

## **Social work-generated evidence in traumatic brain injury from 1975 to 2014: A systematic scoping review**

**Andy Mantell PhD, Grahame Kenneth Simpson PhD, Martha Vungkhanching PhD,  
Kate Fiona Jones PhD, Thomas Strandberg PhD, Patti Simonson DipSW**

## **Abstract**

The International Network for Social Workers in Acquired Brain Injury (INSWABI) commissioned a systematic scoping review to ascertain the social work generated evidence-base on people with traumatic brain injury (TBI) of working age. The review aimed to identify the output, impact and quality of publications authored by social workers on this topic. Study quality was evaluated through assessment frameworks drawn from the United Kingdom National Service Framework for Long-Term Conditions. In the forty year period from 1975 to 2014, 115 items were published that met the search criteria (intervention studies, n=10; observational studies, n=52; literature reviews, n=6; expert opinion or policy analysis, n= 39; and others, n=6). The publications could be grouped into five major fields of practice: families, social inclusion, military, inequalities and psychological adjustment. There was a significant increase in the number of publications over each decade. Impact was demonstrated in that the great majority of publications had been cited at least once (80.6%, 103/115). Articles published in rehabilitation journals were cited significantly more often than articles published in social work journals. A significant improvement in publication quality was observed across the four decades, with the majority of studies in the last decade rated as high quality.

**Key words:** traumatic brain injury, social work, scoping review, evidence-based practice, knowledge production

### **What is known about Social Work in the field of Traumatic Brain Injury?**

- A seminal 1990 paper suggested that the biopsychosocial nature of traumatic brain injury (TBI) presented many opportunities for social work research
- Previous reviews in the area have focused narrowly on specific fields of practice only (e.g., the impact of TBI on families)
- The trajectory of social work research output is unknown

### **What this paper adds to the Social Work knowledge base on TBI**

- The first systematic, comprehensive overview of social work scholarship in TBI.
- By comparing the scholarly output over four discrete decades (1975-84, 1985-94, 1995-04, 2005-14), the review demonstrates the increasing quantity and quality of the social work evidence-base
- Provides an important resource for evidence-informed practice and highlights avenues for future research

## **Introduction**

Traumatic brain injury (TBI) is a global public health issue. Studies have estimated a 5-12% prevalence rate of TBI across developed countries (Anstey *et al.* 2004; Frost *et al.* 2012). In the United Kingdom alone, approximately 275 per 100 000 of the population sustain a TBI every year, with 25 per 100,000 incurring a severe grade of injury (Langfield 2009). TBIs are most commonly caused by road accidents (car, motorbike, bicycle, pedestrian), falls, assaults and sporting injuries (Langfield 2009; Mantell 2010). In conflict zones, TBI usually result from gunshot, shrapnel wounds (Simpson & Tate 2009) or, more recently, improvised explosive devices (Rona *et al.* 2012).

The impact of the TBI ripples out from the individual to their social networks and the wider community creating a broad array of social concerns (Mantell 2010). These can include the break-down of family relationships (Wood & Yurdakul 1997), unemployment (Tyerman 2012), social isolation (Rowlands 2000), increased risk of homelessness (Oddy *et al.* 2012), higher levels of incarceration (Williams *et al.* 2010), depression (Tsaousides *et al.* 2011) and elevated levels of suicide (Simpson & Tate 2007). Underlying these problems, Daisley *et al.* (2009) have categorised the disabilities arising from TBI as spanning physical and sensory impairment, cognitive impairment, communication problems, sexual issues, psychological adjustment and behavioral problems.

Social workers play multiple roles in the field of TBI (Carlton & Stephenson 1990; Simpson *et al.* 2002). These encompass the provision of client and/or family education; counseling or emotional support (Simpson *et al.* 2002); assistance in coping with hospitalization; planning and support during the discharge and community re-integration process; help with guardianship/compensation issues including capacity assessment (Holloway 2015); tackling stigma and discrimination; facilitating social supports (Rowlands 2000) ; advocating for/mobilizing resources to help individuals and their families meet the

long term challenge of maintaining community participation (Degeneffe 2001); and undertaking policy analysis/working for legislative change (Foster et al. 2002).

In their 1990 review, Carlton and Stephenson observed that given the biopsychosocial impact of TBI, it was surprising that social workers had not published more on the subject. Twenty years later, the International Network for Social Workers in Acquired Brain Injury (INSWABI; see Simonson & Simpson 2010; Simpson & Yuen, 2016) commissioned a systematic scoping review to identify the social work generated evidence-base in the field of TBI. Conducting the review reflects the growing recognition within the profession of the importance of research (Orme & Powell 2008; Simpson & Lord 2015). This review provided the opportunity to determine the extent of the knowledge base within TBI that practitioners can draw upon, as well as ascertaining whether there is a growing research output (Brough *et al.* 2013).

Previous studies have looked at the trajectory of social work research, encompassing a broad range of criteria (i.e., research output, staffing, funding). For example, Fisher and March (2003) investigated social work output as a discipline over two rounds of the United Kingdom Research Assessment Exercise. The authors found an increase in research quality across the two time periods. The current review is more narrowly targeted (i.e., publications), but equally interested in establishing whether there is evidence of a growing research capacity among social workers working in TBI.

A scoping review can identify the range and nature of research activity; collate and communicate findings about a body of research; and identify gaps within the existing literature (Arksey & O'Malley 2005; Levac *et al.* 2010). Employing a scoping methodology, the current review sought to (i) identify the output in peer-reviewed publications that social workers have generated in the field of TBI, (ii) ascertain its impact, and (iii) evaluate its quality.

## **Methods**

The review followed five steps: (i) identifying the research question, (ii) identifying relevant studies, (iii) study selection, (iv) charting the data, and (v) analysing/ summarising the study description data. Although not required by the scoping methodology, studies that had collected empirical data also underwent a quality appraisal process (details provided below). Addressing study quality is an important element in evidence-based or evidence-informed practice (Taylor *et al.* 2007) and in the current study, helped evaluate the state of the current body of evidence.

### *Identifying research question*

The first step involved specifying the parameters of the review in terms of the concept, population and outcomes (Levac *et al.* 2010). Conceptually, the evidence-base was defined as the published work produced by social workers about TBI. A social work contribution was defined as at least one author of any eligible publication having a social work qualification. This approach is consistent with previous reviews of social work research outputs in other domains (e.g., Crisp 2000; Brough *et al.* 2013; Tilbury *et al.* 2016; Tilbury *et al.* 2017).

The review aimed to be international in scope and encompass both discipline-specific work as well as work produced as part of interdisciplinary collaboration. To be broadly inclusive, a research typology was adopted that had been developed in the United Kingdom to generate an evidence base for the National Service Framework (NSF) on Long Term Conditions (Department of Health 2005) as applied to neurological conditions (Turner-Stokes *et al.* 2006). This NSF typology recognised the value of heterogeneous research designs (primary research, secondary research, review-based research) as well as expert evidence in contributing to a comprehensive evidence base (more details provided below), and has been employed in previous systematic reviews in the field of TBI (Fadyl & McPherson 2009).

INSWABI members primarily work with those under 65. Therefore, the population for the study was limited to adults of working age with TBI, with studies of people aged older than 65 years excluded from this study. Finally, the outcomes investigated in the current review comprised the output, impact and quality of the published literature. Each of these outcome areas are detailed below.

#### *Identifying relevant studies*

Relevant studies were identified through a three-pronged search strategy. Greenhalg and Peacock (2006) have identified the value of integrating protocol-driven, snowballing and personally-based search strategies to maximise the results for a review. The protocol-based elements of the current review comprised a search of the following electronic databases and search engines: (Applied Social Sciences Index and Abstracts, ASSIA; Current Index to Nursing and Allied Health Literature, CINAHL; IBSS [International Bibliography of the Social Sciences]; PsycINFO; PubMed; Scopus; SocIndex; Social Services Abstracts; Social Work abstracts; and Web of Science). Three search terms covering the population group and the profession were employed in combination with the BOOLEAN operators (*head injur\** OR *brain injur\** AND *social work*). A limiting function was employed to select items published in English. In addition to the database search, a hand search was conducted of the contents of relevant social work journals (Health and Social Work; Journal of Social Work in Disability and Rehabilitation; Social Work in Health Care; British Journal of Social Work; Australian Social Work) and a search was also conducted on Google Scholar.

For the snowballing, iterative searches were conducted of the reference lists of works identified by the first phase database searches, and author tracing was undertaken to ascertain whether additional studies had been published by authors who had works identified in the first phase. Finally, the personal-based strategies involved (i) an e-mail consultation with INSWABI to identify articles that members had come across in the course of their practice,

and (ii) serendipity, described by Greenhalg and Peacock as “finding a relevant paper when looking for something else” (2006, p.1064).

### *Study selection*

Identified works were selected if they met the inclusion criteria: (i) a chapter, book or an article published in a peer review journal, (ii) with a focus on TBI, (iii) among people aged 18-65, (iv) authored or co-authored by a social worker, and (v) published between 1970 and 2014. The decade of the 1970s was chosen as the starting point because the first specialist TBI rehabilitation programs were established internationally during this decade (Rosenthal 1996). The review selected four decade periods (1975-84, 1985-94, 1995-04, 2005-14) so that the trajectory of publication trends could be analysed over a manageable number of comparable units of time. Studies that spanned a broader range of disability groups were included if they either (i) reported discrete data for the TBI group or (ii) for non-empirical reports, TBI was explicitly addressed in discrete sections of the paper. Exclusion criteria included non-peer reviewed citations such as editorials, commentary, book reviews, letters, unpublished abstracts, letters and conference abstracts.

Two authors (AM, GS) independently screened the titles and abstracts of the citations against the inclusion/exclusion criteria which were then compared. Citations for which a decision could not be made or for which there was disagreement underwent a second stage of screening. The full text of the citation was obtained and the two authors reviewed the citation, making a final decision about inclusion/exclusion by consensus.

### *Data charting*

To identify the nature of the output, descriptive data were collected about the selected studies. A template was devised to collect information on several domains (using descriptors adapted from Coren & Fisher 2006). These were: the type of study; field of practice; focus of practice; year of publication; country in which the study was conducted; category of



publication (book, chapter, article); whether a social worker was the lead (first) author; and whether the study was inter-disciplinary (i.e., included co-authors from other allied health, medical or nursing backgrounds).

To ascertain impact, data were collected on the number of citations; the type of journal in which the articles were published (i.e., social work, rehabilitation, other); and whether articles were cited by other social workers. The number of citations was determined by reference to Google Scholar, data extracted 09/06/2015). The extent to which works cited previous works by social work authors was determined by a search of the reference lists of the selected studies.

#### *Summarizing, analysing and evaluating studies*

Data on the study descriptors were tabulated. Studies were grouped into five key fields of practice (family, social inclusion, inequalities, psychological adjustment and military). A small number of publications provided an overview of the field of TBI, often spanning a number of these fields of practice. To investigate characteristics of the output and impact of identified works (aims i and ii), descriptive and between-groups statistical tests were utilised. Given the type of data, chi-square and non-parametric tests (Mann Whitney U, Kruskal Wallace) were employed.

To undertake the quality evaluation (aim iii), the quality assessment framework developed as a companion to the NSF research typology was employed (Turner-Stokes *et al.* 2006). For this review, the first step involved sorting the identified works into the NSF typology categories: primary research-based evidence; secondary evidence; reviews and expert accounts (see Figure 2 below for more detail).

One refinement of the typology was made at this step. Specifically, among studies grouped in the primary research-based evidence category, observational studies were also included in addition to intervention studies. Observational studies were further classified by

the research design (e.g., cohort, cross-sectional etc.). Prior to conducting the quality appraisal, data on additional descriptors were collected for the intervention studies, namely the research design, sample size, type of intervention, mode of delivery and outcomes.

Having sorted the studies, the primary research-based studies, secondary research-based studies and the reviews were assessed using the five quality criteria specified by Turner-Stokes *et al* (2006) (see Appendix 1 for the criteria), scoring 0 (not achieved), 1 (partially achieved) or 2 (achieved) for each criterion, giving a total score between 0-10. Studies are then classed as high (7-10), medium (4-6) or low (scores of 3 or less) quality. In the original development of this method, the quality rating scale was found to have good inter-rater reliability (Turner-Stokes *et al.* 2006).

For the review, a template with the five quality criteria was developed, and descriptors for each criterion generated to improve inter-rater reliability. Employing the template, independent ratings were conducted for works identified as primary research or review-based research by two of the following three authors (AM, GS, MV). Raters could not evaluate studies on which they had been authors. The kappa statistic (Landis & Koch 1977) was used to determine the level of inter-rater agreement across all pairs of ratings of the overall quality of the works (low, medium, high). In the case of disagreements, the final rating was resolved by consensus through consultation with the third rater.

Following the procedures specified by Turner-Stokes *et al.* (2006), the expert professional accounts were not subjected to quality evaluation, but their level of citation was record as an indication of their relative impact (0 citations = none; 1 to 10 citations = low, greater than 10 citations = moderate to high). The publications produced by professional users and the policy-related publications were aggregated. Through consensus discussion, they were classed into field of practice by two of us (GS, AM)

## Results

The search results are displayed in Figure 1. The original phase of the search (1975-2009) was conducted between July 2012 and June 2013. After duplicates were removed, and screening conducted, a total of 28 relevant works were identified through the protocol-driven strategies (ASSIA, 11; CINAHL, 2; PsycINFO, 22; SocIndex, 5; SCOPUS, 2; Social Services Abstracts, 1). Two additional works were identified through hand searching the specified journal. Similarly, a total of 4,680 results were elicited by the search of Google scholar but no new works were identified. One outlying and seminal article (Romano 1974), identified as the first social work authored paper addressing the field of TBI, was added to the decadal period 1975-1984. A total of 47 additional works were identified through the second phase snowballing and person-based strategies, culminating in a final total of 75 published works.

Insert Figure 1 here

A supplementary search to update the review to 2014 was conducted in June 2015, employing the same search terms and search strategy. An additional 40 items were identified, two items that were published prior to 2009 but not identified in the original search, and 38 new items published between 2010 and 2014. Items were identified through PsycInfo (n=15), Pubmed (n=5), hand searching journals (n=2) and author tracing (n=18), with no additional items identified through the other databases or search strategies.

### *Aim (i) Publications output*

Data on the output descriptors are displayed in Table 1. In terms of study type, more than half of the articles were empirical (53.7%, 64/115). The works covered four established fields of practice and one emerging field of practice (i.e., military) (see Table 2). In addition, a number of overview papers covered more than one field of practice.

Insert Table 1

Fields of practice relating to families, social inclusion and psychological adjustment accounted for approximately three quarters of the total number of papers produced (see Table 2). The pattern of papers by field of practice varied over the four decades; the first two decades predominantly produced publications focused on families and psychological adjustment. Publications analysing inequalities started to appear from 1995, and the military publications only in the latest decade. There was a constant number of overview publications produced across each decade.

#### Insert Table 2

There was a significant increase in the number of articles published in the most recent decade (53.0%, 61/115), doubling the output of the previous three decades combined. Together, the United States and Australia produced four fifths of all output (78.2%, 90/115). There were significant differences in publishing patterns ( $\chi^2 = 18.0$ ,  $df=6$ ,  $p=.006$ ). Australian authors were most likely to publish in rehabilitation journals (75.0%, 30/40 Australian journal publications), whereas a larger proportion of authors from the United States (35.7%, 15/42 journal publications) and the ‘other countries’ group (50%, 6/12 journal publications) published in social work journals. In the United Kingdom almost half of the publications were chapters as well as the sole book (46.2%, 6/13), with seven journal publications.

A social worker was the lead author in over two thirds of the publications and a similar proportion of publications that had more than one author involved at least one interdisciplinary collaborator (see Table 1). The United Kingdom had the lowest number of publications involving interdisciplinary collaborations (33.3%; 3/9 published with more than one author), in contrast to Australia (75.6%, 31/41), the United States (68.2%, 30/44) and the ‘other countries’ group (58.3%, 7/12). However, these differences were not statistically significant. Disciplines most frequently involved in collaborative publishing were

psychology, medicine (neurology, rehabilitation, and psychiatry), occupational therapy, speech pathology and nursing.

#### *Aim (ii) Publication impact*

Most works had been cited one or more times (89.6%;103/115). Articles with social workers as lead author had fewer citations (median 15.0, IQR 21.0) than articles in which someone from another discipline was lead author (median 16.5, IQR 46.0), but the differences was not statistically significant (Mann Whitney U). Articles published in social work journals (median 6.0, IQR 17.0) were cited significantly less often ( $\chi^2 = 11.6$ ,  $df=2$ ,  $p=.003$ , Kruskal-Wallis) than citations for journal articles published in rehabilitation (median 18.0, IQR 20.0) or the 'other' category of journals (median 20.0, IQR 41.0).

Citations for the book and book chapters (median 1.5, IQR 5.0) were significantly lower ( $U = 201.5.0$ ,  $p=.001$ , Mann Whitney U) than journal articles (median 16.0, IQR 24.0). Finally, social work authors frequently cited works by other social workers within the field, with two thirds citing one or more of the publications identified in this review (see Table 1).

#### *Aim (iii) Quality evaluation*

Articles included in the quality evaluation are outlined in Figure 3. Works not included comprised four service descriptions (Lees 1988; Trumble 1981; Tyerman & Booth 2006; VanDiver *et al.* 2003), two works on research methods (Egan 2005; Higham 2001), six policy analysis papers (Cole 2012; Cole 2014; Foster 2002; Foster 2003; Foster 2004; Foster 2007) and the expert papers (professional, user/carer;  $n=33$ ).

The remaining 70 studies were aggregated into primary research (intervention, observational), secondary research and reviews (see Figure 2). The level of inter-rater agreement by the authors (AM, GS, MV) on the quality ratings (high, medium, low) for the publications was very strong over the 70 pairs of ratings ( $\kappa=0.85$ ,  $p<.001$ ), within the band of excellent inter-rater agreement ( $\kappa >0.75$ ; Landis & Koch 1977).

## Insert Figure 2

Intervention studies: The ten intervention studies (see Table 3) included a variety of research designs, ranging from a randomised controlled trial through to a single case study, with half published in the last decade (2005-2014). Four studies evaluated service-level outcomes; two involved a multidisciplinary rehabilitation program that included social workers (Sabhesan *et al.* 1993; Simpson *et al.* 2004) and one from a social work specific program (Albert *et al.* 2002). The other seven studies evaluated specific interventions. Four of these were interdisciplinary in nature, involving social work jointly delivering the intervention in collaboration with other health professionals (Simpson *et al.* 2003; Egan *et al.* 2005; Dahlberg *et al.* 2007), or social workers as one of several health professionals individually delivering the same intervention (Vungkhanching *et al.* 2007). The remaining studies documented interventions delivered by social workers (Rowlands *et al.* 2001; Simpson *et al.* 2011; Moore *et al.* 2014).

In nine of the ten studies the person with the TBI was the target of the intervention, and the family caregiver in the other study. The practice areas reflected the dominant psychosocial focus of social work practice in the field. The modalities of intervention ranged across counselling; psycho-education; the provision of a multi-disciplinary rehabilitation program that included social work; skills-based training and a social work liaison program. The majority of interventions were delivered by social workers in health settings but participants in all but one study (Moore *et al.* 2014) were community-based. Programs were delivered on an individual basis in six studies, in a group-based format in another three and in one study a mix of both. Interventions were primarily delivered face to face, but four studies incorporated phone-based delivery as the sole mode of service delivery or in combination with face-to-face delivery.

## Insert Table 3

For the person with TBI, reported outcomes from the interventions included improved psychological well being, improved sexual function, reduced psychopathology, reduced hopelessness, increased levels of skills, reduced alcohol intake and increased independence in community participation/integration. Similarly, the family members reported decreased burden and increased levels of psychological well being. Eighty percent of the studies were rated in the high research quality band (Turner-Stokes *et al.* 2006).

Observational studies: The number and quality of observational studies has increased steadily over the past three decades, with just over half 57.7% (30/52) published in the most recent decade. Furthermore, over eighty percent (86.7%; 26/30) of the articles published since 2004 were rated as high quality, significantly better than the preceding two decades (1984-95 vs 1995-2004 vs 2005-14;  $\chi^2 = 10.16$ ,  $df=4$ ,  $p=.039$ ; see Figure 3).

Insert Figure 3

A range of research designs were employed including case control (n=1); cohort (n=15); cross-sectional studies (n=24) of which a subset employed a case comparison between different sub-groups of people with TBI (6/24); non-consecutive case series (n=8); psychometric (n=3) and one ecological study (see Table 4). A total of 44 of the 52 studies employed quantitative methods with the remainder employing qualitative methods (see Table 4). The studies were grouped by field of practice (family, social inclusion, psychological adjustment, health inequalities) and then sub-categorised by the focus of the publication within the field of practice. Studies were then ranked by their quality rating (see Table 4).

Insert Table 4

Secondary analysis:

Two papers within the last decade (2005-2014) conducted a secondary analysis of data. The fields of practice for the studies were social inclusion and inequalities respectively. The first study compared outcomes for people with TBI from four different post-acute brain

injury rehabilitation programs, analysing data collected by programs belonging to the Pennsylvania Association of Rehabilitation Facilities (Eicher *et al.* 2012). The second study (Linton & Kim, 2014) analysed data from the Arizona Trauma Database to investigate the possibility of race-based differences (among White, Black, Native American, Asian, other races) in the aetiology of TBI, with a particular interest in whether the non-White racial groups had a higher incidence of violence-related TBI. Both publications were rated as high quality.

Reviews: Six reviews were identified. These included one systematic and five narrative reviews. The systematic review examined the research literature published between 2007 and 2012 investigating suicide ideation and behaviours after TBI (Bahraini *et al.* 2013). Among the narrative reviews, two focused on the literature addressing the impact of TBI on families (Degeneffe 2001, Bishop *et al.* 2006); one on the work-life balance of culturally diverse caregivers of people with TBI (Cole 2012), one provided a global introduction to the field (Resnick 1994); with the final one reviewing the literature on building social support after TBI (Rowlands 2000). The quality scores for all reviews were rated in the low category, with the one exception of the systematic review (High).

Expert opinion: One expert user account was identified. Perry (1986), who sustained a severe TBI while driving to a social work home visit, recounts the personal challenges associated with his recovery, rehabilitation and community re-integration. Perry highlighted three primary causes of distress and provided suggestions for their effective management by professionals (Table 5).

Insert Table 5

Finally, the publications that represented expert opinion or policy analyses were grouped by field of practice and then by number of citations (see Table 6). Overall, the expert papers were distributed across all three groupings of citations. The policy papers were all



concentrated in the area of inequalities, addressing health-related (equity of access from acute care to inpatient rehabilitation) and disability-related issues (people with TBI's access to Employee Assistance Programs on return to the workplace; organizational responses that could support the work-life mix for carers from minority backgrounds who were supporting relatives with TBI).

.  
Insert Table 6

## **Discussion**

Overall, the results demonstrated a significant upwards trajectory in knowledge production undertaken by social workers in the field of TBI. This growth was documented in the output, impact and quality of the published research across four decadal periods. The number of publications has more than quintupled since the earlier review by Carlton & Stephenson (1990). Not only has there been a substantial increase in the quantity of works, but also in the quality of the research-based papers, reflecting broader developments within the profession internationally (Simpson & Lord 2015; Thyer & Myers 2011).

The fields of practice that have been the focus of social work scholarship reflect the concerns of the profession more generally. 'Families' and 'social inclusion' situate the individual within the systems and relationships that are a primary concern of social work practice (Mantell 2013a). Inclusion and health inequality both represent social work's commitment to principles of 'social justice' and 'empowerment' (The International Federation of Social Workers 2014). In contrast, the work on psychological adjustment for individuals and their families, highlight possible variations in social work roles internationally. Whilst in some countries such as Australia and United States the social work role incorporates therapeutic practice (e.g., Bronstein *et al.* 2007; Brough *et al.* 2013; Judd & Sheffield 2010), in the UK there has been a significant shift to co-ordinating, managing and allocating resources (Mantell 2013b). One use of the review therefore, can be to enable

practitioners to access skills or programs from the wider international body of social work knowledge and then adapt them to the local practice environment.

The majority of publications were research-based. A past criticism of social work scholarship has been that it focused too heavily on theoretical or conceptual papers at the expense of empirical research (Crisp 2000). However, the review identified strong growth in research-based papers, with such publication types in the majority for the two most recent decadal periods (1995-04, 2005-14). The high number of collaborative interdisciplinary papers reflects the growing international trend towards inter-professional practice capabilities within the health sector as well as interdisciplinary research within disability studies (Matthews *et al.* 2011; Strandberg *et al.* 2015; World Health Organisation, 2010).

Another concern about the broader research output of the profession has been the disproportionate number of descriptive papers versus work evaluating practice (Soydan 2015). The current review found a similar picture, with only 10 of the 59 empirical papers reporting intervention studies. However, the fact that half were published in the latest decadal period suggests a growth in publications evaluating interventions/practice.

The evaluated interventions varied more broadly than programs developed specifically for social work and best delivered by social workers. In the environment of interdisciplinary care, social work interventions may be developed that exploit complementary partnerships with other allied health in the joint provision of programs (e.g., social worker provides the relationship component to supplement a speech pathologist's language component in a social skills group). In addition, role blurring (Gray & White 2012; Vungkhanching & Tonsing 2016) refers to situations in which more than one professional can potentially undertake a task (e.g., social work or occupational therapy undertaking case management). In such cases, if other professions are implementing interventions developed by social work, this is giving an implicit clinical leadership role to the profession.

The focus for systematic reviews has been steadily expanding to address a wider range of study types and issues (Crisp 2015) with the value of observational studies receiving greater recognition (Mallen *et al.* 2006). In this review, the majority of observational studies were cross-sectional or non-consecutives case series, the weaker research designs. Future research could seek to increase the number of controlled or cohort studies. Considering the findings in relation to impact, works published in rehabilitation journals were cited more highly than those in social work journals. Given that brain injury is a highly specialised field within the broad spectrum of social work, this difference may reflect the greater salience of the work within the specialty journals in the field.

There were a number of limitations with the review methodology. First, it was difficult to reliably and consistently identify social work authors, and so there may be other publications that were not identified, leading to an underestimate of the extent of the evidence-base.

Similarly, the search terms used were those most prevalent within social work practice, but this could also have led to the omission of some studies. Moreover, by focusing on TBI, a number of studies that included mixed samples of TBI and other types of acquired brain injury could not be included (e.g., Brown *et al.*1999; Charles *et al.*2007).

Despite the limitations, the review identified a significant body of research.

Knowledge production then lays the groundwork for knowledge use or implementation in practice (Gray *et al* 2012). The great majority of the studies were undertaken in community settings (e.g., nine of the 10 intervention studies). This has the potential of simplifying the process of knowledge transfer (i.e., research findings produced in one location being transferred to another context of use, Gray *et al* 2012, p.157) given that more than half of social workers working in the field are employed in outpatient and/or community settings (Vingkhanching & Tonsing 2016). The observational studies documented the extent and causes of psychosocial disadvantage following TBI through the many dimensions of family,

social inclusion/ exclusion, health inequalities and psychological adjustment. This can build practitioner awareness of psychosocial needs that need assessment, as well as be a resource for client/family education and help drive broader advocacy.

Fisher and Marsh (2003) argued that social work research lacks the critical mass of researchers to be able to generate new knowledge and research based practice. In order to ensure the momentum of the upward trajectory found in this review, e-networks such as INSWABI can continue to provide a mechanism for academic and research collaboration among established and early career researchers in TBI (Lunt *et al* 2012). Adopting an academic-practitioner model with a focus on practice-research can ensure that future work is clinically relevant, with a focus on developing and evaluating intervention, while also providing pathways for building research capacity among social work practitioners (Joubert 2006, Joubert & Hocking 2015). The ‘expert accounts’ represent a distillation of practice wisdom (Chu & Tsoi 2008), and provide a fertile set of practice-based experiences, insights and ideas ready for future evaluation (Fawcett & Pocket 2015). Finally, the review provides a benchmark against which the next decade of social work scholarly activity within the field of TBI can be compared.

## References

- Albert M.A., Inn A., Brenner L., Smith M. & Waxman R. (2002) Effects of a social work liaison program on family caregivers to people with brain injury. *Journal of Head Trauma Rehabilitation* **17**, 175-189.
- Alston M., Jones J. and Curtin M. (2012) Women and traumatic brain injury: 'It's not visible damage'. *Australian Social Work* *65* (1) 39-53.
- Alston M. and McKinnon J. (2005) *Social Work: Fields of Practice*. Oxford: Oxford University Press.
- Anderson M.I., Simpson G.K., Morey P.J., Mok M.M., Gosling T.J. & Gillett L.E. (2009) Differential pathways of psychological distress in spouses vs. parents of people with severe traumatic brain injury (TBI): Multi-group analysis. *Brain Injury* **23**, 931-943.
- Anderson M.I., Simpson G.K., Mok M.M. & Parmenter T.R. (2006) A contemporary model of stress for understanding family functioning and the psychological distress in relatives of people with severe traumatic brain injury (TBI). In: D. Johns (Eds) *Stress and its Impact on Society*. Nova Science Publishers, New York.
- Anderson, M.I., Simpson G.K. and Morey P.J. (2013) The impact of neurobehavioral impairment on family functioning and psychological well-being of male versus female caregivers of relatives with severe traumatic brain injury: multigroup analysis. *Journal of Head Trauma Rehabilitation* **28** (6), 453-463.
- Anstey K., Butterworth P., Jorm A.F., Chistensen H., Rodgers B. & Windsor T.D. (2004) A population survey found an association between self-reports of traumatic brain injury and increased psychiatric symptoms. *Journal of Clinical Epidemiology* **57**, 1202-1209.
- Arksey H. & O'Malley L. (2005) Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* **8**, 19-32.

- Baguley I., Nott M., Howle A., Simpson G. Browne S., King A., Cotter and Hodgkinson A. (2012) Late mortality after severe brain injury in New South Wales: a multicentre study. *The Medical Journal of Australia* 196 (1), 40-45.
- Bahraini N., Simpson G., Brenner L., Hoffberg A., Schneider A. (2013) Suicidal ideation and behaviours after traumatic brain injury: A systemic review. *Brain Impairment* 14(1) 92-112.
- Baker K.A., Tandy C.C.& Dixon D.R. (2002) Traumatic brain injury: a social worker primer with implications for practice. *Journal of Social Work in Disability & Rehabilitation* 1, 25-44.
- Barclay D. Family functioning, psychological stress, and global attainment in brain injury rehabilitation. *Journal of Social Work in Disability and Rehabilitation*. 12 (3) 159-175.
- Bishop M., Degeneffe C. & Mast M. (2006) Family needs after traumatic brain injury: implications for rehabilitation counselling. *Journal of Rehabilitation Counselling* 12, 73-87.
- Booth J. (2006) Brain injury and the family. In Parker J (Ed) *Good Practice in Brain Injury Case Management*. Jessica Kingsley Publishers, London, United Kingdom.
- Boschen K., Gargaro J., Gan C., Gerber G., & Brandys C. (2007) Family interventions after acquired brain injury and other chronic conditions: A critical appraisal of the quality of the evidence. *NeuroRehabilitation* 22, 19-41.
- Bronstein L., Kovacs P. & Vega A. (2007). Goodness of fit. *Social Work in Health Care* 45, 59-76.
- Brough M., Wagner I., Farrell L. (2013) Review of Australian health related social work research 1990-2009. *Australian Social Work* 66, 528-539.
- Brown, A., Pain, K., Berwald, C., Hirschi, P., Delehanty, R., & Miller, H. (1999) Distance education and caregiver support groups: Comparison of traditional and telephone groups. *Journal of Head Trauma Rehabilitation* 14, 257-268.
- Brzuzy S. & Corrlgan J.D. (1996) Predictors of living independently after moderate to severe traumatic brain injury: A comparison study. *Journal of Head Trauma Rehabilitation* 11, 74-83.

- Brzuzy S.& Speziale B.A. (1997) Persons with traumatic brain injuries and their families: living arrangements and well-being post injury. *Social Work in Health Care* **26**, 77-88.
- Buck P. (2011) Mild traumatic brain injury: A silent epidemic in our practice. *Health and Social Work* 36 (4) 299-302.
- Buck P., Sagrati J. and Kirzner R. (2013) Mild traumatic brain injury: A place for social work. *Social Work in Health Care* 52 (8) 741-751.
- Carlton T. & Stephenson D. (1990) Social work and the management of severe head injury *Social Science and Medicine* **31**, 5-11.
- Charles N., Butera-Prinzi F. & Perlesz A. (2007) Families living with acquired brain injury: A multiple family group experience. *Neurorehabilitation* **22**, 61-76.
- Chu W.C.K. & Tsui M. (2008) The nature of practice wisdom in social work revisited. *International Social Work* **51**, 47-54.
- Cole, P. L., Cecka, D. M., & Smith, F. M. (2012a). Persons Affected by Traumatic Brain Injury in the Workplace: Implications for Employee Assistance Programs. *Journal of Workplace Behavioral Health* **27**, 227-249.
- Cole, P. L., & Gary, K. W. (2012b). Tailoring work-life interventions for culturally diverse caregivers of patients with traumatic brain injury. *Home Health Care Services Quarterly*, **31**, 130-154
- Cecka D. (2014) Traumatic brain injury and the Americans with Disabilities' Act: Implications for the Social Work Profession. *Social Work* 59 (3) 261-269.
- Coren E. & Fisher M. (2006) The Conduct of Systematic Reviews for SCIE Knowledge Reviews. Available from <[www.scie.org.uk](http://www.scie.org.uk)> [7 June 2010].
- Crisp B. (2000) A history of Australian social work practice research. *Research on Social Work Practice* **10**, 179-184.

- Crisp B.R. (2015) Systematic reviews: A social work perspective. *Australian Social Work* **66**,528-539.
- Dahlberg C., Cusick C.P., Hawley L.A., Newman J.K., Morey C.E., Harrison-Felix C.L. & Whiteneck G.G. (2007) Treatment efficacy of social communication skills training after traumatic brain injury: a randomized treatment and deferred treatment controlled trial. *Archives of Physical Medicine and Rehabilitation* **88**, 1561-1573.
- Dahlberg C., Hawley L., Morey C., Newman J., Cusick C.P. & Harrison-Felix C. (2006) Social communication skills in persons with post-acute traumatic brain injury: Three perspectives. *Brain Injury* **20**, 425-435.
- Daisley A., Tams R. & Kischka U. (2009) *Head Injury*. Oxford: Oxford University Press.
- Dean J. & Parker J. (2006) *Good Practice in Brain Injury Case Management*. Jessica Kingsley Publishers, London.
- Degeneffe C. (2001) Family caregiving and traumatic brain injury. *Health and Social Work* **26**, 257-268.
- Degeneffe C.E. & Lynch R.T. (2006) Correlates of depression in adult siblings of persons with traumatic brain injury. *Rehabilitation Counseling Bulletin* **49**, 130-142.
- Degeneffe C.E. & Olney M.F. (2008). Future concerns of adult siblings of persons with traumatic brain injury. *Rehabilitation Counseling Bulletin* **51**, 240-250.
- Degeneffe C.E. and Olney M.F. (2010a) We are the forgotten victims: Perspectives of adult siblings of persons with traumatic brain injury. *Brain Injury* **24** (12) 1416-1427.
- Degeneffe C.E. and Lee G.K. (2010b) Quality of life after traumatic brain injury: Perspectives of adult siblings. *Journal of Rehabilitation* **76** (4) 27-36.
- Degeneffe C.E., Chan F., Dunlap L. and Man D. (2011) Development and validation of the caregiver empowerment scale: a resource for working with family caregivers of persons with traumatic brain injury. *Rehabilitation Psychology* **56** (3) 243-250.



- Degeneffe C.E (2012) Quality of life following brain injury: Perspectives from Brain Injury Association of America State Affiliates. *Rehabilitation Education* 26 (2) 213-216.
- Degeneffe C.E. and Lee G. (2014) Brain injury and the family: A guide for rehabilitation counsellors. Family experiences of disability and rehabilitation. In M. Millington and I Marini (eds) *Families in rehabilitation counselling*. New York: Springer.
- DeHope E. (2006) The Case of Joan and Terri: Implications of society's treatment of sexual orientation for lesbians and gays with disabilities. In: L Messinger & D.F Morrow (Eds) *Case Studies On Sexual Orientation And Gender Expression In Social Work Practice*. Columbia University Press, New York.
- DeHope E., Finegan.J. (1999) The self determination model: an approach to develop awareness for survivors of traumatic brain injury. *Neuro-rehabilitation* 13, 3-12.
- Department of Health. (2005) *The National Service Framework for Long Term Conditions*. London TSO.
- Dulmus C. and Sowers K. (2012) *Social Work Fields of Practice: Historical Trends, Professional Issues and Future Opportunities*. Hoboken, NJ: Wiley
- Egan J., Worrall L & Oxenham D. (2005) An internet training intervention for people with traumatic brain injury: Barriers and outcomes. *Brain Injury* 19, 555-568.
- Eicher *et al.* 2012).
- Fadyl J.K., McPherson K.M. (2009) Approaches to vocational rehabilitation after traumatic brain injury: A review of the evidence. *Journal of Head Trauma Rehabilitation* 24,195-212.
- Fawcett B. & Pocket R. (2015) *Turning ideas into research: Theory, design and practice*. Sage: London.
- Fisher M. and Marsh P. (2003) Social Work Research and the 2001 Research Assessment Exercise: An initial overview. *Social Work Education: The International Journal* 22(1), p71-80.

- Forssmann-Falck R., Christian F.M. (1989) The use of group therapy as a treatment modality for behavioral change following head injury. *Psychiatric Medicine* **7**, 43-51.
- Forssmann-Falck R., Christian F.M. & O'Shanick G. (1989) Group therapy with moderately neurologically damaged patients. *Health and Social Work* **14**, 235-243.
- Foster M., Tilse C. & Flemming J. (2002) Pressure to progress severe brain injury and slow recovery in the current health care environment. *Australian Journal of Rehabilitation Counselling* **8**, 20-29.
- Foster M. & Tilse C. (2003) Referral to rehabilitation following traumatic brain injury: a model for understanding inequities in access. *Social Science and Medicine* **56**, 2201-2210.
- Foster M. (2004) Professional claims, uncertainty and the politics of care: Impact on referral and equitable care in traumatic brain injury. *Brain Impairment* **5**, 3-11.
- Foster M. (2007) Council of Australian Governments (COAG) Initiative for young people with disability in residential aged care: What are the issues for acquired brain injury? *Brain Impairment* **8**, 312-322.
- French, L. M., Parkinson, G. W., & Massetti, S. (2011). Care coordination in military traumatic brain injury. *Social work in health care*, 50(7), 501-514.
- French L., Parkinson G. and Massetti S. (2011) Care coordination in military traumatic brain injury. *Social Work in Health Care* 50 (7) 501-514.
- Frost R.B., Farrer T.J., Primosch M. & Hedges D.W. (2012) Prevalence of traumatic brain injury in the general adult population: A meta-analysis. *Neuroepidemiology* **40**,154-159.
- Futeral S.T. (2005) Group work with head-injured people. *Group work with populations at risk*, 62-75.
- Gray, F.C., & White, A., (2012). Concept analysis: case management role confusion. *Nursing Forum* **47**, 3-8.

- Gray M., Joy E., Plath D., & Webb S.A. (2012) Implementing evidence-based practice: A review of the empirical research literature. *Research on Social Work Practice* **23**, 157-166.
- Greaves R., Neary I. & Warren J. (2006) Super support worker. In: J.Parker (Eds) *Good Practice in Brain Injury Case Management*. Jessica Kingsley Publishers, London
- Greenhalg T., & Peacock R. (2005) Effectiveness and efficiency of search methods in systematic reviews of complex evidence: Audit of primary sources. *British Medical Journal* **331**, 1064-1065.
- Hall, K.M., Karzmark, P., Stevens, M., Englander, J., O'Hare, P. and Wright, J., 1994. Family stressors in traumatic brain injury: a two-year follow-up. *Archives of physical medicine and rehabilitation*, 75(8), pp.876-884.
- Higham P. (2001) Developing an interactive approach in social work research: The example of a research study on head injury. *British Journal of Social Work* **31**, 197-212.
- Higham P.E. & Phelps K. (1998) *Careers of care: survivors of traumatic brain injury and the response of health and social care*. Ashgate, Aldershot.
- Holloway M. (2014) How is ABI assessed and responded to in non-specialist settings? Is specialist education required for all social care professionals? *Social Care and Neurodisability* **5**, 201-213.
- Holloway, M.& Fyson, R. (2016). Acquired brain injury, social work and the challenges of personalisation. *British Journal of Social Work* **46**, 1301-1317.
- Jackson A.C. & Tangney S. (1997) A service mapping approach to the analysis of service use for people with acquired brain injury. *Social Work in Health Care* **25**, 169-192
- Johnstone B.,Yoon D.P., Rupright J.& Reid-Arndt S.(2009) Relationships among spiritual beliefs, religious practises, congregational support and health for individuals with traumatic brain injury. *Brain Injury* **23**, 411-419.

- Joubert, L. (2006). Academic-practice partnerships in practice research: A cultural shift for health social workers. *Social Work in Health Care*, **43**,151-161.
- Joubert, L., & Hocking, A. (2015). Academic practitioner partnerships: A model for collaborative practice research in social work. *Australian Social Work*, **68**, 352-363.
- Judd R.G. & Sheffield S. (2010) Hospital social work: Contemporary roles and professional activities. *Social Work in Health Care* **49**, 856-871.
- Keyser-Marcus L.A., Bricout J.C., Wehman P., Campbell L.R., Cifu D.X., Englander J., High W. & Zafonte R.D.(2002). Acute predictors of return to employment after traumatic brain injury: a longitudinal follow-up. *Archives of Physical Medicine and Rehabilitation* **83**, 635-641.
- Landis J. R. & Koch G. G. Ž. (1977a.) The measurement of observer agreement for categorical data. *Biometrics* **33**, 159-174.
- Langfield I. (2009) *Commissioning Policy Neurorehabilitation*. Available from <<http://wales.gov.uk/docs/dhss/meetings/090717neurorehabcompolen.pdf>> [28 September 2009]
- Lees M. (1988) The social and emotional consequences of severe brain injury: The social work perspective. In: I.Fussey & G. M. Giles (Eds) *Rehabilitation of the severely brain injured adult: A practical approach*. Croom Helm, London.
- Levac D., Colquhoun H. & O'Brian K. (2010) Scoping studies advancing the methodology. *Implementation Science* **5**, 69-78.
- Levesque J.D. (1988) Assessing the foreseeable risks in discharge planning: The challenge of discharging the brain-injured patient. *Social work in Health Care* **13**, 49-63.
- Linton & Kim 2ndry analysis
- Lunt, N.T., Ramian, K., Shaw, I., Fouché, C. and Mitchell, F., 2012. Networking practitioner research: Synthesising the state of the 'art'. *European Journal of Social Work*, **15**, 185-203.

- Mallen C., Peat G. & Croft P. (2006) Quality assessment of observational studies is not commonplace in systematic reviews. *Journal of Clinical Epidemiology* **59**, 765-769.
- Mallon B. & Houtstra T. (2007) Telephone technology in social work group treatment. *Health & social work* **32**,139-141.
- Mantell A. (2010) Traumatic Brain Injury and Potential Safeguarding Concerns. *Journal of Adult Protection* **12**, 31-42.
- Mantell A. (2013a) Conclusion. In: A. Mantell (Eds) *Skills for Social Work Practice*. Sage, London
- Mantell A. (2013b) Skills for Engaging. In A. Mantell (Eds) *Skills for Social Work Practice*. Sage, London.
- Matthews L.R., Pockett R.B., Nisbet G., Thistlethwaite J.E., Dunston R, Lee A.,White J.F. (2011) Building capacity in Australian interprofessional health education: Perspectives from key health and higher education stakeholders. *Australasian Health Review* **35**, 136-140.
- McLaughlin A.M. & Schaffer V. (1985) Rehabilitate or remold? Family involvement in head trauma recovery. *Cognitive Rehabilitation*.
- Monahan K. & O'Leary K.D. (1999) Head injury and battered women: an initial inquiry. *Health and Social Work* **24**, 269-278.
- Moore M. (2013) Mild traumatic brain injury: Implications for social work research and practice with civilian and military populations. *Social Work in Health Care* **52** (2) 498-518.
- Moore M., Winkelman A., Kwong S., Segal S., Manley G and Shumway M. (2014) The emergency department social worker intervention for mild traumatic brain injury (SWIFT-Acute): A pilot study *Brain Injury* **28** (4) 448-455.
- Nalder E., Flemming J., Cornwell P. and Foster M. (2012a) Linked lives: The experiences of family caregivers during the transition from hospital to home following traumatic brain injury. *Brain Impairment* **13** (1) 108-122.

- Nalder E., Flemming J., Cornwell P., Foster M. Haines T. (2012b) Factors associated with the occurrence of sentinel events during transition from hospital to home for individuals with traumatic brain injury. *Journal of Rehabilitation Medicine* 44, 837-844.
- Nalder E., Flemming J., Foster M., Cornwell P. and Shields C. (2012c) Identifying factors associated with perceived success in the transition from hospital to home after brain injury. *Journal of Head Trauma Rehabilitation* 27 (2) 143-153.
- Nalder E., Flemming J., Cornwell P., Shields C. and Foster M. (2013) Reflections on life: Experiences of individuals with brain injury during the transition from hospital to home. *Brain Injury* 27 (11) 1294-1303.
- Nevo I., Slonin-Nevo V. (2011) The myth of evidence-based practice: Towards evidence-informed practice. *British Journal of Social Work* 41, 1176-1197.
- Oddy M., Frances Moir J., Fortescue D., Chadwick S. (2012) The prevalence of traumatic brain injury in the homeless community in a UK city. *Brain Injury* 26, 1058-1064
- Orme J., Powell J. (2008) Building research capacity in social work: Process and issues. *British Journal of Social Work* 38, 988-1008.
- Parkinson, G. W., French, L. M., & Massetti, S. (2012). Care coordination in military Traumatic Brain Injury. *Advances in Social Work Practice with the Military*, xx, 55 -71.
- Perry W. (1986) Surviving head injury: A social worker's account. *Health and Social Work* 11, 204-208.
- Plath D. (2006) Evidence-based practice: Current issues and future directions. *Australian Social Work* 59, 56-72.
- Resnick C. (1993) The effect of head injury on family and marital stability. *Social Work in Health Care* 18, 49-62.
- Resnick C. (1994) Head injury: Review of an international issue. *International Social Work* 37, 213-220.

- Romano M.D. (1974) Family Response to Traumatic Head Injury. *Scandinavian Journal of Rehabilitation Medicine* **6**, 1-4.
- Romano M.D. (1989) Ethical issues and families of brain-injured persons. *Journal of Head Trauma Rehabilitation* **4**, 33-41
- Rona R.J., Jones M., Fear N.T, *et al.* (2012) Mild traumatic brain injury in UK military personnel returning from Afghanistan and Iraq: Cohort and cross-sectional analyses. *Journal of Head Trauma Rehabilitation* **27**, 33-44.
- Rosen A. (2003) Evidence-based social work practice: Challenges and promise *Social Work Research* **27**,197-208.
- Rosenthal M. (1996) The art, science and practice of TBI rehabilitation: Past, present and future. In: J.Ponsford, P.Snow & V. Anderson (Eds) *Proceedings of the 5th Conference of the International Association for the Study of Traumatic Brain Injury and 20<sup>th</sup> Conference of the Australian Society for the Study of Brain Impairment*. Melbourne, Australia.
- Rowlands, A. (2000) Understanding social support and friendship: Implications for intervention after acquired brain injury. *Brain Impairment* **1**, 151–164.
- Rowlands A. (2001) 15 Breaking my head in the prime of my life: acquired disability in young adulthood. In: M.Priestley (Eds) *Disability and the Life Course: Global Perspectives*, pp. 179-191.Cambridge University press, Cambridge, UK.
- Rowlands A. (2001) Ability or disability? Strengths-based practice in the area of traumatic brain injury. *Families in Society: The Journal of Contemporary Social Services* **82**, 273-286
- Sabaz M., Simpson G., Walker A., Rogers J., Gillis I. and Strettles B. (2014) Prevalence, comorbidities, and correlates of challenging behaviour among community-dwelling adults with severe traumatic brain injury: A multicenter study. *Journal of Head Injury Rehabilitation* **29** (2) 19-30.

- Sabhesan S., Arumugham R. & Natarajan M. (1991). Psychopathology of confabulations in head injury. *Indian Journal of Psychiatry* **33**, 291.
- Sabhesan S., Arumugham R., Ramasamy P. & Natarajan M. (1987) Persistent alcohol abuse and late outcome in head injury. *Indian Journal of Psychological Medicine* **10**, 61-65
- Sabhesan S., Arumugham R., Ramaswamy P., Athiappan S. & Natarajan M. (1993). Behavioural rehabilitation of head injured patients. *Neurology India* **41**, 13-17
- Sabhesan S., Arumugham R., Ramasamy P. & Natarajan M. (1998) Vocational restitution after head injury. *Indian Journal of Social Work* **49**, 187-194.
- Simonson P., & Simpson G.K. (2010) Building international networks to promote social work practice in specialty fields: The experience of the International Network for Social Workers in Acquired Brain Injury. *Changing Health: 6<sup>th</sup> International Conference on Social Work in Health and Mental Health*, University College Dublin, 28<sup>th</sup> June - 2<sup>nd</sup> July.
- Simpson G. (2001) Addressing the sexual concerns of persons with traumatic brain injury in rehabilitation settings: a framework for action. *Brain Impairment* **2**, 97-108.
- Simpson G., Blaszczyński A & Hodgkinson A.(1999). Sex offending as a psychosocial sequela of traumatic brain injury. *Journal of Head Trauma Rehabilitation* **14**, 567-580.
- Simpson G., Foster M., Kuipers P., Kendall M. & Hanna J. (2005) An organizational perspective on goal setting in community-based brain injury rehabilitation. *Disability and Rehabilitation* **27**, 901-910.
- Simpson G. & Long E. (2004) An evaluation of sex education and information resources and their provision to adults with traumatic brain injury. *Journal of Head Trauma Rehabilitation* **19**, 413-428.
- Simpson G., Tate R., Whiting D. and Cotter R. (2011) Suicide prevention after traumatic brain injury: A randomized controlled trial of a program for psychological treatment of hopelessness. *Journal of Head Injury Trauma* **26** (4) 290-300.



- Simpson G. and Jones K. (2012) How important is resilience among family members supporting relatives with traumatic brain injury or spinal cord injury. *Clinical Rehabilitation* 27 (4) 367-377.
- Simpson G., Sabaz, M and Daher M (2013) Prevalence, clinical features and correlates of inappropriate sexual behaviour after traumatic brain injury: A multicentre study. *Journal of Head Trauma Rehabilitation* 28 (30) 202-210.
- Simpson G., Sabaz, M., Daher M., Gordon R. and Strettles B. (2014) Challenging behaviours, comorbidities, service utilisation and service access among community-dwelling adults with severe traumatic brain injury: a multicentre study. *Brain Impairment* 15 (1) 28-42.
- Simpson G.K., Lord B. (2015) Editorial: Applied research methods. *Australian Social Work* 68, 281–283.
- Simpson G.K., Lord B. (2015) Enhancing the reporting of quantitative research methods in Australian Social Work. *Australian Social Work* 68, 375-383.
- Simpson G., McCann B & Lowy M. (2003). Treatment of premature ejaculation after traumatic brain injury. *Brain Injury* 17, 723-729.
- Simpson G., Mohr R. & Redman A. (2000) Cultural variations in the understanding of traumatic brain injury and brain injury rehabilitation. *Brain Injury* 14, 125-140.
- Simpson G.K., Tate R.L. (2009) Suicidality and suicide prevention among war veterans with Traumatic Brain Injury. In: L. Sher & A. Vilens (Eds). *Suicide in the Military* pp. 161-182. Nova Science Publishers, New York.
- Simpson G., Tate R., Ferry K., Hodgkinson A. & Blaszczyński A. (2001). Social, neuroradiologic, medical, and neuropsychologic correlates of sexually aberrant behavior after traumatic brain injury: A controlled study. *Journal of Head Trauma Rehabilitation* 16, 556-572.
- Simpson G., Simons M & McFadyen M. (2002) The challenges of a hidden disability: Social work practice in the field of traumatic brain injury. *Australian Social Work* 55, 24-37.

- Simpson G. & Tate R. (2007) Suicidality in people surviving a traumatic brain injury: Prevalence, risk factors and implications for clinical management. *Brain Injury* **21**, 1335–1351.
- Simpson GK & Yuen F. (2016). Perspectives on brain injury: An introduction. *Journal of Social Work in Disability and Rehabilitation*, **15**, 169-178.
- Smith-Osborne A. (2013) Chapter 13: Traumatic Brain Injury and Military Families. J. Strolin-Coltzman, H. Matto and M. Ballan (eds) *Neuroscience for Social Work: Current Research and Practice*. New York: Springer.
- Soydan H. (2015) Intervention research in social work. *Australian Social Work* **68**, 324-337.
- Speziale B, Kulbago S. and Menter A. (2010) Diagnosing and treating traumatic brain injury among veterans of the Afghanistan and Iraq wars: Implications for social work. *Journal of Social Work in Disability and Rehabilitation* **9** (4) 289-302.
- Strandberg T. (2009a) Adults with acquired traumatic brain injury: experiences of a changeover process and consequences in everyday life. *Social Work in Health Care* **48**, 276-297.
- Strandberg T. (2009b) Adults with acquired traumatic brain injury: a theoretical analysis from a social recognition perspective. *Social Work in Health Care* **48**, 169-191.
- Strandberg, T. (2015) Vertical and horizontal knowledge-integration in disability research. *Journal of Social Medicine* **92**, 216-224.
- Tate R.L., Broe G. A. & Lulham J. M. (1989) Impairment after severe blunt head injury: the results of a consecutive series of 100 patients. *Acta Neurological Scandinavica* **79**, 97–100.
- Tate R.L., Lulham J.M., Broe G.A., Strettles B.& Pfaff A.(1989) Psychosocial outcome for the survivors of severe blunt head injury: the results from a consecutive series of 100 patients. *Journal of Neurology, Neurosurgery & Psychiatry* **52**, 1128-1134.
- Tate R.L., McDonald S. & Lulham J.M. (1998) Incidence of hospital-treated traumatic brain injury in an Australian community. *Australian and New Zealand Journal of Public Health* **22**, 419-423.

- Tate R., Simpson G., Soo C., & Lane-Brown A. (2011) Participation after acquired brain injury, clinical and psychometric considerations of the Sydney Psychosocial Reintegration Scale. *Journal of Rehabilitation Medicine* **43**, 609-618.
- Taylor B.J., Dempster M. & Donnelly M. (2007). Grading gems: Appraising the quality of research for social work and social care. *British Journal of Social Work* **37**, 335-354.
- Thyer B.A., & Myers L.L. (2011) The quest for evidence-based practice: A view from the United States. *Journal of Social Work* **11**, 8-25.
- Tilbury C., Hughes M., Bigby, C. & Osmond J. (2016) Social work research in the child protection field in Australia. *British Journal of Social Work* ,1-19. Doi
- Tilbury C., Hughes,M., Bigby,C., Fisher,M., & Vogel, L.A (2017). A comparative study of Australian social work research, *British Journal of Social Work*.
- Togher L., McDonald S., Tate R., Power E., Rietdijk R. (2013) Training communication partners of people with severe traumatic brain injury improves everyday conversations: A multicenter single blind trial. *Journal of Rehabilitation Medicine* **45**, 637-645.
- Trumble. (1981) Social work department. In: C.D Evans (Eds) *Rehabilitation after severe head injury*, pp.176-189. Churchill Livingstone, London.
- Tsaousides T., Cantor J.B. & Gordon W.A. (2011) Suicidal ideation following traumatic brain injury: Prevalence rates and correlates of adults living in the community. *Journal of Head Trauma Rehabilitation* **26**,265–275.
- Tyerman A. (2012) Vocational rehabilitation after traumatic brain injury: Models and services. *NeuroRehabilitation* **31**, 51–62.
- Tyerman A & Booth J. (2001) Family interventions after traumatic brain injury: A service example. *NeuroRehabilitation* **16**, 59-66.

- Tucker M. and Degeneffe (2013) Future concerns among families following brain injury in the United States: Views from the Brain Injury Association of America State Affiliates. *Australian Journal of Rehabilitation Counselling* 19 (2) 135-141.
- Turner-Stokes L., Harding R., Sergeant J., Lupton C & McPherson K. (2006) Generating the evidence base for the National Service Framework for Long Term Conditions: a new research typology. *Clinical Medicine* 6, 91-97.
- Vandiver V.L., Johnson J & Christofero-Snider C. (2003) Supporting employment for adults with acquired brain injury: a conceptual model. *Journal of Head Trauma Rehabilitation* 18, 457-463.
- Vungkhanching M., Heinemann A.W., Langley M.J., Ridgely M. & Kramer K.M. (2007) Feasibility of a skills-based substance abuse prevention program following traumatic brain injury. *The Journal of Head Trauma Rehabilitation* 22, 167-176.
- Vungkhanching, M. & Tonsing, K.N., (2016). Social workers' perceived role clarity as members of an interdisciplinary team in brain injury settings. *Journal of Social Work in Disability & Rehabilitation* 15, 370-384.
- Watts R., Perlesz A. (1999). Psychosocial outcome risk indicator: Predicting psychosocial outcome following traumatic brain injury. *Brain Injury* 13, 113-124
- Williams H., Mewse A., Tonks J., Mills S., Burgess C., Cordan G .(2010) Traumatic brain injury in a prison population: Prevalence and risk for re-offending. *Brain Injury* 24, 1184-1188
- Winstanley J., Simpson G., Tate R. & Myles B.( 2006). Early indicators and contributors to psychological distress in relatives during rehabilitation following severe traumatic brain injury: Findings from the brain injury outcomes study. *Journal of Head Trauma Rehabilitation* 21, 453-466.

Wiseman, S. (2011) Transdisciplinary working: the social worker as case manager. *Social Care and Neurodisability* 2 (1) 5-14.

Wood R. L. & Yurdakul L. K. (1997) Change in relationship status following traumatic brain injury. *Brain Injury* **11**, 491–502.

World Health Organization. (1996) The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. In: C.J.L Murray & A.D Lopez (Eds) *Global burden of disease and injury series*. Harvard University Press, Boston.

World Health Organisation. (2010) *Framework for action on interprofessional education and collaborative practice*. Author, Geneva.