were thanked once more for their participation and given a debrief sheet read through. This method was repeated until all three interviews had taken place.

### **Transcription of interviews**

A combination of transcription guidelines were used to provide a comprehensive set of instructions. This therefore made the level of transcription appropriate to the level of analysis that was performed as Interpretative Phenomenological Analysis requires a more detailed level of transcription than other forms of analysis (King & Horrocks, 2010). The transcripts include pauses, rising intonation, interruptions of speakers, emphasis during speech and non-verbal noises such as laughter or coughing. The researcher combined transcription guidelines from DuBois, Schuetze-Coburn, Cumming and Paolino (1993), Hugh-Jones and Madill (2009) and O'Connell and Kowel (1995) including the fact that all names were anonymised within the transcript and names of external charities were removed.

All three interviews were transcribed by the researcher using these instructions. This was completed by the researcher uploading a copy of the transcription onto a

computer and listening to it via a pair of headphones then transcribing onto a Microsoft Word document. Fifty eight pages were produced.

#### Method of analysis

The form of Interpretative Phenomenological Analysis that was used was based on a method outlined by Smith et al. (2009). The first stage of analysis included reading and re-reading the original transcript until the researcher was comfortable with the data. The next stage involved initial noting on the transcript. There was three types of noting including, descriptive, linguistic and conceptual comments. The descriptive comments aimed to describe the participants' speech directly, including what had been said and the subject within the transcript. The linguistic comments focused on examining the language and intonation within the transcript. Finally the conceptual comments were used to examine and focus on the narrative and conceptual elements within the transcript. It is important to note, each interview transcript was analysed separately until a comparison was made between all three interviews emergent themes. Therefore a step by step approach was taken during this stage in the analysis where by the researcher commented on one interview transcript at a time with each type of exploratory noting individually. This was to allow the researcher to devote all their attention to each type of commenting at a time without having to search for all three types of exploratory commenting at once through different participants' data.

The next stage involved developing emergent themes from the exploratory comments that were noted. This stage took the interpretation further from the data within the initial transcript and began to include more of the researcher themselves. These themes were short and concise phrases that included the psychological core of the data. This stage was also completed using a step by step approach, where the researcher completed one interview transcript at a time.

Subsequently the emergent themes were considered in further detail and connections were made between them. They were interpreted on six levels to provide a comprehensive analysis and establish the super-ordinate themes. The first level was abstraction which involved a basic technique of identifying patterns between emergent themes and trying to get a sense of the super ordinate themes to come. The second level was subsumption whereby a similar process to abstraction occurs however emergent themes acquire a super-ordinate position as it helps to group a series of themes together. The third level was polarisation which meant examining the transcript for oppositional relationships between emergent themes. The fourth level was contextualisation which was used by examining contextual or narrative elements that were highlighted in the emergent themes throughout the transcript. The fifth was numeration, which was used by examining the frequency of emergent themes that occurred and finally the function of the emergent themes were interpreted to illustrate the deeper meaning of participants' words and therefore get a detailed understanding

of the self within the transcript. This stage in the analysis was done manually using techniques such as mapping and charting to allow the researcher to become involved and submerged within the data.

As the analysis progressed, tables of super-ordinate themes were produced for each participant's interview. Finally, these themes were compared between all three cases to produce a master table of super-ordinate themes that encompassed all the themes that appeared from within the transcript. Techniques such as mapping and charting were also used at this stage enabling the researcher to be immersed amongst the data.

## Analysis

The interpretations from the analysis produced a total of four super ordinate themes that can be seen below:

- A. The Group and Overcoming Acquired Brain Injury
- B. Social Support and Helping Others
- C. Importance of the Project Group for the Self
- D. Reflection, Maintenance and Progression of the Self through Time

A master table of super-ordinate themes from all three participants can be found in the appendices along with a table of themes for each individual participant.

### The Group and Overcoming Acquired Brain Injury

As participant one, Sean, describes the purposes of the group he discusses one purpose as trying to understand their own brain injury as a member within the group.

"So it's like a social group, for social skills but it's also about understanding your injury as well." Line 13-14

Sean's interpretation of the group's purpose suggests he has experienced gathering a greater understanding of his brain injury during his attendance of the group. Moreover as he speaks about his injury in the present tense with no denial about its existence, this confirms his acceptance for it. Perhaps the acceptance for the Brain Injury has increased as he learned to understand more about it, therefore acceptance of brain injury has been helped by the group. Further evidence for this can be seen when he speaks about what the group has done for him:

"It's helping me take a step forward." Line 145

Here Sean recounts his experiences of learning to accept and overcome his brain injury. By acknowledging that he is moving forward infers that he is aware of his progression and recovery through time. Sean also acknowledges this progression has been facilitated by his membership within the Thursday Morning Project group which suggests he believes he may not have progressed as much without it. However, due to the fact he chose the words 'helping me' this suggests his ongoing progression is not entirely due to that group, and is perhaps partly helped by him alone or other factors outside of the group.

The second participant, Matt, also describes his experiences of overcoming Brain Injury:

"because at end of day I'm not a quitter, I won't quit [um hm] yes I've suffered a bad injury, it's cost me a lot, [um hm] but at the end of the day it's I either take it or I wallow away in self-pity, I'm not going to wallow away in self-pity and I don't think a lot of the members of the group are because they've got the support they need, [from] and actually been given the inspiration from the group..." Line 495-500

Here, Matt speaks assertively about the emotional process of overcoming brain injury and the fact he made an active choice not to wallow and move on. He attributes his ability to progress to the group providing each member support and inspiration. The way he discusses this topic suggests it is important to him and also suggests he may have experienced feeling negatively towards his brain injury in the past, this is suggested when he repeats that he will not quit. These results can be also interpreted from other aspects of the transcript:

"I define basically, I either sit back and just, do nothing, or I come, and I take part in what activities they put in front of us whatever projects they put in, I'm quite happy to take part and give it my all." Line 512-514

This extract is another example of Matt speaking confidently and assertively about the attribution of the group when overcoming brain injury. By attending the group and taking part in activities, he is given a purpose. He is aware that the group assists in the progression of self after brain injury however, he is also aware that it is partly due to each members input of effort too.

The last participant, Paul also refers to his acceptance of brain injury:

"Anything which affects (pause) us as brain injured members." Line 856-857

Here Paul suggests he is accepting of his problems, this is clear when describes a distinct group bounded by their brain injuries, that he considers himself to be a part of.

- 'us as brain injured members.' Arguably this demonstrates his acceptance of Brain Injury and in turn is one step towards the overcoming of it. However as the transcript progresses it is more noticeable that he is unsure he will be able to overcome his brain injury and also is contradictory towards the previous two participants when they speak about gaining understanding from the group.

"I don't even understand my brain injury never mind theirs." Line 1163-1164

This extract suggests that regardless of the group, Paul still feels as though he does not understand his brain injury. The sarcasm reflects through the tone in his words when he says 'never mind theirs' as though what he is expected to do in that group is too much for him.

## Social Support and Helping Others

Throughout the whole transcript social support and helping others was a recurrent theme. It could be seen within the initial noting and throughout the emergent themes. Sean describes what he finds most enjoyable within the group:

*"How different everyone is and how everyone has a different view, like, and they're such inspirations like all of them." Line 27-28* 

Sean expresses his appreciation of the differences between him and the other group members and views these differences as a positive thing. The bold statement of how he sees them as inspirations highlights his respect towards others. In this instance, the inspiration that he gains from his peers allows him to try and progress. Moreover, the inspiration he gets from his peers is also to help others like they have helped him:

"To improve someone's life [yeah] means a lot to me." Line 237

There is a sense of Sean wanting to give something back. He wants to help others like he has been helped himself. Additionally helping others provides support for the self too, so he wants to help others in order to help himself:

*"If I feel depressed for example I can bring it up in the group and then that will help, to then get over that." Line 116-118* 

This is an example of how Sean uses the group for personal support and is an indication that the group works on a multi-dimensional approach; to help and to be helped.

It can be interpreted that Matt also describes these experiences too as he speaks about the activities that take place within the group: "We're doing is various projects for the centre, we're giving these, to help people." Line 621-622

As he breaks down his sentence and finishes it with the purpose of the activities, 'to help' it is clear that the process of helping is an important aspect of the group for him. He also speaks as though he knows he is able to give something back, this is emphasised when he says 'for the centre.' In addition Matt outlines when he receives support from the group as well as giving it:

*"It allows you to open up and it doesn't, make you feel like there's only you going through it." Line 390-391* 

This complements the analytic interpretations found from Sean's interview as it supports that the group works on a multi-dimensional approach. More specifically this quote suggests that for Matt to be supported is making sure he knows he is not alone.

Finally, Paul also confirms this view of the purpose of the group when he speaks about his personal views of helping others:

"As I understand it, with the project was, close to me, for us to, help others (pause) which (pause) I'm (pause) big on I'll say, if we can." Line 880-883

There is noticeable emotion flooding through this extract as he speaks about his desire to help others. There are a considerable amount of long pauses as he collects his thoughts about how he feels and as he collects his emotions. He speaks about his personal attraction to the group, why he likes to do it. However there is a lack of confidence as he questions whether they will be able to, 'If we can' as though he is unsure they will be able to fulfil this desire. Furthermore emphasis on 'us' suggests he has a sense of group belonging.

# *"It's more it's more than a friendship." Line 985*

This extract supports the importance of strong relationships within the group. The fact that he has difficulty articulating it with the repetition of 'it's more it's more' suggests that this is an emotional subject for him.

# Importance of the Project Group for the Self

Sean generally has a positive overview of the group suggesting many reasons that the group is important for him and others:

*"I have learnt coping skills for like, [yeah] um depression and, like mood swings and stuff like that." Line 204-206* 

Here Sean speaks about the new skills that he has learnt from the group. This shows that he has now learnt how to cope with when he feels depressed or has mood swings, suggesting this was something that he could not previously cope with well, or at all.

Matt has also experienced the learning of new skills within the group, which is evident when he speaks about his new found independence:

"I've got more independence In my life [yeah] I interact in society better I have er, a lot more er, sorry er a bigger social acquaintance now when I go out a lot more [yeah] not just days I have the confidence to basically travel on busses and the con- er confidence now to go further afield." Line786-789

Matt describes independence as being free to go wherever he wishes, speak to whoever he wishes and not be held back in anything he wishes to do. All of these things have been improved for him since attending the group and therefore he feels much more independent as a result. There is also a suggestion that if there is an improvement then there was a point where Matt did not feel independent. However there are other things that have come from the group for Matt that highlight the importance:

Int: "So in what way if any has the Thursday morning project group supported you to become more independent."

*P2: "It's allowed me to take part in various things, feel like I've got a purpose in life." Line 487-488* 

In this extract Matt speaks about a new found purpose that he feels he has been given from the group. He speaks broadly about his life, which shows he feels the group has had an important impact on every aspect of his self. He is confident and clear in his delivery, inferring he is confident that this is an authentic answer and that this is really what has happened to him.

Paul found new skills in a different way to Sean and Matt again:

"I tend to use humour as a sort of (pause) coping mechanism... just to (pause) get through it then I can be able to, <u>right</u>I'll make a joke of it... it was always that thing but I use humour as a sort of, thing, you know... but it seems to be more peravent prevalent (pause.)"Line 1109-1124

Instead of Paul finding new skills from scratch in the group like Sean and Matt, he improved on an existing skill he had in place to cope with the negative aspects in his life. Paul found that he uses this coping mechanism more since being a part of the

group therefore suggesting that the group has played an important role in cementing this skill.

The clear and primary reason that Paul finds the group important is the fact that it can be used as a method to challenge preconceptions of Acquired Brain Injury survivors:

"as In how people perceive, disability how people think, how we are perceived as, brain injured people, we're all dribbling idiots (pause) (()) and we don't challenge- none of us challenge it on It." Line 1252-1258

However, as is clear from this extract he does not currently think that it is being used to its full potential and therefore he is frustrated about that. The way he refers to ABI survivors as 'dribbling idiots' infers he has awareness for current stereotypes about Brain Injury. The emotion during this part of the interview seems high as he pauses to think about what he has said partway through.

It is clear from the extracts in this section that the meaning of importance ranges for each individual to the extent that Paul does not feel the group is reaching its full potential yet.

# Reflection, Maintenance and Progression of the Self through Time

The element of time as a process is consistent throughout the transcription in all three participants. First, Sean speaks about his experience of the effects of time and how the group facilitates his reflection of this:

*"I think I've grown up a little bit like I've learning to understand people more um, cos like you said, not everyone's, (um like) who they are up here they're a lot deeper you've got to sort of understand that." Line 189-191* 

He speaks about how he feels he has a greater understanding of the differences between people and reflects on the fact that this transformation has occurred over a period of time whilst being a part of the group. He speaks about how he now feels it is an important skill to be able to do that, as though he wishes he could have always been as open minded. This links back to the previous super-ordinate theme, Importance of the Project Group for the Self, in which new skills are learnt by all three participants within the group and reflected on during the interviews.

Matt also speaks of his transformations and improvements since being a part of the group:

"Confidence has improved dramatically" Line 674

This snappy extract confirms Matt has experienced improvement in the self since the beginning of the group. The tone of this sentence reflects his confidence. Matt then goes on to reflect on his past self:

"You're always told you're never going to be the person that you was." Line 759-760

'Always told' suggests that the extract above is a consistent message that is frequently given to him. This is such a difficult message to receive often that it must be a difficult experience for him. Also this extract infers that there is a preference towards the old self, which may be the case for some survivors but not all. As though he wishes he could go back to his original self. Paul also displays this underlying dissatisfaction when he reflects on what it felt when he was coming out of hospital:

"When you first come out it's like here's this, here's this (pause) you've got to have all of this and then you've got all these things and you can't, you barely can talk you can barely read you can barely." Line 820-823

Here Paul reflects on the negative things that have happened to him in the past. It is clear that this is his motivation to change these protocols and make the group help other people in that way. This aspect of this theme links back to helping people. The end of this extract highlights him becoming overwhelmed by his experiences. A very powerful extract, where he recounts what has been lost.

There are subtle links between all four of the super-ordinate themes that connect them together. For example, learning new skills that can be found within the super- ordinate theme C is found to overlap into theme D in which these new skills have emerged over time and this is when transformation of the self has occurred. Another link is where importance of the group in super ordinate theme C links to helping others in theme B. Finally, theme A. links into theme B. in the case where Sean describes himself overcoming brain injury as 'taking a step forward' however this also links into theme C. as he is regaining his independence.

# Discussion

Foxhall and Gurr's (2010) quantitative experiment that researched the usefulness of therapeutic groups for ABI survivors found that they provide an increased opportunity for social interaction and peer support. In addition, they found that cognitive deficits were improved within the group environment and the survivors' ability to use coping strategies were enhanced. All of these findings were expanded in the study within this report on two levels. First, within super-ordinate theme 'Social Support and Helping Others' there is evidence that survivors experienced an elevated level of peer support from being a part of the therapy led project group which was a result of increased

social interaction. Cohen (2004) also argues there are positive consequences to increased social support and social integration suggesting that it can reduce negative social interaction which was also evident within the first theme. Second, the theme 'Importance of the Project Group for the Self' outlines participants experiencing an increased ability to use coping strategies as a result of the group. This can be associated with Rath, et al. (2003) who argue promoting coping strategies is more important during ABI rehabilitation than treating the cognitive deficits. This is because it encourages self-regulating therapy and stimulates independence (Backhaus, et al., 2010). Which is evident within the mens experiences in this study.

Similarly to the analysis within Howes et al. (2005) study on women's experiences of ABI, where women focus on their experiences of changes within their social beings post-brain injury. The men within the current study speak consistently about a change in their social identity since the group. Taifel (1974) formulated Social identity theory based on the role of self-conception within group membership, intergroup relationships and group procedures. The theory suggests that a combination of processes operate together to produce group behaviour. These processes that are part of Tajfel's (1974) theory are prominent within the interviews such as; social categorisation, social identification and social comparison (Hogg, 2006). Consequently, these processes are also evident in all four of the super-ordinate themes as participants reflect upon their transformation of self attributed to the group, their experiences of group membership, how social relationships have facilitated their new self-identification and their views of themselves from the perspective of other people. These results relate to the results within Haslam et al. (2008) study where the importance of social identity continuity facilitates well-being and improved life satisfaction after Acquired Brain Injury.

It was evident within the accounts of the men that their life satisfaction had improved since the therapy led project group. This could be seen within three of the superordinate themes; 'The Group and Overcoming Acquired Brain Injury', 'Importance of the Project Group for the Self' and 'Reflection, Maintenance and Progression of the Self through Time.' Corrigan, Bogner, Mysiw, Clinchot and Lisa (2001) conducted a longditudinal study to assess changes in life satisfaction after TBI and suggest that improvements are related to maintaining a healthy and productive lifestyle. Arguably, the participants' narratives provide evidence that the project feature of the group gives them a productive purpose in life which can be associated with improvements in life satisfaction (Reker, Peacock, & Wong, 1985). Therefore cementing the evidence from Corrigan et al. (2001) by promoting productivity within ABI survivors' rehabilitation.

All three men discuss helping other survivors who have only recently acquired their brain injury, to make sense of it and adapt to a different lifestyle by using the mens personal experiences of overcoming ABI as a resource. Jumisko, Lexell and Soderberg (2005) suggest TBI survivors are often alone in their suffering and wish for

more information from healthcare professionals. This is consistent with the narratives of the men within this study and further demonstrates there may be a lack of information available. Consequently, information that this project group is providing, is arguably valuable to other survivors. This is consistent with Fleming and Ownsworth (2006) who argue increasing awareness during ABI rehabilitation can have positive effects for survivors. Moreover, Wilson-Barnett (1980) conducted a study that expands on this research in broader groups of people. The results suggested that providing the correct information for different sorts of hospital patients can alleviate stress and and prepare them for events that have not yet happened. Similarly, this could also be seen within Howes et al. (2005) study where the ABI survivors experience using information from healthcare professionals to make sense of their lives and reduce pressure that occurs during alteration in their life after the injury.

### **Methodological features**

Due to the fact the researcher was not experienced at interviewing qualitative psychological research, there may have been an unintentional and undesirable effect on the data collected (Wengraf, 2001). However, during analysis it became apparent there was a significant amount of reported phenomenological experiences from all three participants. This would suggest there was a smaller impact on the analysis than was initially anticipated by the researcher after data was collected. Nevertheless, if the study was to be replicated, a more experienced interviewer may be more appropriate, to reduce any uncertainties about the reliability of data collection (Rossman & Marshall, 2010).

An advantage, or disadvantage of the methodology within the current study was the pre-existing relationship between the researcher and the participants, whereby the researcher was a volunteer at the Brain Injury Centre for one year previous to the study commencing. However, relationships between researchers and participants are dynamic meaning there are added benefits or hinderance for both roles and the results (Israel, Schurman, & Hugentobler, 1992). Asselin (2003) argues that existing relationships between participants and their researchers can threaten the trustworthiness or credibility of the results. For example, during the interpretation of data, if a pre-existing relationship was present, Asselin (2003) argues there may be interpreter bias. Conversely, McDermid, Peters, Jackson and Daly (2014) argue that providing the dual role of researcher and the pre-existing role - in this case volunteer are acknowledged prior to data collection, then the credibility of the study should not be affected. Furthermore, difficulties may arise concerning confidentiality and privacy however, advantages such as the participants feeling more comfortable to share their experiences with someone they know as opposed to someone they don't know. conflict against these difficulties (Callahan, 2007). If this study was to be replicated it is difficult to select whether the pre-existing relationship between researcher and

participant was beneficial or not, and therefore difficult to assume which approach would be superior.

An implication during the very first stages of conducting this research report was failure by the researcher, to meet requirements of some of the ABI survivors. When handing information sheets and consent forms out, some of the participants had difficulties reading the pages given to them because they have acquired vision impairments after brain injury. This was amended immediately and pages with larger text were printed. However, there may have already been a negative consequence of failing to meet these requirements without hesitation (Reeve, 2006). If the study was to be repeated, then the researcher should adopt a more in depth approach to the development of the study, and meet the requirements of all the participants in order to avoid ignorance and upset (Kelly, 2005).

## Implications for rehabilitation

The study within this report impacts on future rehabilitation in a variety of ways. The first super-ordinate theme was 'The Group and Overcoming Acquired Brain Injury.' In this theme the men recounted their experiences of coming to terms with the psychological impacts their injuries gave them and how the group has facilitated this change. Research suggests it takes a longer amount of time to overcome psychological implications after brain injury than it does to overcome physical implications (Okie, 2005). Moreover, as this project group provides an effective rehabilitation technique to overcome the psychological implications of ABI this can only be a positive outcome.

The second super-ordinate theme 'Social Support and Helping Others' can also be associated with existing rehabilitation techniques for ABI survivors such as peer support programs (Hibbard, et al., 2002). The combination of peer support alongside group projects may be a reason this group is so successful because it has been found to be successful in other collections of people (Schwartz & Sendor, 1999). However, this study was useful as it provided evidence for the success of peer support and project groups as therapy for ABI survivors.

The third super-ordinate theme was 'Importance of the Project Group for the Self' in which the men recounted their experiences of how the group has been beneficial, to them. This theme itself is evidence that therapy led project group for these male ABI survivors was a positive and valuable experience, and therefore replication to other groups of ABI survivors would be useful (Burke, 1997). Another recurring feature within the narratives of the men throughout this theme was their involvement in the group as a valuable experience. This links back to Miotto et al. (2009) study in which a group based APS treatment was measured for its effectiveness. The results in this study also suggest group based treatment to be an effective and functional method of therapy

and therefore benefiting ABI survivors and promoting future group based therapy for brain injury in a group environment.

Finally, the fourth super-ordinate theme was 'Reflection, Maintenance and Progression of the Self through Time' which links to existing ideas regarding ABI survivors having to adjust the self over time as they progress through rehabilitation (Anson & Ponsford, 2006 2). This theme adds to the existing research as it provides further evidence that therapy led project groups are useful to reflect and adjust the self.

## **Concluding remarks**

The study outlined within this report suggests therapy led project groups like the group within this study for male ABI survivors could be a valuable tool for rehabilitation. Participants reflect on their experiences of changes to their emotional, cognitive and social aspects of recovery that can be attributed to the group. Emotional features to recovery were altered such as self-worth, when they re-discovered their purpose in life after brain injury, through the use of projects. Cognitive aspects were altered such as the learning of coping strategies to deal with the implications of brain injury and also finding independence and confidence as a result of the group which was also apparent in Howes et al. (2005) research. Finally the social aspects of recovery were attributed to the group due to the fact one of the group's main aims was to help others. Reflecting on the analysis within the study, it is clear that aim has been met with all three men concluding increased social support and helping others throughout their narratives. Drench (1994) suggests that social interaction with people facing similar problems and disabilities to another survivor can often lead to increased life satisfaction and positive role model, which is evident within the results of this study.

The reflection of past and present self alongside what each man wishes from their future self and the attribution of this to the group suggests each man had an increased desire to recover and reconstruct their identity as a result of the group (Ylvisakera & Feeney, 2000). They are able to see where their identity has come from and where they wish for it to end up which is seen as a positive outcome in the rehabilitation of ABI (McGrath, 2004). This is further evidence that the project group provides valuable and respectable therapy for ABI survivors.

In conclusion, the current study supports the idea that therapy led project groups are a beneficial and valuable treatment for male ABI survivors. Groups such as this facilitate the transformation and recovery of the self, social identities to be found within group environments, increased social support alongside the ability to provide social support to others and finally important cognitive rehabilitation techniques such as coping strategies and self-confidence.

#### References

Andelic, N., Sigurdardottir, S., Schanke, A.K., Sandvik, L., Sveen, U., & Roe, C. (2010). Disability, physical health and mental health 1 year after traumatic brain injury. *Disability and Rehabilitation*, 1122-1131.

Anson, K., & Ponsford, J. (2006 2). Coping and Emotional Adjustment Following Traumatic Brain Injury. *Journal of Head Trauma Rehabilitation*, 248–259.

Anson, K., & Ponsford, J. (2006). Evaluation of a coping skills group following traumatic brain injury. *Brain Injury*, 167-178.

Asselin, M. E. (2003). Insider Research: Issues to Consider When Doing Qualitative Research in Your Own Setting. *Journal for Nurses in Staff Development*, 99-103.

Backhaus, S. L., Ibarra, S. L., Klyce, D., Trexler, L. E., & Malec, J. F. (2010). Brain Injury Coping Skills Group: A Preventative Intervention for Patients With Brain Injury and Their Caregivers . *Archives of Physical Medicine and Rehabilitation*, 840–848.

Bertisch, H., Rath, J. F., Langenbahn, D. M., Sherr, R. L., & Diller, L. (2011). Group Treatment in Acquired Brain Injury Rehabilitation. *The Journal for Specialists in Group Work*, 264-277.

Bradt, J., Magee, W. L., Dileo, C., Wheeler, B. L., & McGilloway, E. (2010). Music therapy for acquired brain injury. *The Cochrane Library*.

British Psychological Society. (2002). *Psychological services for stroke survivors and their families.* Leicester: BPS.

Bryant, R. A., Marosszeky, J. E., Crooks, J., & Gurka, J. A. (2000). Posttraumatic Stress Disorder After Severe Traumatic Brain Injury. *The American Journal of Psychiatry*, 629-631.

Burke, J. R. (1997). Examining the Validity Structure of Qualitative Research. *Education*, 282.

Callahan, E. (2007). Interpretation. In E. Callahan, *Effects of Peer Assessment on Attitude Toward Science in High School Students* (pp. 149-164). Ann Arbor: UMI.

Cicerone, K. D., Langenbahn, D. M., Braden, C., Malec, J. F., Kalmar, K., Fraas, M., et al. (2011). Evidence-Based Cognitive Rehabilitation: Updated Review of the Literature From 2003 Through 2008. *Archives of physical medicine and rehabilitation*, 519-530.

Corrigan, J. D., Bogner, J. A., Mysiw, J. W., Clinchot, D., & Lisa , F. (2001). Life Satisfaction After Traumatic Brain Injury. *Journal of Head Trauma Rehabilitation*, 543–555.

Drench, M. E. (1994). Changes in Body Image Secondary to Disease and Injury. *Rehabilitation Nursing*, 31–36.

DuBois, J. W., Schuetze-Coburn, S., Cumming, S., & Paolino, D. (1993). Outline of discourse transcription. In J. A. Edwards, & M. D. Lampert, *Talking data: Transcription and coding in discourse research* (pp. 45-90). Hillsdale: NJ: Lawrence Erlbaum.

Faul, M., Xu, L., Wald, M. M., & Coronado, V. G. (2010). Traumatic Brain Injury in the United States. *Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control*.

Flanagan, S. R., Cantor, J. B., & Ashman, T. A. (2008). Traumatic brain injury: future assessment tools and treatment prospects. *Neuropsychiatric Disease and Treatment*, 877–892.

Fleming, J. M., & Ownsworth, T. (2006). A review of awareness interventions in brain injury rehabilitation. *Neuropsychological Rehabilitation: An International Journal*, 474-500.

Fordyce, D. J. (1986). Changes in perspectives of disability among patients, staff, and relatives during rehabilitation of brain injury. *Rehabilitation Psychology*, 217–227.

Foxhall, M., & Gurr, B. (2010). Skills for life – evaluation of a group intervention for brain injury survivors. *Social Care and Neurodisability*, 214 – 222.

Haslam, C., Holme, A., Haslam, A. S., Iyera, A., Jettena, J., & Williams, H. (2008). Maintaining group memberships: Social identity continuity predicts well-being after stroke. *Self and identity changes in neuropsychological rehabilitation*, 671-691.

Headway the brain injury association . (2015). *Rehabilitation and continuing care after brain injury*. Retrieved March 31, 2015, from Headway the brain injury association : https://www.headway.org.uk/rehabilitation.aspx.

Headway the brain injury association. (2015). *Key facts and statistics*. Retrieved March 31, 2015, from Headway the brain injury association: https://www.headway.org.uk/key-facts-and-statistics.aspx.

Hibbard, M. R., Charatz, H., Rosenthal, R., Ashman, T., Gundersen, N., Ashman, T., et al. (2002). Peer Support in the Community: Initial Findings of a Mentoring Program for Individuals with Traumatic . *Journal of Head Trauma Rehabilitation*, 112-131.

Hogg, M. A. (2006). Social identity theory. In M. A. Hogg, *Contemporary social psychological theories* (pp. 111-1369). Stanford: Stanford University Press.

Howes, H., Benton, D., & Edwards, S. (2005). Women's experience of brain injury: An interpretative phenomenological analysis. *Psychology & Health*, 129-142.

Hugh-Jones, S., & Madill, A. (2009). 'The airs got to be far cleaner here': a discursive analysis of place- identity threat. *British Journal of Social Psychology*, 601-624.

Israel, B., Schurman, S. J., & Hugentobler, M. K. (1992). Conducting Action Research: Relationships between Organization Members and Researchers. *Journal of Applied Behavioral Science*, 74-101.

Jetten, J., Haslam, C., Haslam, A. S., & Alexander, S. H. (2012). *The social cure: Identity, health and well-being.* Hove: Psychology Press.

Johnstone, B., & Stonnington, H. H. (2012). *Rehabilitation of neuropsychological disorders: A practical guide for rehabilitation professionals.* New York: Taylor & Francis.

Jumisko, E., Lexell, J., & Soderberg, S. (2005). The Meaning of Living with Traumatic Brain Injury in People with Moderate or Severe Traumatic Brain Injury. *Journal of Neuroscience Nursing*, 42-50.

Kelly, B. (2005). 'Chocolate... makes you autism': impairment, disability and childhood identities . *Disability and Society*, 261-275.

Kesler, S. R., Lacayo, N. J., & Jo, B. (2011). A pilot study of an online cognitive rehabilitation program for executive function skills in children with cancer-related brain injury. *Brain Injury*, 101-112.

King, C., & Horrocks, C. (2010). Interviews in qualitative research. London: Sage.

Kreutzer, J. S., Marwitz, J. H., Godwin, E. E., & Arango-Lasprilla, J. C. (n.d.). *Practical Approaches to Effective Family Intervention After Brain Injury.* 

Langenbahn, D. M., Sherr, R. L., Simon, D., & Hanig, B. (1999). Group psychotherapy. In K. G. Langer, L. Laatsch, & L. Lewis, *Psychotherapeutic interventions for adults with brain injury or stroke: A clinician's treatment resource* (pp. 167-187). Madison: Psychological Press.

Levine, B., Schweizer, T. A., O'Connor, C., Turner, G., Gillingham, S., Stuss, D. T., et al. (2011). Rehabilitation of executive functioning in patients with frontal lobe brain damage with goal management training. *Frontiers in Human Neuroscience*, 9.

Lezak, M. D. (1978). Living with the charaterologically altered brain injured patient. *Journal of Clinical Psychiatry*, 592–598.

Martin, R. A. (2014). Life goals in residential rehabilitation: interpretive phenomenological analysis of the experiences of people with complex acquired brain injury. *Dissertation University of Otago*.

McDermid, F., Peters, K., Jackson, D., & Daly, J. (2014). Conducting qualitative research in the context of pre-existing peer and collegial relationships. *Nursing Research*, 28-33.

McGrath, J. (2004). Beyond restoration to transformation: positive outcomes in the rehabilitation of acquired brain injury. *Clinical Rehabilitation*, 767-775.

Miotto, E. C., Evans, J. J., & Souza de Lucia, M. C. (2009). Rehabilitation of executive dysfunction: A controlled trial of an attention and problem solving treatment group. *Neuropsychological Rehabilitation: An International Journal*, 517-540.

O'Connell, D. C., & Kowel, S. (1995). Basic Principles of Transcription. In J. A. Smith, R. Harre, & L. V. Langenhove, *Rethinking Methods in Psychology*. London: Sage.

Okie, S. (2005). Traumatic Brain Injury in the War Zone. *The New England Journal of Medicine*, 2043-2047.

Ponsford, J., & Schoenberger, M. (2010). Family functioning and emotional state two and five years after traumatic brain injury. *Journal of the International Neuropsychological Society*, 306-317.

Ponsford, J., Sloan, S., & Snow, P. (2012). *Traumatic Brain Injury: Rehabilitation for Everyday Adaptive Living*. Hove: Psychology Press.

Quiros, L. (2010). Trauma, Recovery, and Growth: Positive Psychological Perspectives on Posttraumatic Stress. *Journal of Teaching in Social Work*, 118-121.

Rath, J. F., Simon, D., & Langenbah, D. M. (2003). Group treatment of problem-solving deficits in outpatients with traumatic brain injury: A randomised outcome study. *Neuropsychological Rehabilitation: An International Journal*, 461-488.

Reeve, D. (2006). Towards a psychology of disability: The emotional effects of living in a disabling society. In D. Goodley, & R. Lawthom, *Disability and Psychology: Critical Introductions and Reflections* (pp. 94-107). London: Palgrave.

Reker, G. T., Peacock, E. J., & Wong, P. T. (1985). Meaning and Purpose in Life and Well-being: a Life-span Perspective. *The Journal of Gerontology*, 44-49.

Rossman, G. B., & Marshall, C. (2010). *Designing Qualitative Research*. Thousand Oaks: SAGE.

Royal College of Physicians. (2004). *National Clinical Guidelines for Stroke.* London: Royal College of Physicians.

Russell , D. M. (2001). Rehabilitating individuals with serious brain injuries: personality characteristics and the experience of loss. *Dissertation – Abstracts – International – Section B: The Sciences and Engineering*, 3861.

Salazar, A. M., Warden, D. L., Schwab, K., Spector, J., Braverman, S., Walter, J., et al. (2000). Cognitive Rehabilitation for Traumatic Brain Injury. *Jama*, 3075-3081.

Schwartz, C. E., & Sendor, R. M. (1999). Helping others helps oneself: response shift effects in peer support. *Social Science & Medicine*, 1563–1575.

Silver, J. M., McAllister, T. W., & Arciniegas, D. B. (2009). Depression and cognitive complaints following mild traumatic brain injury. *American Journal of Psychiatry*, 653-661.

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative Phenomenological Analysis: theory, Method and Research.* London: SAGE Publications Inc.

Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information*, 65-93.

Tsaousides, T., & Gordon, W. A. (2009). Cognitive rehabilitation following traumatic brain injury: assessment to treatment. *Mount Sinai Journal of Medicine: A Journal of Translational and Personalized Medicine*, 173–181.

Tyerman, A., & Humphrey, M. (1984). Changes in self-concept following head injury. *nternational Journal of Rehabilitation Research*, 11-23.

Wengraf, T. (2001). *Qualitative Research Interviewing: Biographic narrative and semistructured methods.* London: Sage.

Williams , W. H., & Evans , J. J. (2003). Biopsychosocial approaches in neurorehabilitation: Assessment and management of neuropsychiatric, mood and behavioural disorders. *Neuropsychological Rehabilitation* , 1-2.

Wilson-Barnett, J. (1980). Prevention and alleviation of stress in patients . *Nursing*, 432-436.

Wolters, G., Stapert, S., Brands, I., & Van Heugten, C. (2010). Coping styles in relation to cognitive rehabilitation and quality of life after brain injury. *Neuropsychological Rehabilitation: An International Journal*, 587-600.

Ylvisakera, M., & Feeney, T. (2000). Reconstruction of identity after brain injury. *Brain Impairment*, 12-28.