# USING NARRATIVE THERAPY TO IMPROVE SELF-CONTINUITY AND RELATIONSHIP CONTINUITY IN COUPLES AFTER A BRAIN INJURY

by

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A thesis submitted to the University of Birmingham for the degree of DOCTOR OF CLINICAL PSYCHOLOGY

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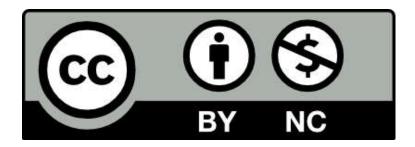
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#### **Thesis Overview**

This thesis focused on couples therapy for couples with one partner who survived a brain injury. It consists of a scoping review, an empirical paper, and two press releases.

The scoping review outlines the current state of the literature on interventions made available to couples following a brain injury. It focused on publications which aim to improve an aspect of the couple's relationship, rather than the general coping of individual partners. The review found that while interest in this area is increasing, there is an overall lack of robust research. The findings discuss how research could improve, including by ensuring that the relational aspect to be targeted is clearly outlined and measured appropriately.

The empirical paper describes a case series where three couples were offered ten structured sessions of narrative therapy, adapted specifically to target the self-continuity of the injured partner and relationship continuity of the uninjured partner. The paper details the contents of the interventions and the reasons for their inclusion. Findings are then presented for each couple on how the intervention impacted their continuity and associated concepts such as self-esteem, relationship satisfaction, and wellbeing. Overall, the intervention showed positive results for injured partners who struggled with self-identity. Uninjured partners showed at least some improvement in relationship continuity and most benefitted in associated wellbeing and relationship satisfaction.

The press releases provide accessible summaries of both papers.

# Acknowledgement

Firstly, I would like to thank Dr Gerard Riley for his guidance, support, and patience while working on this research. I feel very lucky to have found a project that I truly enjoyed and feel passionate about.

I would also like to thank all of the participants who took part in the study and allowed me to document their experiences. I am grateful to the staff across the different Headway branches who made recruitment possible.

Thank you to Dr Amanda Mobley and John Burnham for their time during the initial stages of the project and for helping me think about the intervention I was offering. I would also like to thank the Clinical Psychology Doctorate course team and all my clinical supervisors for their enthusiasm, guidance, and teaching over the last three years.

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Literature Review: A Scoping Review of Couples Interventions Addressing Relational

Aspects Following a Brain Injury

#### **Abstract**

#### Introduction

The effects of brain injury are discussed with a particular focus on how close family relations are impacted by the injury. Research discussing specific effects on spouses and partners is outlined, providing a rationale for the review.

#### Methods

Five databases (PsycINFO, Web of Science, EMBASE Classic, MEDLINE(R), and CINAHL Plus) were searched following a pre-agreed protocol defining specific inclusion and exclusion criteria. The search focused on identifying publications which specifically addressed an aspect of couples' relationships and had identifiable findings for couples, case examples, or acknowledged adaptations made for couples.

#### **Results**

Nineteen relevant publications were identified. The recommended intervention types and components varied widely. The results are discussed in relation to the overall quality of the current literature, proposed modalities of interventions, aspects of relationships being targeted, outcome measures used, the rationale of the interventions, and outcomes.

# **Conclusions**

There appears to be a growing interest in couples interventions following a brain injury though more robust studies are needed. In particular, researchers should ensure that aspect of the relationship to be targeted is clearly identified and measured appropriately. The implications for future research are discussed, though preliminary findings in this area appear promising.

#### Introduction

Acquired brain injury refers to any damage to the brain that occurs after birth and can be traumatic or non-traumatic in nature. Traumatic injury is a result of external force, for example, a blow to the head or an object piercing the skull. Some of the most common causes include road traffic accidents, falls, and assaults. Non-traumatic injuries refer to any other type of brain injury such as stroke, encephalitis, tumours, or hypoxic injury (Headway, n.d.). Acquired brain injury is often a life-changing experience for a person and their family. Research has widely documented the common difficulties encountered by injured individuals and those closest to them. Some of the commonly observed psychological issues include cognitive problems such as poorer executive functioning or memory issues, behavioural problems such as increased aggression, difficulties recognising emotion (alexithymia) and low empathy, personality changes such as low motivation and self-centredness, and reduced social functioning (Arciniegas et al. 2002; Fleminger, 2008; Johnson & Balleny, 1996; Temkin et al., 2009; Williams & Wood, 2010). Furthermore, research has shown that individuals are more vulnerable to psychiatric disorders following a brain injury, most commonly depression, anxiety, delusional disorders, and personality disorders (Fleminger, 2008; Koponen et al., 2002; Whelan-Goodinson et al., 2009).

Due to these issues, individuals often require at least some degree of support and care, which most commonly falls to the family members (DeJong et al., 1990). While the exact statistics are not clear, most research samples contain the largest proportions of caregivers as parents and spouses respectively, with many publications reporting these family members become the primary caregivers most often (Livingston et al., 2010; Perlesz et al., 1999; Serna & de Sousa, 2006). It should also be noted that family members are often considered informal

carers, which means that their numbers will likely be under-reported (Rutherford & Bu, 2018; Urwin et al., 2021).

Caring responsibilities can put a strain and pressure on family relationships and on the individuals providing care, however, not all families are negatively affected (Perlesz et al., 1999). Commonly reported effects on carers include reduced life satisfaction (Livingston et al., 2010), depression and anxiety (Ennis et al., 2013), as well as increased burden, which can be higher than for carers of individuals with other conditions (Harding et al., 2015). A scoping review by Baker and colleagues (2017) found that research most commonly reports carers struggling with high levels of caregiver burden, poor family functioning, and high distress. It was also noted that a high caregiver burden is linked with a lower functioning level of the care recipient. Nonetheless, there appear to be some important differences in how parents and spouses specifically are affected by their caring roles. For example, spouses have been shown to be more likely to experience disruptions in family functioning than parents (M. I. Anderson et al., 2009; Kreutzer et al., 1994). Some have even described feeling that their partner has been replaced by another person, one they no longer feel emotionally close to or wish to be intimate with (Bodley-Scott & Riley, 2015; Oddy, 1999). Furthermore, Perlesz and colleagues (1999) suggested in their critical review that the role change is greater for spouses than it is for parents, as they often have to face the loss of primary support from their now injured partner, loss of intimacy, and financial strain. Additionally, they may have to adjust to this role change while parenting their own children and being unable to grieve for their losses. It might therefore not be surprising that spouses might struggle to adjust to changes post-injury, which may increase the chances of marital breakdown (Blais & Boisvert, 2005). The exact rates of breakdowns vary across different studies from 15% to 78%, though they mostly report a negative impact on overall marriage quality (E. E. Godwin et al., 2011).

In contrast, when positive relationships are maintained, individual wellbeing as well as rehabilitation outcomes can improve. For example, Kendall and Terry (2009) highlight the importance of family support as directly related to emotional wellbeing in the long term for individuals diagnosed with traumatic brain injury and suggest that families should be involved in rehabilitation. Furthermore, Sander and colleagues (2002) found that better family functioning was associated with better rehabilitation and employability outcomes. Similarly, Clark and Smith (1999) also found that healthier family functioning was associated with higher performance of activities of daily living after stroke. Focusing more specifically on couples, Ostwald and colleagues (2009) found that stroke survivors who reported a strong, positive relationship with their partner also reported lower stress. This was also found to be true for spousal caregivers of stroke survivors, as those who perceived their caregiving relationship as more positive reported lower stress scores (K. M. Godwin et al., 2013).

Close family relationships are clearly important to the wellbeing and recovery of both carers and individuals with a brain injury. It is, therefore, key to understand how brain injury impacts these relationships and what can be done to ensure they remain strong. A range of interventions have been described for supporting family relationships. Due to the widely varied effects of the injury, the needs of both the injured individuals and their carers are complex and varied. Accordingly, there is a correspondingly varied range of different kinds of intervention addressing a multitude of issues. A scoping review of these interventions would be useful, as it could provide a summary for researchers and clinicians about the kinds of intervention available, the quality of the research available, and identify any gaps in the literature. This, in turn, might generate some recommendations about future research in the area.

Given that the needs of couples are different to those of other family member dyads, this review will aim to specifically focus on spousal or partner dyads, omitting other family relations. This is to provide a more in-depth analysis of the literature in the area, accounting for the specific needs that spouses and partners have. The aim of this paper is therefore to provide a scoping review of couples interventions which address the relational aspect following a brain injury. It is hoped that it can provide an overview of the interventions currently being used for couples in this situation, and note any gaps in the literature which could inform future research.

#### Methods

A scoping review was chosen as the most appropriate form of literature review. This is due to the high diversity of needs of couples and thus the high diversity of interventions provided for couples following a brain injury. Scoping reviews are sometimes recommended in such circumstances (Munn et al., 2018), as they provide a broad overview of the literature and its quality. They can also help assess the readiness of the literature for more in-depth analysis, such as a meta-analysis or systematic review, which could more specifically comment on the effectiveness of interventions. It was anticipated that the scoping review might only return a small number of results, however, small-scale scoping reviews are not uncommon in brain injury literature (Bryson-Campbell et al., 2013; Candlish et al., 2022; Jones et al., 2018; Mah et al., 2018).

An unpublished protocol was written and agreed upon with the project's supervisor to ensure clear objectives and parameters of the search were kept to. The scoping review was then conducted in accordance with Joanna Briggs Institute (JBI) methodology (Peters et al., 2020), where possible. Due to resource limitations, there was a deviation from the

recommended method in that only the author screened all the literature. However, if there was any uncertainty about whether a paper met the inclusion/exclusion criteria, the paper was also reviewed by the research supervisor before a decision was made.

#### Search Strategy

A three-step search strategy was utilised, whereby an initial search of PsycINFO and Web of Science databases was used to identify the most commonly used keywords and to explore the availability of papers. Titles, abstracts and keywords of what appeared to be relevant papers were used to refine and add to the search terms. The final search terms below were then agreed upon between the author and their supervisor:

- 1) Brain Injury OR Stroke
  - AND
- 2) Family OR Spouse OR Partner OR Marriage OR Couple OR Relationship
  - **AND**
  - 3) Therapy OR Intervention
    - AND
    - 4) Psychology

A second search was run on 23<sup>rd</sup> August 2022 using the above search terms on databases PsycINFO, Web of Science, EMBASE Classic, MEDLINE(R), and CINAHL Plus, resulting in a total of 2,229 titles. These databases were deemed to be the most appropriate to search as they focus on psychological or allied health professional research. All search results were exported into reference management software to ensure they were tracked.

Finally, once the publications were screened and selected, their reference lists were screened for any additional sources which may have been missed. Further abstract and full paper checks were carried out on any references identified in this way.

# Source of Evidence Screening and Selection

All search results from databases and reference screenings were exported into Endnote 20.4.1, with duplicates removed. Titles and abstracts of the remaining papers were screened for whether they met the inclusion/exclusion criteria, as outlined in Table 1. If they appeared to meet the criteria or if it was unclear whether they met the criteria, they were retained for full-text review.

**Table 1**Inclusion and Exclusion Criteria

Any country of origin

Inclusion Criteria	Exclusion Criteria
Involvement of adults with a brain injury	Family interventions which do not address a
and their partners	relational aspect in the relationship (e.g.
	focus only on burden)
Both partners involved in the intervention	Publications not available in English
If the sample of participants is mixed to	
include other family members, results for	
intimate partners are distinguishable	
If a general family intervention is described, adaptations for couples are outlined or case examples with couples are given	
The intervention addressed an aspect of their relationship	

**Inclusion Criteria** 

**Exclusion Criteria** 

Any type of publication, including grey literature, descriptive studies, book chapters, etc.

# No outcome measures/evaluation necessary

The review focused on adults with an acquired brain injury and their partners, both of whom had to be involved in the treatment for the paper to be included. *Partner* was defined as any person currently involved in a long-term relationship, such as marriage or cohabiting. The treatment had to specifically focus, at least in part, on improving some aspect of the relationship, though the specific aspect did not have to be identified by the authors. This meant that the authors could simply aim to investigate the relationship quality or effects on the relationship generally. A list of relational aspects was created based on literature investigating relational outcomes and couples interventions (S. R. Anderson et al., 2022; Gilbert et al., 2023; Spanier, 1976), specifying aspects such as affection, closeness, communication, conflict, emotional intimacy, empathy, satisfaction, and warmth. If the intervention focused on a different relational aspect, the full text of the article was reviewed to decide whether the relationship was adequately addressed and whether the article still fitted in with the aims of this review.

This meant that some articles on family interventions were excluded, as they did not focus on relational factors, but rather outcomes such as caregiver burden or depression. If the intervention was provided for family members in general, the study had to distinguish between the results for couples and other family members. Similarly, if a publication simply described the intervention, some acknowledgement of adaptation for couples or case studies including couples had to be provided. This was to ensure that the interventions remain couple-relevant and not focused on other family members. The review also set out to consider all

available literature, both published and unpublished. This included but was not limited to primary research papers, reviews, case studies, unpublished thesis, books, and grey literature, if available. This was to allow a greater breadth of literature to be covered since it was understood that primary research in this area could be limited. Additionally, the intervention only needed to be described, not evaluated, to be included. This was to further understand the current availability of interventions offered to couples. Any uncertainty on whether to include a publication in the final set was discussed between the author and the project supervisor. Due to the low number of identified papers and the inclusion of multiple descriptive publications, the supervisor and the author discussed about 50% of the included publications.

#### Data Extraction

All relevant papers were charted in a table outlining the author, year of publication, country of origin, aims, study population and sample size, methodology, intervention details, outcomes measures, and key findings relating to the scoping review question, as per the JBI Manual for Evidence Synthesis (Peters et al., 2020). The table can be seen under the "results" section.

#### Analysis and Presentation of the Results

The primary objective of this scoping review was to generate a descriptive overview of the current therapies offered to couples where one partner has experienced a brain injury. There will therefore be no further coding or synthesising of these results. The findings are presented below, in both a tabular format summarising key information of the published literature, as well as a descriptive narrative, identifying key findings and gaps in the research.

#### **Results**

The initial search across five databases returned 2,229 titles. Removing duplicates left 1,839 articles. Titles and abstracts screening identified 44 potentially relevant titles, which were narrowed down to 13 relevant titles following full-text screening. These texts were then searched for other relevant references, identifying six further titles, bringing the total to 19. Figure 1 demonstrates the screening process, while Table 2 offers an overview of the identified articles, structured based on recommendations from the JBI manual (Peters et al., 2020). A more detailed table outlining all the rejected articles can be found in Appendix A. It may be worth noting that eight papers have been rejected for inclusion in this review, due to them not focusing on any aspect of the intervention on any relational outcomes. While the research interest in family interventions post brain injury appears to be increasing, many interventions still do not focus on the relationships between partners or do not acknowledge the varying needs of different family members. Instead, many of the rejected articles focused on other factors, such as carers' coping and support.

# Figure 1

Study Selection Process

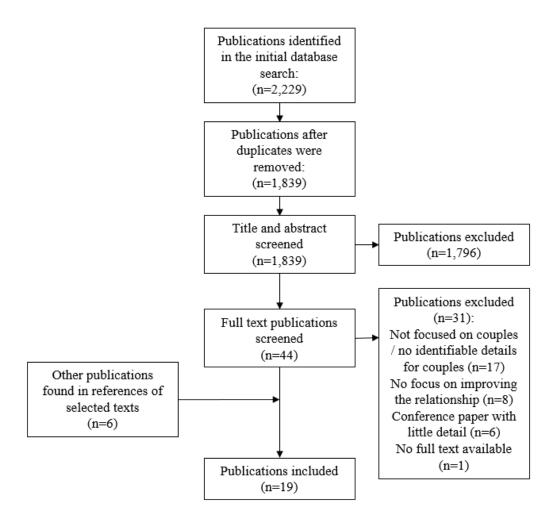


Table 2

Identified Articles

Author(s); Year;	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome	Key Findings That Relate to the
Country of Origin					Measures	Scoping Review  Question
Backhaus et	To investigate the	9 couples: 16	Uncontrolled	Couples CARE – 16-	The Dyadic	Improvement in
al.	feasibility of a	participants were	before and after	week group	Adjustment Scale	adjustment and
	group	Caucasian, 9	study. No	intervention based on	(DAS) for marital	satisfaction, overall
2016	intervention and	survivors had a	follow-up.	principles of CBT,	adjustment and	marriage quality, and
	its effects on	traumatic brain		DBT and Gottman's	satisfaction, the	communication
USA	relationship	injury, 2 had an		framework. This	Quality of	skills.
	satisfaction and	ischemic stroke,		included	Marriage Index	
	communication	and 1 had hypoxia.		psychoeducation;	for relationship	
		The mean age of		emotional receptivity,	quality, and the	
		all participants was		empathy, and	Four Horsemen of	
		47.06. No data on		emotional awareness	the Apocalypse	
		the sex of the		training;	Questionnaire to	
		participants was		communication skills;	assess	
		provided.		emotional coping	engagement in	
				skills; and addressing	negative	
				relationship needs.	communication	
					patterns.	

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
Chawla &	To describe how	One case study	Descriptive	20 EFT sessions	N/A	The authors surmise
Kafescioglu	emotionally	provided: a	case study	focused on identifying		that the couple were
2012	focused therapy (EFT) can be used to aid the	Caucasian couple with a 45-year-old male who had a	only.	problematic cycles and de-escalating them, restructuring		more able to share their feelings with one another, share
Country	expression of	traumatic brain		their interactions, and		parenting
unclear	emotions and	injury and his 38-		finding new solutions		responsibilities
	emotional	year-old female		to relationship		better and engage in social activities
	regulation in couples with	spouse.		problems.		following EFT.
	chronic illness, such as a brain injury.					Tollowing EPT.
Clark et al.	To investigate whether education	32 couples in the intervention group	A randomised controlled trial.	Participants were provided with an	The McMaster Family	Statistically significant results
2003	and counselling	and 30 couples in	Follow up at 6	information pack on	Assessment	showed that the
	after stroke	the control group	months.	stroke, its risks and	Device (FAD) for	family functioning
Australia	improved family functioning.	who did not receive information and counselling on		reduction measures, coping strategies, and community support signposts. They were	measuring family functioning.	of patients remained stable for the intervention group but declined for the

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
		discharge from rehabilitation. The mean ages of patients were 71.2 in the control group and 73.3 in the intervention, while the mean ages of spouses were 69.3 in the control group and 71.3 in the intervention. 38 stroke patients were male, and no demographic data on the sex of the partners was provided. No data on ethnicity was provided.		also offered 3x 1h visits from a counselling techniques trained social worker to discuss stroke-related stress.  Sessions were not standardised and adapted to individual needs.		control, while the family functioning of spouses improved slightly for the intervention group but declined for the control group.

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
Einerson et	To investigate the	26 couples - 17	Secondary	Couples ReStoreD –	No quantitative	The analysis found
al.	experience of couples who took	stroke survivors were male and 17	analysis of qualitative data	8-week self- administered positive	measures were used. Thematic	that the intervention increased awareness
2022	part in a couples intervention post-	partners were female. 48	collected in the pilot study by	psychology intervention,	analysis was performed on	of spouse (i.e., understanding of
USA	stroke.	participants were White. The mean age of stroke survivors was 53.9 while that of partners was 52.4.	Terril et al (2022) – details of intervention described in Terril et al (2018) (see below).	incorporating gratitude, fostering relationships, focusing on positives, acts of kindness, savouring everyday experiences, seeking meaning, and identifying meaningful goals. Each participant was asked to complete at least 2 individual and 2 couple activities from a list provided.	transcribed interviews to identify themes. The second primary theme identified was "changes in the relationship"	spouse and changes post-stroke, as well as empathy and tolerance for spouse), spending more positive time together, prompted participants to be more intentional in the relationship (i.e., taking the time to be together, slow down and enjoy it), and increased/improved communication.

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
Kreutzer et	To investigate the	45 couples were	A randomised	Therapeutic Couples	The Revised	RDAS scores
al.	effectiveness of	recruited for	controlled trial	Intervention (TCI) –	Dyadic	showed a
	an intervention to	intervention and	with two	5x 2h sessions based	Adjustment Scale	statistically
2020	improve couples' quality of	30 couples for a wait-list control.	parallel arms and a 3-month	on CBT principles, focusing on topics	(RDAS) to measure	significant increase post-intervention and
USA	relationship post-	Most injured	follow-up.	such as normalising	relationship	remained stable at
	brain injury.	participants had a	1	common issues,	quality.	follow-up for
		traumatic brain		healthy		treatment patients
		injury (91%), 54		communication,		and spouses, while
		were male, 59		managing stress,		the control group did
		were White, with a		problem-solving,		not. The number of
		mean age of 47.3		rebuilding intimacy,		patients'
		in the treatment		setting achievable		relationships
		group and 47.4 in		goals, as well as an		meeting the cut-off
		the control group.		optional session on		score for a
		54 partners were		parenting.		'distressed' category
		female and 60				dropped from 53%
		were White, with a				to 38%
		mean age of 46.7				posttreatment and at
		in the treatment				follow-up.
		group and 46.5 in				
		the control group.				

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
Meredith	To outline some of the family	N/A - a case example of a	N/A	Common and potentially helpful	N/A	The author argues that utilising family
2020	therapy concepts and how they can	couple given: a male partner who		techniques which could be used with		therapy could have helped open direct
UK	be used in the field of aphasia.	had a stroke with resulting aphasia, and a female partner. The author provides thoughts on how they could have approached discharge conversations in retrospect.		couples are outlined, including reviewing the family life cycle, genograms, using narrative therapy techniques, and how resilience is influenced by relations. A case is made for the use of family therapy with a couple who suddenly and unexpectedly spilt up following a brain injury.		communication between the partners, consider their changing roles from partner to carer and their identity as a couple, enabling the couple to address their fears and be more supported in deciding living arrangements.

Author(s); Year; Country of	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review
Origin	The secondom	90 sourles in	A word a wall	Committed to	The Materality	Question
Ostwald et	The secondary	80 couples in	A randomised	Committed to	The Mutuality	No significant
al.	aims were to	postal intervention	trial of two	Assisting with	Scale assessed the	difference was found
2014	increase mutuality (i.e., quality of relationship	and 79 couples in home intervention - stroke survivors	conditions measuring outcomes at 3,	Recovery after Stroke (CAReS) intervention aimed at altering the	quality of the caregiving relationship.	in caregiver or stroke survivor mutuality scores between
USA	characterized by	and their spouses.	6, 9, and 12	perception of the		individual
	love, shared	119 stroke	months.	situation, improving		interventions, but
	activities,	survivors were		coping strategies and		when assessed
	common values,	male and 92 were		use of social		together mutuality
	and reciprocity)	White, with mean		resources. Both home		scores decreased
	for both the	ages of 65.75 in		and postal		significantly for both
	caregiving spouse	the postal		interventions included		populations. This
	and the stroke	intervention and		12 months of		indicates reduced
	survivor.	66.98 in the home		personalised letters		mutuality post-
		intervention. 119		with signposting		intervention.
		caregivers were		information, gifts, and		
		female and 92		advice on stress, diet,		
		were White, with		exercise, and stroke.		
		mean ages of		Additionally, the		
		61.34 in the postal		home intervention		
		intervention and		group received home		
		63.61 in the home		visits from advanced		

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
		intervention. Minorities represented about 40% of the sample.		practice nurses, occupational therapists, and physical therapists for the first 6 months after discharge, offering advice, counselling, skill training, and signposting.		
Perlick et al. 2011 USA	To describe how the Multifamily Group Treatment (MGT) for veterans with serious mental illness was adapted for veterans with a traumatic brain injury.	N/A	N/A	MGT was adapted for veterans with traumatic brain injury, and a joining protocol was specified for couples. This included: education to normalise the effects of injury, highlighting the benefits of positive thinking, skills training to improve	N/A	N/A –evaluated in Straits-Troster et al., 2013 (see below).

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
				problem-solving and		
				communication; a		
				behavioural		
				formulation on		
				couple's functioning		
				and conflict while		
				introducing the idea of		
				emotional acceptance.		
				The rest of the		
				intervention included		
				2x workshops		
				providing education		
				on traumatic brain		
				injury and its effects		
				on the person and		
				their family, as well as		
				group sessions where		
				problem-solving was		
				used to discuss issues		
				such as relationship		
				issues. For some,		
				additional individual		

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
				couple sessions were offered outside of the group to address issues such as high conflict or parenting.		
Rasmus & Orłowska	To investigate the effects and applicability of	160 couples where one partner experienced after-	Program evaluation study using	10x 90mins sessions based on the Understanding	The Dyadic Adjustment Scale (DAS) to measure	A statistically significant difference in DAS scores was
2020	group therapy for couples on	stroke aphasia were allocated into	archived data, allocated by	Aphasia guidebook and Aphasia Couples	the quality of the relationship.	reported between therapy attendants
Poland	marital adjustment.	four intervention groups: 20 in the fluent aphasia group, 20 partners, 20 in the non- fluent aphasia group, 20 partners, and 80 matched controls (not interested in therapy – data was	type of aphasia or interest in the intervention.  Measures were collected at the start and 6 months post-intervention.	Therapy, including elements of education, support giving, and couples' therapy.  Most sessions were unstructured, based on sociolinguistic and family system therapy guidelines, offering perspectives of both partners.	Tomas of the second of the sec	and controls. Further analysis showed that spouses in both control groups and the non-fluent intervention group, as well as fluent aphasia patients in the control group all reported significantly lower

Author(s);	Relevant Aims	Target Population	Methodology	Intervention	Relevant	Key Findings That
Year;		and Sample Size			Outcome	Relate to the
Country of					Measures	Scoping Review
Origin						Question
		regularly collected				overall DAS scores
		and archived by				after 6 months.
		the institutions as a				Analysis of
		way of evaluating				individual subscales
		treatment efficacy.				showed that fluent
		The mean ages for				aphasia patients
		the different				reported consensus
		groups ranged				as statistically
		from 51.5 to 56.5.				significantly higher
		50 of the aphasia				at 6 months, while
		patients were male,				controls rated it as
		and 50 spouses				significantly lower.
		were female. No				Spouses of fluent
		data was provided				patients also rated
		for ethnicity.				their consensus as
						significantly higher
						than fluent spouse
						controls. Patients in
						both aphasia
						intervention groups
						rated their affective
						expression as

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
						significantly higher than controls at 6 months, however, both spouse intervention groups rated it as significantly lower at 6 months.
Robinson-Smith et al.	To investigate the effects of a psychoeducationa l intervention on couples' dyadic	Convenience samples of 10 couples where one partner had a stroke: 5 in the	Quasi- experimental, repeated measures, mixed-methods	6x sessions of cognitive coping intervention adapted from the Partners in Coping Program. The	The Dyadic Coping Inventory (DCI) measures couples' coping and	A statistically significant difference was found in dyadic coping by oneself for stroke survivors, as
USA	coping.	intervention condition, 5 in the control group. 6 stroke survivors were male and 4 spouses were female. The mean ages of stroke	pilot study with a randomly assigned control group.	intervention included elements of taking a balanced view, focusing on the present, taking things one at a time, making reasonable goals, reframing,	communicating stress, each partner's perception of the other's coping, and each partner's perception of how	compared over time to the control group.  Spouses in the intervention condition experienced a statistically significant increase

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
		survivors were 65.2 in the experimental group and 75.6 in the control, while spouses' mean ages were 65.4 in the experimental group and 75.6 in the control. No data was provided on ethnicity.		communicating support to partner, adjusting to body image changes, and increasing enjoyable activities.	the couple is coping.	in positive dyadic coping. Qualitative feedback showed that couples increased their intimacy by talking and reminiscing across both conditions.
Söderström et al.	To outline a crisis intervention for use shortly after a	One case example: a 40-year-old male who sustained a	Case study with measures administered	The intervention was based on object relation theory and	The Psychosocial Functioning Questionnaire	The couple in the case study reported that their
1992	brain injury happens that can	traumatic brain injury and his 30-	only at follow- ups one and	transactional analysis and included offering	(PFQ) was developed for the	relationship has deepened, and they
Sweden	aid coping for patients and their significant others.	year-old female spouse. The article mentions applying the therapy to 14	two years post- injury.	containment, accessing suppressed feelings, and analysing	purpose of the study to measure and track how participants	cared for each other more. Specifically, they reported positive changes on

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
		family dyads but only presents detailed outcomes for one couple. No data on ethnicity is provided.		transactional patterns in the relationship. Sessions were initially offered to partners separately until they were ready for family therapy.	appraised changes in different areas of their lives.	the PFQ relating to talking with each other and showing affection to each other both one year and two years postinjury. The measure was descriptive with no numerical values provided and no statistical analysis.
Stiell et al. 2007 Canada	To describe how the relationship between chronic illness and couples' adjustment can be aided by emotionally focused therapy (EFT).	One case study of a couple: a 67- year-old male who had a stroke resulting in global aphasia and his 65- year-old wife. No data for ethnicity is provided.	Descriptive case study only.	10 sessions of EFT integrated with SCA – supported conversation for adults with aphasia. Sessions identified cycles of withdrawal and helped the couple find new ways of communicating and	N/A	The authors state that the sessions helped the couple develop an alliance, validate their experiences, and feel heard. Sessions allowed the couple to communicate their feelings to each

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention sharing their needs and feelings.	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question other, "stand together" and reconnect with social activities.
Straits- Troster et al. 2013 USA	To explore participants' experience, acceptability and perceived efficacy of a family intervention described in Perlick et al. 2011 (see above).	8 veterans and 8 family members (6 spouses), 11 participants were from ethnic minority backgrounds, all veterans sustained a blast injury and had a mean age of 34.5 years while family members' mean age was 37.9.	3x 90min focus groups of 4-6 participants conducted by the study's clinicians were transcribed and analysed through qualitative content analysis. Participants were asked about their experience of the	2-3 family meetings, an education workshop on traumatic brain injury, and 9 months of group meetings. See Perlick et al 2011 for details.	Qualitative analysis based on content analysis.	Themes included "increasing understanding of the interconnection between TBI and posttraumatic stress disorder" which helped spouses cope with the symptoms of the TBI, and "restoring relationships through communication and understanding", which allowed a safe space to discuss feelings openly.

Author(s); Year; Country of	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review
Origin						Question
			intervention, its			Separate groups for
			acceptability			spouses were
			and perceived			suggested by
			efficacy.			participants.
Terrill et al.	To develop and	11 married couples	Before and	8-week self-	The Social	Outcomes not
	test the feasibility	- most participants	after pilot study	administered positive	Relationship	analysed. Fostering
2018	of a couples'	were White. 6	with	psychology	Index (SRI)	relationships and
	intervention	stroke survivors	descriptive data	intervention,	measures	working on goals
USA	poststroke to	were female, with	and a randomly	completing at least 2	positivity and	were the most
	improve coping.	a mostly male	assigned	activities alone and	negativity in a	commonly chosen
		caregiver sample	waitlist control	together each week.	couple's	activities. 8/10
		(55%). No exact	consisting of 2	Activities included	relationship.	couples continued
		data on ethnicity	couples to test	practising gratitude,		with activities
		was available.	the feasibility	kindness, focusing on		though at a
			of the waitlist	positives, fostering		decreased rate.
			design. A 3-	relationships, working		Activities rated as
			month follow-	on goals, savouring		'most helpful'
			up assessment	moments, and seeking		differed between
			interview was	meaning or purpose		caregivers and stroke
			completed.	(spirituality).		survivors.

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
Uomoto &	To demonstrate	One case study of	AB design –	The Behavioural	Tracking the	Baseline outbursts 9
Brockway	how behaviour management	a couple provided: a 43-year-old male	"angry outbursts"	Management Treatment Programme	number of angry outbursts each	per week decreased over the period of
1992	training can be used with families	patient who had a brain tumour	operationalised with family and	consisting of 8-12 sessions, lasting	week during treatment and at	the intervention to 1-2, and 0 at follow-
USA	to reduce anger in	removed and his	baseline	between 1 and 1.5	follow-up	ups.
	patients with a	wife (no age	established for	hours each. Parts of	periods.	Authors conclude
	brain injury.	provided). The	a week prior to	sessions would be		family involvement
		couple's 17-year-	treatment and	completed separately		helps the
		old daughter was	follow-up	and parts together.		effectiveness of
		also involved in	completed at 1,	Sessions consisted of		behavioural
		the intervention.	3 and 6 months.	CBT for anger		interventions.
				training adapted for		
				brain injury, e.g.		
				through writing things down. Family taught		
				to identify antecedents		
				(irritating discussion		
				topics) and taught to		
				adapt communication		
				where needed, (e.g.		
				speaking slower).		

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
				Time-out strategies were discussed and used by the patient and prompted by the family.		
Yasmin & Riley 2020 UK	To describe how integrated behavioural therapy can be used to improve relationship continuity poststroke.	One case study of a couple: a male stroke survivor in his early 60s and his wife in her late 50s.	A case study comparing before and after results.	12x 2h sessions of integrated behavioural couples therapy focusing on the couple's pre and post-stroke similarities and continuities, understanding the effects of brain injury, empathic understanding of each other's situations and	The Birmingham Relationship Continuity Measure was used to assess relationship continuity, Dyadic Adjustment Scale to measure relationship adjustment, and	Statistically reliable changes occurred in the wife's relationship continuity, satisfaction, and functioning, backed by qualitative feedback which spoke of improvements in the relationship.
				feelings, improving communication, decreasing dependency,	the Relationship Assessment Scale to measure	

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
				increasing the frequency of positive behaviours towards partners, and reengaging in valued activities.	relationship satisfaction.	
Yeates	To discuss common issues	One case study to illustrate the	Descriptive case example.	25 sessions based on emotionally focused	N/A	The author states that based on
2013	within couples' relationships	intervention: a male partner who	•	therapy (EFT) to raise awareness of		reviewed research, couples therapy
UK	following a brain injury and how these can be addressed in therapy.	survived a haemorrhage from an aneurysm and his wife. No data on ages or ethnicity was provided.		individual attachment- related fears and misinterpretations of each other's states, discussing how these linked to negative cycles that maintained the couple's issues. Responses to each other and communication of		should focus on clarifying each partner's intents and emotions in a safe space to facilitate communication. The non-injured partner should be worked with to reduce hostile or critical communication and

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
				attachment fears and emotions were then addressed using mentalisation-based therapy and EFT.		increase the provision of cues to signal needs and emotions to the injured partner. The therapist may also need to encourage both partners to mentalise (i.e., consider each other's perspectives, goals, intentions, etc) in order to de-escalate arguments. The case study reported increased closeness.
Yeates & Salas,	To describe the use of emotionally focused couples therapy (EFT) in	One case example given: a 56-year-old male patient with a tumour, and his wife (no age	Descriptive case example.	7 sessions of EFT focusing on individual attachment styles and exploration of negative cycles of	N/A	A case is made for the importance of attachment in couples following a brain injury, and

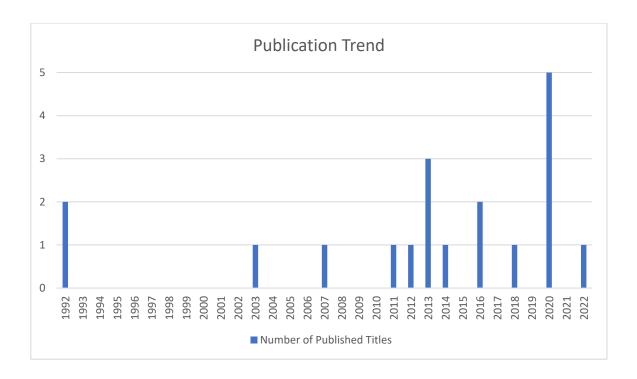
Author(s); Year;	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome	Key Findings That Relate to the
Country of Origin					Measures	Scoping Review  Question
UK	acquired brain injury.	provided). No data on ethnicity was provided.		interaction and using techniques such as evocative responding, heightening, and choreographic enactments of positive interactions. This, in turn, helped increase closeness, connectedness and allowed the couple to communicate their feelings.		how EFT can help could help address attachment dysregulation, thereby increasing closeness. The author recounts a story told by the couple at the end of their therapy which illustrates their increased closeness, but no other feedback or evaluation is provided.
Yeates et al.	To outline the	4 couples	Case series	EFT sessions provided	The Dyadic	Statistically
2013	theory behind the use of emotionally	presented as individual case studies: a 56-year-	design with before and after measures taken.	ranging from 6 to 25 sessions depending on the couple's needs.	Adjustment Scale is used to measure relationship	significant changes calculated using the reliable change
UK	focused therapy	old male stroke		Sessions identified	functioning, the	index were found for

Author(s); Year; Country of Origin	Relevant Aims	Target Population and Sample Size	Methodology	Intervention	Relevant Outcome Measures	Key Findings That Relate to the Scoping Review Question
	(EFT) in couples following a brain injury and further demonstrate its effectiveness.	survivor and his 52-year-old wife; a 64-year-old male survivor of a ruptured aneurysm and his 65-year-old wife; a 61-year-old male stroke survivor and his 58-year-old wife; a 42-year-old male survivor of a traumatic brain injury and 58 female partner — the only couple to form the relationship postinjury. No data on ethnicity was provided.		individual attachment styles, identifying negative patterns of interactions, increasing communication of emotions, and finding alternative ways of dealing with their issues.	Dyadic Cohesion subscale is used to measure interpersonal connection and responsiveness, and the Affective Expression subscale to measure physical intimacy.	three couples across different measures to differing degrees, though not all of them were clinically significant. Clinical significance was measured by using cut-off scores halfway between two standard deviations from the mean of the clinical sample and two standard deviations from the mean of the functional population. The fourth couple reported negative or no changes post- therapy. The authors

Author(s);	Relevant Aims	Target Population	Methodology	Intervention	Relevant	<b>Key Findings That</b>
Year;		and Sample Size			Outcome	Relate to the
Country of					Measures	Scoping Review
Origin						Question
						note that this couple
						met post-injury and
						had individual
						trauma histories
						which may have
						been influencing
						factors.

There are some common features of the publications used in this scoping review. The majority come from English-speaking countries, with around half published by American authors and four from the UK. There are only two articles from other parts of Europe. Furthermore, where background information on participants is provided, the majority of the studies have samples consisting of primarily white participants, often with partners with a brain injury being male, and caregiving partners being female. While the earliest published study included in this review dates to 1992, the majority of publications come from the last decade. In some instances, multiple articles are published following one intervention, presenting separate analyses or detailed intervention write-ups. While still small, there is a clear growing interest in identifying specific couples interventions, which may differ or be adapted from general family interventions. Figure 2 is a visual representation of the year of publication of the included texts.

**Figure 2**A Graph Showing the Year of Publication for All Included Articles



# Quality of Evidence

A large proportion of the included texts (n=6) are opinion papers, rather than research papers (Chawla & Kafescioglu, 2012; Meredith, 2020; Perlick et al., 2011; Stiell et al., 2007; Yeates, 2013; Yeates & Salas, 2020). These texts outline theories or clinical experiences of the authors underlying suggested interventions, and often (though not always) include case examples. However, the examples given do not include outcome measures and the outcome was not systematically evaluated. A further four papers outline details of case studies or case series: one case study utilising a before and after design (Yasmin & Riley, 2020), one case series utilising a before and after design (Yeates et al., 2013), one case study utilising an AB design (Uomoto & Brockway, 1992), and one case study which only reports post-treatment questionnaire results (Söderström et al., 1992). Four papers incorporated a group design using pre- and post-intervention measures, with three of them using a control group (Rasmus & Orłowska, 2020; Robinson-Smith et al., 2016; Terrill et al., 2018), and one uncontrolled design (Backhaus et al., 2016). However, Terrill and colleagues (2018) did not analyse the pre- and post-test measures they collected, only presenting them descriptively. There was one randomised trial (Ostwald et al., 2014) which compared two treatment groups - one with further home support and one without. Finally, there were two randomised controlled trials included in this review (Clark et al., 2003; Kreutzer et al., 2020). A further two papers (Einerson et al., 2022; Straits-Troster et al., 2013) included in the review offered a qualitative analysis of interventions also mentioned in other papers. Overall, six of the studies included a follow-up period (Clark et al., 2003; Kreutzer et al., 2020; Ostwald et al., 2014; Rasmus & Orłowska, 2020; Söderström et al., 1992; Terrill et al., 2018). Evans (2003) suggested a hierarchy of evidence for evaluating healthcare interventions. Although it is beyond the scope of this review to analyse each individual paper's quality, the majority of the literature would

fit within the poor to fair categories of appropriateness, effectiveness, and feasibility of interventions. This is because the majority of the studies consist of case studies, descriptive studies, and before and after studies - all of which fall within the two aforementioned categories in this hierarchy of evidence.

#### **Intervention Modalities**

Recommendations for modalities of interventions varied widely between studies, with many devising their own intervention plans. These appear to often be integrative in nature, drawing on multiple elements. The most often occurring major element of intervention was psychoeducation. While psychoeducation is likely to feature in all therapies to some degree (for example to increase understanding and expression of emotions as used in Chawla & Kafescioglu, 2012), eight articles identified or recommended it as a major part of the intervention (Backhaus et al., 2016; Clark et al., 2003; Kreutzer et al., 2020; Ostwald et al., 2014; Perlick et al., 2011; Rasmus & Orłowska, 2020; Robinson-Smith et al., 2016; Straits-Troster et al, 2013).

The second most written about modality (n=5) was emotionally focused therapy (EFT - Chawla & Kafescioglu, 2012; Stiell et al., 2007; Yeates, 2013; Yeates et al., 2013; Yeates & Salas, 2020). However, it should be noted that most of these publications are based on general descriptions of EFT with case studies provided, with only one article measuring any outcomes (Yeates et al., 2013). Nonetheless, these articles provide rich and detailed descriptions of the therapy process, showing how different EFT stages should be followed. They offer clear guidance to other clinicians, making this treatment modality one of the easiest ones to replicate in this review.

Cognitive or Cognitive Behavioural Therapy (CBT) techniques were mentioned in four separate articles as major components of the interventions. The details of the interventions were outlined in all four papers, either by providing overviews of sessions with examples (Robinson-Smith et al., 2016; Uomoto & Brockway, 1992) or providing detailed descriptions of each session's main topics and aims (Backhaus et al., 2016; Kreutzer et al., 2020). However, the specific CBT elements were more difficult to identify based on these descriptions. Only two papers clearly stated that CBT was used to challenge unhelpful misappraisals (Backhaus et al., 2016) or that cognitive skills were built to expand positive responses, with examples suggesting strategies such as recognising unhelpful thinking were used (Robinson-Smith et al., 2016).

Behavioural elements were also mentioned in two articles, however, these can be more difficult to distinguish. For example, Uomoto and Brockway (1992) refer to their intervention as the Behavioural Management Treatment Programme, but state that their methods were based on CBT for anger management. Nonetheless, the approach favours behavioural elements, as it primarily speaks about behavioural changes such as time-out strategies or increasing the frequency of enjoyable activities. The only other intervention clearly utilising behavioural approaches was completed by Yasmin and Riley (2020), who offered couples Integrated Behavioural Couples Therapy and offered a detailed description of each component of the treatment.

Some of the publications have recommended other approaches. A positive psychology intervention has been tried by Terril and colleagues (2018), while Söderström and colleagues (1992) presented an intervention based on object relations theory and transactional analysis. Other articles offer interventions less rooted in a specific modality, with some mentioning providing printed resources which provide advice, information, or signposting alongside a

small number of general counselling sessions (Clark et al., 2003; Ostwald et al., 2014). Another intervention offered unstructured sessions based on more general couples therapy or solution-focused principles (Rasmus & Orłowska, 2020). Finally, one publication outlines general principles and techniques of systemic therapy, based on the authors' clinical experience of these being helpful in aiding couples after a brain injury, but the article does not report any application or systematic evaluation of these techniques (Meredith, 2020).

## The Aspect of Relationship Addressed by the Intervention

Overall, the literature acknowledges the importance of addressing the negative effects brain injury has on relationships, however, there are vast differences in the way these effects are remedied. Many of the included studies aim to improve "relationship functioning" or "quality", but there is little agreement or definition on which aspects of a relationship should be addressed to achieve this. Communication is the strongest contender, as there were only three articles which did not include communication as either an outcome for improvement or part of the intervention. Connections and closeness are some of the key aspects often highlighted as a target for EFT (Chawla & Kafescioglu, 2012; Stiell, Naaman & Lee, 2007; Yeates, 2013; Yeates et al., 2013; Yeates & Salas, 2020), while others mention similar concepts of affection and empathy (Söderström et al., 1992; Terrill et al., 2018; Yasmin & Riley, 2020). Fewer studies focused on intimacy (direct - Kreutzer et al. 2020; Yeates et al., 2013; indirect - Robinson-Smith et al., 2016), joint activities (Terril et al., 2018; Yasmin & Riley, 2020), and management of anger, frustration, or conflict (Backhouse et al., 2016; Perlick et al., 2011; Uomoto & Brockway, 1992). On the other hand, some papers described interventions aiming to measure relational outcomes but did not provide a clear description of which aspects of relationships were targeted or specific ways in which they were addressed beyond the provision of 'counselling' (Clark et al., 2003; Ostwald et al., 2014).

## Outcome Measures

Only 13 of the 19 included studies evaluated outcomes in a systemic way, with 11 using quantitative measures and two using qualitative analysis. However, not all of the questionnaires are validated. The Dyadic Adjustment Scale (DAS [Spanier, 1976]) was the most commonly used (n=4). Its subscales measure dyadic consensus, satisfaction, cohesion, and affective expression. One study used the Revised Dyadic Adjustment Scale (RDA [Crane et al., 2000]) which comprises three relationship constructs: consensus, satisfaction, and cohesion. Consensus is further broken down into decisions, values, and affection, satisfaction into stability and conflict, and cohesion into activities and discussion. This scale also distinguishes between distressed and non-distressed relationships.

Other validated measures included the McMaster Family Assessment Device (FAD [N. B. Epstein et al., 1983]), the Dyadic Coping Inventory (DCI [Bodenmann, 2008]), the Quality of Marriage Index (QMI [Spanier, 1976]), the Relationship Assessment Scale (RAS [Hendrick et al., 1998), the Birmingham Relationship Continuity Measure (BRCM [Yasmin et al., 2020]), the Social Relationship Index (SRI [Campo et al., 2009]), the Mutuality Scale (Archbold et al., 1990), and the Four Horsemen of the Apocalypse Questionnaire (Gottman, 1999). Each of these measures only appeared in one study. The FAD measures an individual's perceptions of their family and includes subscales for problem-solving, communication, roles, affective responsiveness, affective involvement, behaviour control, and general functioning. The DCI measures stress communication and dyadic coping, which consists of supportive, delegated, negative, and joint coping styles. The QMI and RAS both measure overall relationship satisfaction. The BRCM measures whether non-injured partners experience their partner and their relationship as continuous with the pre-injury person and relationship or experience them as very different. The Mutuality Scale consists of four theoretical factors of

love, shared activities, shared values, and reciprocity – these factors have been confirmed in stroke patients (Pucciarelli et al., 2016) but not in other populations (e.g., Hudson & Hayman-White, 2006). Finally, the Four Horsemen of the Apocalypse Questionnaire assesses engagement in four negative patterns of communication, namely criticism, contempt, defensiveness, and stonewalling. There are publications offering psychometric properties of this scale (Gottman, 2012; Lute, 2015), however, Backhaus and colleagues (2016) appear to not have been aware of this in their study as they reported that no psychometric properties were available.

Non-validated measures have also been used across studies. Questionnaires were developed specifically for the needs of the study by Söderström and colleagues (1992) as they designed the Psychosocial Functioning Questionnaire, which aimed to track changes in interpersonal relationships, perceived cognitive and behavioural changes, sexuality, leisure, and overall adjustment. However, the authors only provide examples of results from certain areas such as "talking with partner" or "showing affection for partner" with little further detail. Outcomes were also measured through tracking behavioural changes in Uomoto and Brockway (1992), who operationalised "angry outburst" as behaviour to be tracked by families and report changes on a weekly basis.

As previously mentioned, two articles used qualitative methods. Einerson and colleagues (2022) ran a secondary analysis using thematic analysis on semi-structured interviews conducted with participants who took part in the intervention described by Terrill and colleagues (2018; 2022). Straits-Troster and colleagues (2013) ran focus groups with participants who attended the intervention described by Perlick and colleagues (2011) and analysed their results using methods informed by content analysis to note themes or patterns across the interviews.

## Rationale

Overall, the quality of the evidence base guiding each intervention varied, particularly in relation to how much was based on literature specific to couples following a brain injury. Some articles, such as Chawla and Kafescioglu (2012), discuss brain injury in the wider context of chronic illness and its impact on relationships. These usually do not acknowledge the specific difficulties brought about by brain injury or how the intervention might be relevant to such specific issues.

Much of the background literature presented comes from interventions targeting couples in the general population with some similarities drawn to the brain injury population. For example, Backhaus and colleagues (2016) discuss commonly experienced issues by married couples in the general population and compare them to reported similarities in the brain injury population. Their intervention details contain some explanations of how brain injury can affect individuals, for example through reduced ability to recognise and empathise with emotions, and how couples can try to work on strategies to improve this. However, there is limited discussion of this in the rationale for the intervention. Similarly, Meredith (2020) discusses how approaches such as narrative or family therapy could be used with couples following a brain injury, based on her own clinical experience. The author described how to apply these techniques to more specific brain-injury related issues, such as when post-stroke aphasia affects an uninjured partner's approach to conversations with their injured partner.

Others, such as Kreutzer and colleagues (2020) do explain some of the common issues faced by couples post-injury as the basis for the intervention. However, there is little detail given on how exactly these difficulties arise due to brain injury and why the specific elements of the intervention were chosen to remedy them. Similarly, Rasmus and Orłowska (2020) give

a detailed account of how post-stroke aphasia might affect couples' relationships but provide little detail on how exactly their intervention aims to address these difficulties.

Overall, very few interventions focus on the detail of how brain injury impacts specific processes and aspects of a couple's relationship. As a result, very few make it clear how their intervention was designed to address these. Yeates (2013) and Yeates and colleagues (2013) are some of the exceptions, as both articles go into the details of specific effects of brain injury, such as impacted empathy or social cognition, and the essential elements of an intervention to address them. They, therefore, provide a detailed rationale of how and why EFT is particularly well suited to aid these difficulties. Another exception is the study by Yasmin and Riley (2020), as it specifically focuses on the concept of continuity and discontinuity following brain injury. The authors provide arguments for designing their intervention to specifically address discontinuity in the uninjured partner to improve the relationship, for example through identifying shared valued activities they did before the injury and re-introducing these where possible.

#### **Intervention Outcomes**

Where outcomes were systematically measured, the majority of the interventions resulted in positive changes within couples' relationships. Seven of the 11 quantitatively evaluated studies reported improvements in scores specifically related to relationship outcomes after the intervention. Of those, three studies included follow up which demonstrated that positive changes were maintained. Furthermore, two qualitative papers (Einerson et al., 2022; Straits-Troster et al., 2013) evaluating interventions presented in other papers found that participants reported positive changes post-intervention, such as improved communication and increased time spent together. However, one study (Terrill et al., 2018) did not analyse the results they collected, focusing instead on the feasibility and experience of

the intervention. Nonetheless, they did report that post-intervention, which asked participants to increase certain activities, eight out of ten couples reported carrying on with activities three months after the intervention, albeit at a reduced rate.

A minority of studies reported negative changes in the relationship or limited positive results. Ostwald and colleagues (2014) reported that mutuality decreased for both intervention groups. Rasmus and Orłowska (2020) found that overall family functioning was significantly different between the intervention and the control groups, however, this seems to be more reflective of the lesser decline in the intervention groups rather than an improvement.

Nonetheless, individual subscale changes for dyadic consensus and affective expression showed more positive significant results. Similarly, Clark and colleagues (2003) found that while family functioning worsened for the control group, it remained stable for patients and increased slightly for caregivers. Yeates and colleagues (2013) also reported that one out of the four recruited couples did not appear to benefit from their intervention. The authors then provide reflections on reasons these outcomes differed, which might include factors such as the couple meeting post-injury and having significant individual trauma histories related to previous close relationships.

#### **Discussion**

## Strengths and Gaps

From a clinical perspective, one particular strength of the articles is that they often provide a lot of detail about the interventions, which makes it possible for them to be adapted and replicated by clinicians working within this field to enhance their practice and ensure the same principles are being followed. While case studies, in particular, provide rich and clinically important information and descriptions, larger studies have often also provided sufficient guidance to guide the clinical work of others. Many of the publications, particularly

from the EFT literature, give very clear descriptions of how therapy should be conducted and what common problem areas should be addressed in relationships post-injury.

Although the methodology of most of the papers was not good enough to sustain firm conclusions about effectiveness, the reviewed literature suggests that a wide range of techniques have the potential to be effective treatments for couples following a brain injury. While these need to be studied in further detail, this is encouraging as it could help support couples in finding an approach that suits them. This is an important consideration, as due to the wide-ranging effects of brain injury, it is unlikely that one type of intervention will be able to address all possible issues. While some try to address this by incorporating multiple components into the intervention, these might not all be relevant to the individuals seeking therapy. A better option might therefore be either personalising each session or having optional components, such as the parenting module offered by Kreutzer and colleagues (2020). Personalising therapy has been highlighted by some of the papers (Clark et al., 2003; Ostwald et al., 2014) and it is important to acknowledge that individual differences may also affect couples' preferences towards an approach.

Due to the participants being primarily white, English-speaking samples with primarily male injured and female non-injured partners, it is not possible to conclude whether the interventions suggested are equally helpful across different cultures and dyads. It has been documented that brain injury is four times more common in men, however female patients tend to report more symptoms (Munivenkatappa et al., 2016; Murrey et al., 1999). This is often reflected in the research, as most dyads tend to have a male injured partner and a female caregiving partner. However, it is unclear whether societal gender roles and expectations have an impact on couples where injured partners are female and caregiving partners are male. There may be differences in how these relationships are affected or how the couple responds

to an intervention. In fact, there is some evidence suggesting male caregiving partners may struggle to adjust more than female caregiving partners (Alexander & Wilz, 2010). Such differences, therefore, deserve further attention and research to enhance current understanding.

There are some issues in terms of the theoretical rationale of the interventions since they rarely appear to be based on clearly identified brain-injury specific issues which affect relationships. More often, the rationale is based on interventions being effective for other populations without acknowledging the unique impact of brain injury on both partners. When the impact is acknowledged, there is little discussion about how brain injury disrupts relational processes and therefore how an intervention should be structured to address this. Clear descriptions of these issues and how the intervention is then suited to targeting them were only present in the minority of publications. Future interventions should therefore focus on identifying where brain injury causes a disruption specifically, and thus designing an intervention to target this process.

A related significant issue within the literature is the lack of clarity in relation to defining the aspect of the relationship being targeted and how the intervention might therefore improve the relationship. Furthermore, some of the relational concepts potentially overlap and thus are open to interpretation. For example, EFT-focused interventions mention connection and closeness as benefits of this approach. However, do these concepts vary from affection or emotional intimacy? Some authors clearly identify relational outcomes to be addressed by the intervention. For example, Backhaus and colleagues (2016) outline detailed reasons for focusing their intervention on communication, as well as dyadic coping. However, many studies identify more general issues, such as depression or problem-solving, without discussing how or why these might impact a relationship before attempting to measure

relational changes. These non-relational factors will likely have an impact on individuals' lives such as coping and quality of life. Nonetheless, there is a subtle, yet important, distinction between interventions which benefit individuals and by proxy may also lessen the burden on the relationship, and interventions which directly aim to improve the quality of a relationship. Authors rarely identify the latter outright both in terms of which aspects of the relationship they aim to target and how these are addressed through the intervention leaving it up to the readers to discern the information, which is often contained in a short sentence amongst many other details. Others, such as Ostwald and colleagues (2014) also provide such key information in an altogether different paper, which reveals that aspects such as intimacy or anger were in fact considered as part of the intervention, however, it is still unclear to what degree or how they were managed (Ostwald et al. 2008). These details are seen more frequently outlined in detailed case studies, such as Yasmin and Riley (2020), which often have the space to provide much more information about the intervention. However, specifying both the aspects of the relationship to be addressed and how elements of the interventions address it does not need to be extensive, and would benefit the clarity of studies. In turn, this would allow other researchers to identify relevant literature in this area more easily. This is clearly an issue, as despite this review identifying multiple publications which discuss improving some aspect of a relationship, authors such as Kreutzer and colleagues (2020) highlight being able to find only one other study which addresses relationship quality.

Another benefit of clearly outlining the focus of interventions and outcomes would be allowing the authors to consider their chosen outcome measures in greater detail. As previously mentioned, most studies appear to include measures of general family functioning, quality, or satisfaction, which on the surface appears to be a reasonable choice. However, these do not necessarily align with the details of what the intervention attempts to address. For

example, the majority of interventions seemed to highlight communication as one of the key aspects to be addressed, however, the majority of the measures do not track changes in this area. The exceptions appear to be the FAD, the DCI, the Four Horsemen of the Apocalypse, and the Psychosocial Functioning Questionnaire, as they all include some aspect of communication which is measured directly. Conversely, Clark and colleagues (2003), who utilised FAD, are in the minority of studies that do not specifically mention communication either as a goal for improvement or as directly addressed in the intervention, though this does not mean that this was not addressed during counselling sessions which were adapted for each couple.

Lastly, the overall quality of the literature is currently low, with very few robust studies such as randomised controlled trials. More rigorous evaluations are needed to determine the effectiveness of the proposed interventions. Additionally, there are some missed opportunities to expand the knowledge base, as many case studies are purely descriptive and lack any outcome measures. In fact, L. H. Epstein and colleagues (2021) argue that single-case experiments are an underused type of research design in early intervention research. Since most of the interventions included in the study were designed specifically for the purpose of the study and often included single case studies, study designs such as single case experiments could provide more reliable ways of investigating their effectiveness, particularly in these early stages.

# Implications for Future Research

Firstly, there is a clear need for larger, well-designed studies in this area to support current theories and further evaluate the effectiveness of interventions, as currently the field is dominated by descriptive publications and case studies.

When designing their interventions, authors need to pay particular attention to the relational processes and outcomes they are attempting to target. Providing a clear description of what relational aspects are targeted by the intervention and how this is achieved would allow studies to further build on each other's techniques and synthesise results more easily. In turn, this would also allow for more comparative reviews of evaluation studies to take place as the evidence base increases, as currently, the focus of the interventions is too broad.

Ensuring that relational processes to be addressed are clearly identified might also impact the effectiveness of interventions. A recent literature review of couples counselling in health conditions by Berry and colleagues (2017) suggested that in order for interventions to be effective at addressing relational concerns, they need to specifically address relational issues either as a primary focus or a specific component. The authors found that interventions which focused on education or skill training were less effective at addressing interpersonal issues.

Further research also needs to ensure that appropriate and sensitive measures are chosen to reflect any changes in the relational outcomes they identify and aim to improve. For example, if an intervention aims to improve communication between partners, the authors should ensure they choose a validated, sensitive measure which will allow them to monitor any particular changes in this area.

Interventions also need to be developed based on a detailed understanding of how brain injury negatively impacts both partners and their relationship. This will allow interventions to be designed precisely to address changes directly caused by the injury, rather than extrapolate common issues from different populations.

Furthermore, if relational processes affected by the injury are identified and targeted, specific components of interventions can be tested for effectiveness in addressing these areas.

This will allow for the creation of more personalised interventions with components which can be adapted depending on the couple's needs. Where possible, differences in effectiveness should also be scrutinised based on individual differences such as age, gender, or culture so that interventions can be more effectively targeted at those more likely to benefit.

## Strengths and Limitations of the Review

The primary strength of this paper is bringing together current knowledge on couples' therapies utilised following brain injuries from a wide range of published sources. This is the first publication to attempt this within brain injury literature. It provides a good overview of the state of the current evidence base and offers suggestions in hopes of improving the clarity and focus of future publications.

However, it should also be noted that due to the specific focus on couples, some potentially helpful intervention studies may have been excluded if findings did not acknowledge any differences, adaptations or separate results for couples as compared to other family members. In practice, this meant that if a paper attempted to influence or measure outcomes such as 'family functioning' but only presented results for all the family members together, it was not included in his review. The review explicitly excluded such papers in order to ensure that the interventions discussed here were all reflective of the specific needs of couples, rather than other family members. This is due to the developing understanding within the literature of the differing roles, changes and adaptations needed within couple-dyads as compared to other dyads. This does not mean that such interventions would not offer useful input; however, this cannot be discerned for certain without acknowledging differences in interpersonal dynamics between different family members.

Another limitation concerns the search terms. After completing the review, the author became subsequently aware of some papers relating to the use of narrative approaches that were not picked up by the search strategy. Although it is believed that the search has identified the majority of relevant papers, this may suggest that the search strategy was too narrow, resulting in some relevant publications being missed. This could be addressed by further research, possibly by omitting the term "psychology" from the search terms.

Finally, the review did not assess the quality of each paper in detail - it only provided information about the design that was used. This is consistent with the aims of a scoping review, which are to describe the state of research, rather than to draw conclusions about effectiveness. No conclusions have been drawn about effectiveness, however, it appears that a wide range of techniques have the potential to be effective. A detailed analysis of the quality of individual papers may have provided some information about which techniques may deserve more attention in realising this potential.

## Conclusions

This review offers an outline of the current state of the literature on couples' interventions offered following a brain injury. It identifies the lack of methodologically sound research and identifies areas for improvement. The key learning points include the importance of defining relational outcomes to be addressed by the intervention and ensuring that appropriate outcome measures are utilised. However, preliminary findings of intervention studies appear promising and should offer hope and incentive for future researchers using a range of approaches to develop them further.

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Empirical Research Paper: Using Narrative Therapy to Improve Self-Continuity and Relationship Continuity in Couples After a Brain Injury

## Abstract

## Introduction

People living with a brain injury can experience changes in cognitive, behavioural, emotional, and social domains, which can lead to issues with their self-identity. Additionally, these changes can impact on their relationship with family members, particularly partners and spouses. These changes can be referred to as discontinuity of the self and the relationship.

Narrative therapy might offer a way of addressing these issues.

#### Methods

Three couples where one partner had a brain injury were offered ten sessions of narrative therapy. Questionnaires measuring self-continuity and relationship continuity, as well as associated changes in self-concept, self-esteem, grief, wellbeing, and relationship satisfaction, were administered before and after the intervention.

#### The Intervention

A detailed description of the intervention based on narrative therapy is outlined, explaining different elements which were used and why they were chosen. The intervention aims not to deny any changes, but to highlight where aspects of the couple's identities or relationship are continuous.

#### **Case Studies**

Each couple is discussed as a separate case study, with key issues and results discussed for both partners. All injured partners benefited in either self-continuity or at least one associated area, while all uninjured partners showed at least some improvement in relationship continuity. The descriptions highlight which elements of the therapy seemed particularly impactful.

## Discussion

Benefits for injured and uninjured partners are discussed overall, along with parts of the intervention that the participants deemed most beneficial. The limitations of both the intervention and the evaluation are discussed in detail.

## Introduction

Acquired brain injury affects thousands of people every year in the UK, with one hospital admission reported every 90 seconds between 2019 and 2020 (Headway, 2023). The negative effects of brain injury have been widely reported to impact cognitive, behavioural, emotional, and social aspects of individuals' lives (Gouick & Gentleman, 2004; Schretlen & Shapiro, 2003; Temkin et al., 2009). Such changes may also present a challenge to spouses of injured individuals and their relationships (Blais & Boisvert, 2005). With so many people affected every day, the importance of addressing such changes is clear.

## **Brain Injury and Self-Continuity**

The Continuity Theory was originally developed in the context of ageing, explaining how individuals cope with periods of change and transitions. Atchley (1989) spoke of continuity across the lifespan as repeating patterns over time. He argued that internal continuity is linked with memory and remembered preferences, experiences, skills, and so on, while external continuity relates to an individual's pattern of behaviour in familiar locations, environments, and roles. Continuity, therefore, enables individuals to recognise key aspects of their self-identity as still present, albeit possibly in a different form. He further argued that optimum continuity aids our sense of competence, integrity, and self-esteem, as well as enables adjustment to life's changes and transitions.

Brain injury often results in severe changes in a person's life. Research into its effects has consistently highlighted changes to self-identity and a disconnect from the pre-injured self as one of the main issues that individuals experience (Levack et al., 2010). Perceived changes to self-identity might impact internal continuity in line with the Continuity Theory. These changes have been associated with issues such as a greater sense of loss, depression, and anxiety, as well as poorer self-esteem, adjustment, and quality of life (Cantor et al., 2005;

Carroll & Coetzer, 2011; Vickery et al., 2009). Similarly, external continuity might be affected by experiences such as being treated differently by friends and family, changes to roles, and loss of functioning or usual activities (Chamberlain, 2006; Hallett et al., 1994). Such experiences can result in self-criticism and withdrawal from social activities (A. Freeman et al., 2015). On the other hand, research has also found that continuity of social identity has been linked with a higher quality of life, higher life satisfaction, and lower chronic stress (Haslam et al., 2008; Secrest & Zeller, 2003).

These studies highlight the need for interventions which target continuity as an aspect of self-identity. Furthermore, postinjury interventions need to enable individuals to express this continuous identity through social roles, activities, and shared narratives.

## Brain Injury and Relationship Continuity

The impact of brain injury on the family has also been widely documented. A literature review by Perlesz and colleagues (1999) reported that despite many families adjusting well, effects such as burden, decreased family functioning, and friction are regularly reported by primary caregivers, which are mostly parents and spouses. The review also discusses that spouses appear to struggle more than parents. The authors discuss that parents return to parenting the injured person as they have before, while spouses have to move from a peer relationship to a more "parenting" role, while often facing their own isolation, financial hardship, and loss of intimacy. Additionally, they often have to manage raising their own children and have little opportunity to grieve the changes that occurred.

The changes within partner relationships following a brain injury have been discussed in the literature using a framework of relationship continuity and discontinuity (Villa & Riley, 2017). Partners in continuous relationships perceive the relationship and their partner as

similar to pre-injury, still feel a similar level of affection for the injured partner, still feel like a member of a couple, and do not experience a sense of loss. Relationships are seen as discontinuous if the uninjured partner perceives the injured partner to be a different person, feels the relationship has been replaced with a new one, no longer feels the same level of affection, views themselves more as an individual than a member of a couple, and experience a sense of loss. This framework was first introduced by Riley and colleagues (2013) in dementia research but has since been adopted within brain injury research (Villa & Riley, 2017; Yasmin et al., 2020).

While research into relationship continuity is only beginning to emerge, studies to date have indicated that maintaining relationship continuity has important implications. Bodley-Scott and Riley (2015) found that partners who experienced discontinuity also spoke of a sense of loss and negative reactions to the injured person, barriers to affection and intimacy, and questioning their commitment to the relationship. Furthermore, Villa and Riley (2017) found that continuity was associated with a more proactive and creative approach when dealing with changes. Riley and colleagues (2020) replicated these findings by conducting a mixed methods study involving 26 partners of people living with a brain injury and found those who experienced greater continuity in the relationship also had a more person-centred approach to providing care to their partners. Moreover, relationship continuity has also been associated with higher relationship quality and satisfaction (Yasmin et al., 2020). Yasmin and Riley (2020) found similar benefits in a case study where one couple was offered integrated behavioural therapy after a stroke. The therapy resulted in statistically significant improvements in the wife's relationship continuity and satisfaction scores, as well as lower stress scores for both partners. It is therefore clear that maintaining or improving relationship continuity can be beneficial for both partners.

## Narrative Therapy Interventions

As outlined, continuity of self and continuity of the relationship are both important concepts that may need to be addressed following a brain injury. While not specifically focused on these, narrative therapy seems particularly well suited as an approach to target them both, if adapted. White (2007) outlines how dominant narratives can become intertwined with identity, and how problems should be externalised - meaning objectified and separated from individuals. Individual dominant stories can also be informed by societal narratives. Evidence in brain injury research suggests that these narratives can often be negative and stigmatising, focusing on discontinuity and resulting in injured individuals being treated differently (Gelech & Desjardins, 2011; Riley & Hagger, 2015). Narrative therapy focuses on looking at stories with different outcomes or providing exceptions. These can then begin to illustrate the underlying values, beliefs, skills, or desires that the person possesses, which may have previously been overlooked. Such "re-authoring conversations" can begin to reshape which stories are a part of the person's identity. There are many ways of re-authoring conversations within narrative therapy, including the Tree of Life (Ncube, 2006). All approaches will include linking aspects such as intentions, hopes, beliefs, or values in past stories, present circumstances, and future dreams and plans (White, 2007). Re-telling stories about the past self and finding aspects within them which are still present for the person can help find internal continuity. Similarly, having these conversations together with a partner can help reinforce the continuity of the relationship, allowing the partner to recognise aspects of the relationship which are still the same. The attitude and behaviour of the partner might in turn further impact the external continuity of the injured person. Whiffin and colleagues (2017) suggest that family members have an important part to play in maintaining the injured person's self-continuity through recognising aspects of the past, present and future that are

connected together. Narrative therapy positions clients as experts in their lives already having all the skills they need, with narrative conversation allowing them to re-author their story and uncover new knowledge about themselves (DeKruyf, 2008).

Butera-Prinzi and colleagues (2014) argued that narrative therapy aided adjustment and more positive identities of a family post-injury by living a life aligned with their values. Other recent publications argue the benefits of narrative therapy following a brain injury for individuals and couples, based on the authors' clinical experience (Hawkins et al., 2019; Morris, 2004; Todd & Weatherhead, 2018). Mwale and colleagues (2022) recently suggested that the Tree of Life is particularly well-suited to working with people following a brain injury, as the visual tree and reflection on life events offer a slower pace and places fewer demands on the individual. However, there is no research focusing specifically on improving continuity using narrative therapy.

Narrative therapy could therefore be used as a tool to improve continuity. Since the discrepancy between the pre-injury and post-injury view of self is linked with issues such as distress, grief, and lower self-esteem (Carroll & Coetzer, 2011; Vickery et al., 2009), it follows that improvements in self-continuity might also result in improvements in self-esteem and overall wellbeing for the injured individual. Similarly, due to relationship discontinuity being associated with more negative reactions to challenging interpersonal care needs (Riley et al., 2020), it could be expected that increased continuity might reduce the emotional strain on the uninjured partner thereby increasing their wellbeing. This, along with benefits to overall relationship quality and satisfaction that followed increased continuity, was also demonstrated by Yasmin and Riley (2020). The aim of the current study is therefore to outline in detail a narrative intervention targeting both self-continuity and relationship continuity post-injury and assess its effectiveness and impact.

## Methods

The study was granted ethical approval from the University of Birmingham Ethics

Committee. The confirmation of approval can be seen in Appendix B. Ethical issues

considered included standard issues of confidentiality and safe storing of data. However,

primary consideration was given to participants' potential risk of distress. This was therefore

explained on the Participant Information Sheet as well as explored in the pre-intervention

meeting to ensure participants were aware of what was involved. The therapist remained

vigilant for any signs of distress during the therapy sessions and took appropriate action to

contain any distress that occurred. The Participant Information Sheet signposted participants

to other agencies that provide support and should the need have arisen (which it did not), the

participants would have been assisted to access those agencies. It was also made clear that
they had the right to withdraw from the research without the treatment being terminated so
that they did not feel obliged to continue. Participants were made aware of limits of

confidentiality if risks were raised. Furthermore, to ensure treatment was provided ethically
and appropriately, the researched was provided with weekly supervision by the research
supervisor.

To ensure fidelity to the model, the researcher undertook a course on Introduction to Narrative Therapy offered by the Dulwich Centre equivalent to 20 hours of training. Narrative methods and techniques were researched and a session plan was put together and then discussed with an expert in the field to ensure the plan was utilising appropriate methods and any potential issues were considered.

## Design

This study was conducted as a case series involving three couples living with a brain injury who were offered narrative therapy to promote self-continuity in their individual

identities and the identity of their relationship. Questionnaires were given before and after the therapy to evaluate the impact of the intervention.

## Participants and Procedure

The study aimed to recruit at least two couples for the purpose of testing the intervention and collecting feedback from different sources. Three couples were recruited from different Headway branches across the West Midlands. Managers were provided with an outline of the study and the inclusion and exclusion criteria, which were shared with other staff members. The recruitment leaflet, the participant information sheet, and the consent form can be seen in Appendix C, D, and E, respectively. Initially, the criteria required the couple to have lived together for at least five years prior to the injury and continue to live together in the present. However, couples who appeared to meet other criteria and lived together for a slightly shorter period of time were allowed to take part. At least 12 months had to have passed since the injury and the couple had to feel able to talk about emotionally charged subjects. Lastly, the injured partner had to feel satisfied with themselves prior to the injury but dissatisfied in the present, while the uninjured partner had to feel satisfied with the relationship prior to the injury but dissatisfied in the present. Participants were not eligible to take part if they were unable to engage in the therapy meaningfully or provide their consent.

Staff identified eligible participants and provided them with a participant information sheet and contact details for the researcher if they were interested in taking part. An initial meeting was arranged where the couple were shown the proposed treatment and could ask any questions or clarify any expectations. Capacity was assessed during this initial meeting by explaining what the study entailed and checking that the participants understood this.

Participants were also screened for the inclusion and exclusion criteria by asking them the screening questioning included in the participant information leaflet (appendix D). This

before the injury and whether they were less satisfied with themselves now. The uninjured partner was asked whether they were generally satisfied with the relationship before the injury and whether they were generally satisfied with the relationship before the injury and whether they were less satisfied now. The couples were then provided with consent forms which they were asked to read, sign and return to the researcher, along with a set of questionnaires prior to the intervention commencing. The questionnaires were repeated following the final session of the intervention. These were left with the couples following the session, with the option to return them in a sealed envelope to Headway staff, or directly via email to the researcher depending on the couple's preferences. A debrief session was offered to all couples to feedback on their scores and check-in. Three couples contacted the researcher signalling their interest in the intervention and all three completed it. There were no couples who declined to take part or withdrew at a later stage.

## Questionnaires

The primary focus for the injured partner's questionnaires was monitoring changes in scores related to their self-identity and any associated effects on self-concept, self-esteem and wellbeing. The uninjured partners were asked about relationship continuity and any associated changes in relationship satisfaction and wellbeing. Table 1 provides an overview of the questionnaires used.

A Reliable Change Criterion (RC) was calculated for each questionnaire where changes were monitored, with a 95% confidence interval. The RC is a calculation of the change in score that needs to occur for the change to be statistically significant and not simply reflective of a measurement error (Jacobson et al., 1984).

## Table 1

# An Overview of Questionnaires Used in the Present Study

Questionnaire	Administered to	Construct Measured	No. of Items	Example Item
Demographic Questionnaire	Both partners	Background information	5 for injured partners, 3 for uninjured partners	Ethnicity
European Brain Injury Questionnaire	Injured partner	Perceived effects of the brain injury	34 core items	Being unable to plan activities
Self-Identity after Brain Injury Questionnaire	Injured partner	Self-continuity	6 items	Sometimes I feel like a stranger to myself
Head Injury Semantic Differential Scale	Injured partner	Self-concept	20 word pairs	'Forgetful' and 'mindful'
Self-Concept Clarity Scale	Injured partner	Stability and changeability of self-concept	12 items	I spend a lot of time wondering about what kind of person I really am
Rosenberg Self- Esteem Scale	Injured partner	Self-esteem	10 items	On the whole, I am satisfied with myself
Brain Injury Grief Inventory	Injured partner	Grief post brain injury	20 items	I feel angry that I had the brain injury (loss); I feel I can reach out to people (adjustment)
Birmingham Relationship Continuity Measure	Uninjured partner	Relationship continuity	23 items	I don't feel about him the way I used to

Questionnaire	Administered to	Construct Measured	No. of Items	Example Item	
Relationship Assessment Scale	Assessment		7 items	How good is your relationship compared to most	
Warwick- Edinburgh Mental Wellbeing Scale	Both partners	Mental wellbeing	13 items	I've been feeling useful	

**Demographic Questionnaire.** Participants were asked demographic questions about their gender, age, ethnicity, type of brain injury, and the month and year it happened.

**European Brain Injury Questionnaire (EBIQ).** The EBIQ measures how the injured individual perceives the effects of the brain injury (Teasdale et al., 1997), providing contextual information. Participants rate their answers on a three-point scale, with higher scores indicating more issues.

Self-Identity after Brain Injury Questionnaire (SIBIQ). The SIBIQwas developed to measure self-continuity in persons with a brain injury. The questions are answered on a five-point Likert scale, with higher scores indicating a greater sense of self-continuity. The RC was calculated as 5.33 (M=17.2,  $\alpha$ =.92, SD=6.8, Rajendran, 2023).

Head Injury Semantic Differential Scale (HISDS). The HISDS measures how individuals view themselves before and after an injury, a.k.a. self-concept (Tyerman & Humphrey, 1984). It uses a seven-point scale where lower scores indicate a more negative view of self. The original HISDS was used in the study as this was the only version available to the author. The scale has undergone some small changes in the newest version, which was

used to calculate the RC as 16.15 (M=74.8,  $\alpha$ =.92, SD= 20.6, Carroll & Coetzer, 2011). The scale was used to monitor any changes in injured participants' self-concept associated with continuity.

**Self-Concept Clarity Scale (SCCS).** The SCCS measures the clarity of individuals' beliefs about themselves and how stable these are. Answers are rated on a five-point Likert scale, with higher scores indicating a greater clarity of self-concept. The RC was calculated as  $8.40 \text{ (M=38.9, }\alpha=.86, \text{SD=8.1, Campbell et al., 1996)}$ . It was used to assess whether the stability of self-concept changed with an intervention addressing self-continuity.

Rosenberg Self-Esteem Scale. The RSES measures a person's sense of self-esteem (Rosenberg, 1965). Items are rated on a four-point Likert scale, with higher scores indicating higher self-esteem. The RC was calculated as 5.15 (M=15.4, α=.89, SD=5.6, Carroll & Coetzer, 2011). It was used to measure any changes in self-esteem that may have accompanied changes in self-continuity.

**Brain Injury Grief Inventory.** The BIGI consists of two subscales measuring loss and adjustment. Statements are rated on a three-point Likert scale, with higher scores on subscales indicating higher loss and higher adjustment respectively. The RC was calculated as 5.88 for the loss subscale (M=10.7,  $\alpha$ =.84, SD=5.3, Carroll & Coetzer, 2011) and 5.64 for the adjustment subscale (M=11.8,  $\alpha$ =.62, SD=3.3, Carroll & Coetzer, 2011). The scale was used to measure any changes in grief which may be associated with self-continuity and self-concept.

**Birmingham Relationship Continuity Measure.** The BRCM measures relationship continuity in partners of persons living with a brain injury, rated on a five-point Likert scale. The measure is available in two versions for female and male care receivers to adjust the

language. Higher scores indicate a greater sense of relationship continuity. The RC was calculated as 12.25 (M= 63.2,  $\alpha$ =.96, SD=22.1, Yasmin et al., 2020). This was the primary measure of interest for the uninjured partners.

Relationship Assessment Scale. The RAS measures relationship satisfaction (Hendrick, 1988) on a five-point Likert scale, with higher scores indicating higher relationship satisfaction. The RC was calculated as 5.82 for individuals with a brain injury (M=23.2,  $\alpha$ =.91, SD=7.0, Vaughn & Matyastik Baier, 1999), and 3.99 for partners of people living with a brain injury (M=12.2,  $\alpha$ =.91, SD=4.8, Yasmin et al., 2020). It was used to check whether partners of injured individuals showed any changes in relationship satisfaction associated with changes in relationship continuity following the intervention. It was also administered to injured partners to see whether the intervention had any impact on their relationship satisfaction.

Warwick-Edinburgh Mental Wellbeing Scale. The WEMWS measures mental wellbeing using a five-point Likert scale, with higher scores indicating better wellbeing. The RC was calculated as 5.82 (M=51.0,  $\alpha$ =.91, SD=7.0, Tennant et al., 2007). It was used to measure both partners' overall wellbeing to see whether it changed as a result of changes to self-continuity or relationship continuity.

Qualitative Feedback. Participants were asked to provide qualitative feedback on their experience of the intervention. This took the form of informal questions of what went well and what could be improved at the end of each session, as seen in Appendix F. Participants were also asked to complete a structured written questionnaire at the end of the intervention, asking about their experience of the different elements of it (Appendix G).

## The Intervention

The intervention was guided by the general principles of narrative therapy (White, 2007) and specific techniques which will be outlined in detail here. The intervention was designed as a minimum of ten 1-1.5 hour sessions, with the option to extend particular elements if participants were unable to complete the in-between session work at home. This is comparable to some of the other interventions offered to couples following a brain injury (e.g., Backhaus et al. 2016; Kreutzer et al., 2019), although there is little consensus in the literature and the intervention lengths vary widely. While there was a general structure of the sessions, the individual content did vary according to the perceived needs and wishes of the couple. An overview of the intervention is shown in Table 2.

Table 2
Summary of Therapy Sessions

#	Focus of Session	Content Examples
1	Relational interviewing, a summary of shared ethics and values is created	<ul> <li>The couples are asked to discuss what brought them together in the first place:</li> <li>How did you first meet?</li> <li>What kind of relationship did you hope to create together and why?</li> <li>What ethics or values or moral principles) were important to you (such as trust, kindness, loyalty, and love)?</li> <li>Why did you feel these were important to the building up of the relationship?</li> </ul>
2	Externalising the problem and exploring its effects	<ul><li>The couples are asked about how the brain injury has affected them:</li><li>How would you describe the problem?</li><li>What effects does the problem have?</li><li>When does the problem become easier to cope with?</li></ul>

#	Focus of Session	Content Examples
		- When does it become more difficult to cope with?
3	Evaluating the effects of the problem and justifying the evaluations	<ul> <li>The couples are asked their views on how the effects of the injury have impacted them:</li> <li>How do you feel about these effects?</li> <li>Is this effect positive or negative or both or neither?</li> <li>Why is this okay / not okay with you?</li> <li>What does this say about your partner about what's important to them?</li> </ul>
4	The Couple's Tree of Life: individual Trees	Roots – background, history, culture:  Where did you come from?  What was your family like?  What was important to you growing up?  Ground – present routines, and activities:  What do you do day to day?  Trunk – skills, abilities, accomplishments, values:  What are you good at?  What is important to you now?  How might your response to the injury fit in with who you are as a person?  Branches – goals, hopes, and dreams for the future:  What do you hope your future might look like?  Are there aspects you want to keep or things you hope might develop?  How might you act as the person/partner you wish to become?  Leaves – significant people from the past or present  Is there anyone who would have recognised these skills or values in you?  Why do you think they contributed to your life this way? What did they appreciate about who you are?  How do you think this person's life may have been impacted by your relationship with them?  Fruits/flowers – gifts we received from others

(including acts of kindness, friendship, etc):

#	Focus of Session	Content Examples
		- What gifts have you received from important
		people in your life?
		- What do you think led them to give you this?
5	The Couple's Tree of Life: presenting individual Trees, introducing the Couple's Tree	Each partner is asked to present their Tree of Life and its key elements. The other partner is then asked to reflect on anything that stood out to them.
	indoducing the Couple's Tree	reflect on anything that stood out to them.
		Couples Tree of Life
		Roots - people who taught you something meaningful as a couple, things such as favourite places and favourite songs.
		Ground - talk about some of the common activities you do and where you live now.
		Trunk - the values, principles, abilities, and skills that distinguish you as a couple and that are common to both of you.
		Branches – your dreams, expectations, and desires as a couple.
		Leaves - the people who are important to you as a couple.
		Fruits/flowers - the material or emotional gifts that other people offered you as a couple.
6	The Couple's Tree of Life: the	The couple continues working on their joint Tree.
	Couple's Tree, the therapist writes a letter to the relationship and asks both partners to write back	A letter addressed to the couple's relationship (as if it was a person) asks the couple to take it home and write their response from the point of view of the relationship. Partners are asked to reflect on:
		a) how their love developed over time (for couples B and C this was deemed more appropriate by the therapist due to the length of time that passed since the injury) OR how their love got them through the
		and C this was deemed more appropriate by the therapist due to the length of time that passed si

#	Focus of Session	Content Examples
		initial injury (for couple A who experience the injury more recently);
		<ul><li>b) what has changed since the injury that got in the way of the partners nourishing the relationship;</li><li>c) what remained the same since the injury and could be built upon; and</li><li>d) what hopes they have for the future.</li></ul>
7	The Couple's Tree of Life: presenting the Couple's Tree, letters to the relationship readout	<ul> <li>After presenting their joint Tree, the couple is asked:</li> <li>What were some of the most important things in your Tree? How do those things help you get through difficult times together?</li> <li>What's the smallest possible step you can take to be closer to your goals and dreams?</li> <li>How can you become the partners that you want to be to one another?</li> <li>After reading out the letters, partners are asked:</li> <li>How do you feel hearing what your partner wrote?</li> <li>What stood out to you the most?</li> </ul>
8	Witnessing within the couple	Partner A is asked to sit back and listen to hear and not to respond. Partner B is asked what stood out to them the most so far, have they noticed any changes since the therapy began, or are there any topics we need to discuss in more detail.  As partner B answers, the therapist interviews them about their experience, highlighting any continuity or where it may still be improved. At the end, they are asked what they hope their partner hears.  Partner B is then asked to sit back and listen as partner A is interviewed about what they heard:  What stood out to you the most from what you heard?  Did any images come to your mind as your partner was speaking?  What do you think this says about your partner's values and about what matters to them?  How has hearing this today affected you?

#	Focus of Session	Content Examples
		Partner A then returns to listening, while partner B is interviewed about their thoughts on what they heard. Roles are then swapped so both partners have a chance to bring up stories which are important to them.
9	Outsider witness invited in	<ul> <li>The couple are again interviewed on any changes they noticed since the start of the session to highlight positive changes and continuity, as the witness listens.</li> <li>The witness is then asked: <ul> <li>What were you most drawn to or stood out to you? Why do you think this is important to the couple?</li> <li>What images came to mind as you were listening?</li> <li>Did anything you hear resonate with your own life experiences?</li> <li>How has hearing this story today affected you? <ul> <li>What will you take away from it?</li> </ul> </li> <li>The witness is then asked to sit back and listen as the couple is interviewed about their reflections and what stood out to them in what they heard.</li> </ul> </li> </ul>
10	End of therapy summary and ending certificates	The therapy and changes are summarised in conversation. The couples are offered a certificate to complete to document the changes they want to continue seeing. Three separate versions of a document are available with varying levels of prompts to put down what they wanted to take forward from the sessions and what they have learnt in them. These documents were custom-made based on conversations with the couples. Examples of prompts include One thing I learnt about my partner/myself is" or "To show my love and commitment to this relationship, I promise to".

The first session was based on "relational interviewing", devised by Madigan (Madigan & Winslade, 2017). This approach addresses the relationship as a separate entity, rather than addressing the couple as individuals. It aims to connect couples in conflict with

their pre-conflict values, ethics, and experiences in the present time. A loose definition of "values" was used here, to include anything that was important to them as a couple that built the foundations of their relationship. This created space between the couple and their issues and brought the couple onto common ground. Furthermore, it was anticipated that shared values would not show a great deal of change following the injury and that this would therefore highlight some continuity in the couple's relationship. A printed summary of the values and ethics was shared with the couple and brought out in all following sessions as a reference.

The second and third sessions assessed the extent of the issue and externalised it, separating both partners' identities from the problem (White, 2007). Firstly, definitions of the problem were negotiated. The problems were initially given general descriptions such as "the injury", followed by more specific effects such as "the distance". Such separation may help create an opportunity to establish continuity with pre-injury self-identity and relationship identity. Secondly, the effects of the problem were mapped onto different areas of life such as home or friendships. Then, both partners were asked how they felt about these effects. Lastly, partners were asked about their justifications for these evaluations. White (2007) further explains that these questions are key to understanding the underlying values, aspirations, future goals, etc, which drive and influence individuals. This crucial step allows partners to begin developing more positive stories about their identities and their relationship. For example, explaining that feeling emotional distance within the relationship is not acceptable to either partner because they deeply care about each other and miss their close connection highlights the continuous feelings of the partners despite the injury.

Sessions four to seven focused on the Couple's Tree of Life, developed by Chimpén-López and colleagues (2022). Their work is adapted from the original Tree of Life technique (Ncube, 2006), and formed a way of finding alternative stories and re-authoring the conversation (White, 2007) to identify continuity. The structure of this segment was stretched from the initially proposed three meetings to four, to allow extra time to complete the between-session tasks. The fourth session introduced the individual Tree of Life, which aimed to reinforce key aspects of each partner's identity, which were still present. This helped to widen the scope of the conversation beyond the injury and the caring role, reminding individuals that certain traits, accomplishments, etc, were still present. Additionally, this would help them to perceive the injury as an event within the wider context of their lives, rather than something that defined them. Participants were given verbal and printed prompts and shared some of the stories these brought up. They were asked to finish their Trees at home, though an optional extra session was offered if this was difficult. Only one couple required an extra session. During the fifth session, partners shared their Trees with each other, highlighting any important aspects. They were asked about thoughts and reflections on each other's Trees, which further reaffirmed key aspects of their identity – for example highlighting achievements or key life events. When discussing hopes and dreams, the couples were asked to begin thinking about the smallest steps they could take towards achieving these. This was done to introduce gradual changes in behaviour that would help bring them closer to their lives prior to the injury, thereby enhancing external continuity. If there was time in the session, they began work on the joint Tree, otherwise, this started in session six. The aim of the shared Tree was to highlight the strengths of the relationship, as well as aspects which were continuous before and after the injury. Values frequently remained similar throughout the relationship, for example, partners still wanted to have fun together. These were often also reflected in their goals, which were usually unchanged by the injury at their core, though their expression may have been affected by the injury or other changes to life circumstances. For

example, where having new experiences together pre-injury may have been about sports and travel, it might now be about having days out together as a family.

At the end of session six, the therapist wrote a letter addressed to the couple's relationship, based on instructions by Bjorøy and colleagues (2015). The letter asked each partner to write a letter back from the point of view of the relationship, addressing it to the couple. The relationship is personified here, so that any individualising ideas about the relationship are challenged, encouraging partners to consider that "the whole of the relationship is greater than the sum of the parts" (Bjorøy et al., 2015). Writing back from the point of view of the relationship, therefore, encourages each partner to consider more than just their point of view. Additionally, it helps to thicken the preferred narrative, focusing on what is still present within the relationship and shared future goals. The couples were also tasked with finishing their joint Tree before the next session. During the seventh session, the couple presented their joint Tree and highlighted which aspects of it have helped them to get through "the storms of life". They also read out the letters to each other for the first time and were asked to reflect on what they heard.

The eighth session took a different approach and encouraged the couples to witness each other's conversations with the therapist (Freedman, 2014). Sessions set up this way allow participants to speak uninterrupted while their partner positions themselves as a friend, aiming to take the information in rather than respond. Such conversations can help thicken the preferred narratives about continuity. Participants were asked to reflect on any particularly important stories we touched on, or on any changes they have noticed in themselves or their relationship since the start of therapy. This was used to highlight positive changes that brought the relationship closer to the pre-injury state, for example, a more equitable share of responsibilities and roles or increased shared activities which were enjoyed before the injury.

This line of questioning also allowed participants to open up about any issues which may have received less attention, for example highlighting what held changes back and what still needed to happen, such as letting go of overprotectiveness to restore balance of roles, or how emotional support could be offered in line with how it was offered pre-injury. The witnessing partner was then asked to reflect on what stood out to them and what they thought this said about their partner's values or hopes. This was their chance to reflect on and affirm changes or consider how these could be achieved if still missing. The first partner then discussed the witness' reflections, which included developing preferred narratives on continuity further or developing solutions. The process was repeated for the other partner.

The ninth session adopted a similar structure, inviting an outsider witness into the session. The couples had a choice of inviting someone they knew or another professional. The aim of this session was to further thicken the preferred narratives of continuity, as well as "spread the news" as part of a "definitional ceremony" (White, 2007). The witnesses were prepared prior to the session with a script outlining what kind of questions they will be asked to reflect on. It was also explained that they should avoid responses such as congratulating or giving advice. This is because such responses do not help develop narratives further and imply judgement, even if positive (White, 2007). The witness listened to the conversation between the therapist and the couple before being asked four types of questions related to the expression of what they heard, images that came to mind, personal resonance, and how they were affected (White, 2007). During this conversation, the couple were asked to simply listen. Lastly, the couple were asked to reflect on what they heard, how it affected them, and what they in turn will take away from hearing the witness' account.

The tenth and final session was a summary session, offering a chance for the partners to create a document which solidified what they learnt and their preferred narratives.

Therapeutic documentation is seen as a key aspect of narrative therapy (Fox, 2003) and these documents formed part of the definitional ceremony, which allowed partners to share preferred narratives with each other (White, 2007). The preferred narratives could relate to how the partners viewed themselves and what aspects they wanted to continue working on, for example being equal partners, recognising strengths that they have minimised since the injury, or planning to spend more time together as a couple as they did before the injury. These narratives therefore further enhanced both self and relationship continuity.

## **Case Studies**

Each couple's progress through the intervention and any intervention effects will be discussed as a separate case study. All personally identifiable information has been anonymised to protect participants' identities.

Calculating clinical significance (Jacobson & Truax, 1991) was considered. However, normative data is not available for the majority of the measures, meaning this calculation may not be meaningful (Evans et al., 1998). The remaining questionnaire results would predominantly fall within the 'functioning population' range (defined as within two standard deviations of the normative mean) pre-intervention, adding little benefit to the analysis.

Instead, effect sizes based on the numbers of standard deviations of change have been calculated and interpreted for each participant to put the results into clinical context.

Specifically, an effect size below 0.2 was considered as very small; below 0.5 as small; below 0.8 as medium; below 1.2 as large and 1.2 or above as very large (Sawilowsky, 2009).

However, these results should be interpreted with caution as this method for calculating effect size is usually used for measuring group differences.

## Case A: Amy and Michael

Amy (36) and Michael (54) were a White British couple who lived together for three years prior to the injury. Three years have passed since Michael suffered a traumatic brain injury. While they both initially answered the screening questions appropriately, Michael's questionnaires reported minimal effects of the injury with a score of 39 on the EBIQ and scores related to self-identity all being relatively high. However, Michael scored himself as the maximum 140 on the past version of the HISDS, compared to 106 in the present pre-intervention, suggesting some continuity issues. As the sessions progressed, it became clearer that at times Michael minimised the impact of his injury and his own limitations. His results, therefore, should be interpreted with caution. Amy presented with a low relationship continuity, meeting the inclusion criteria.

The sessions began with Amy often saying she felt "stuck". This, it later transpired, referred to their lives only feeling focused on Michael's recovery and not enjoyment together. Her sense of safety and security was gone, and she felt she was now solely responsible for her two children and caring for Michael. Michael was not as able physically as he wanted to be, which impacted his participation in sports and racing (running and cycling). He was frustrated with his physical limitations, though not with his personality. Amy worried about his safety and felt a lot of responsibility for keeping him safe, which resulted in limited autonomy. Michael, on the other hand, felt that Amy was a little overprotective and he needed to be more independent, though in later sessions admitted he also got used to having everything done for him. Michael was also affected in the way he displayed emotions and thought it was obvious that he loved Amy and showed this to her often. However, Amy reported that she only heard about Michael's feelings in the sessions.

The issues of overprotectiveness and dependence were addressed throughout different stages. During the initial phase of externalising and exploring the problem as well as the within-couple witnessing session, Michael was able to voice his view on them being "inseparable" since the injury, which highlighted Amy's overprotectiveness to her. Similarly, Michael voiced desires such as wanting to go back to employment in his Tree of Life when discussing future goals, which was not something the couple discussed often prior to this. As a result, Amy was able to begin putting in small changes to encourage Michael's independence and become more comfortable with him taking more risks. This was a shift towards more continuity both in terms of the relationship and Michael's identity as prior to the injury Amy reported being more dependent on Michael and was therefore learning to start letting go of her caregiving role where possible.

Completing the Trees of Life seemed like a turning point for Amy in particular. It seemed that the Trees helped her re-focus on "small bits of joy" in everyday life, such as going out for a coffee or spending time with her children, which were previously overshadowed by the injury. She also reported becoming more aware of the support network around her, which reduced feelings of isolation. Initially, Amy felt the accident took away all of their dreams and future plans. Re-focusing on realistic dreams, that were in line with their old values but achievable given the different circumstances, seemed to offer hope and a sense of continuity as she was able to imagine a happy future once again. The couple's new dreams included making shared memories as a family, being good parents and partners to each other, as well as hopes for other personal achievements such as fundraising goals for Amy and para-athletic races for Michael. Michael also often spoke of the benefits of seeing the shared values and people around them written down, as well as talking about how strong they were as a

couple before the injury. These aspects may have helped to anchor him in the present and offered stability, though he struggled to put into words why these things were beneficial.

Michael also highlighted that the sessions made him understand that he needs to try to show more affection to Amy. This came up in several sessions and seemed to be made particularly clear by the witness' presence and the letters the couple wrote to each other. The letters and certificates helped Michael to communicate his feelings as he seemed to express himself better in writing. They also offered a material reminder for Amy to remind herself of Michael's feelings when he was unable to.

**Table 3**Score Changes for Michael

Questionnaire	Mix-Max	Mean in	SD	Pre-	Post-	Change	RC	Effect
	Score	Population		Score	Score			Size
CSIS	6 - 30	17.2	6.8	22	29	7*	5.33	1.03ª
SCCS	12 - 60	38.9	8.1	52	52	0	8.40	-
HIDS Present	20 - 140	74.8	20.6	106	117	11	16.15	0.53
RSES	0 - 30	15.4	5.6	21	25	4	5.15	0.71
BIGI-Loss	0 - 22	10.7	5.3	2	1	-1	5.88	-0.19
BIGI - Adjustment	0 - 18	11.8	3.3	14	12	-2	5.64	-0.60
RAS	7 - 35	23.2	7.0	35	35	0	5.82	-
WEMWS	14 - 70	51.0	7.0	56	63	7*	5.82	1.00 <sup>a</sup>

Note. SIBIQ – Self-Identity after Brain Injury Questionnaire; SCCS – Self-Concept Clarity Scale; HISDS – Head Injury Semantic Differential Scale; RSES – Rosenberg Self-Esteem Scale; BIGI – Brain Injury Grief Inventory; RAS – Relationship Assessment Scale, SD – Standard Deviation; RC – Reliable Change Criterion; \* indicates statistically significant changes; \* indicates large or very large effect size.

Table 4
Score Changes for Amy

Questionnaire	Mix-Max	Mean in	SD	Pre-	Post-	Change	RC	Effect
	Score	Population		Score	Score			Size
BRCM	23 - 115	63.2	22.1	44	66	22*	12.25	0.99ª
RAS	7 - 35	12.2	4.8	22	21	-1	3.99	-0.21
WEMWS	14 - 70	51.0	7.0	42	47	5	5.82	0.71

Note. BRCM – Birmingham Relationship Continuity Measure; RAS – Relationship

Assessment Scale; WEMWS – Warwick-Edinburgh Mental Wellbeing Scale; SD – Standard

Deviation; RC – Reliable Change Criterion; \* indicates statistically significant changes; a indicates large or very large effect size.

Michael's score showed statistically significant improvements in self-continuity and wellbeing. These results also showed large effect sizes. His scores also improved on HISDS and RSES, indicating improvements in how Michael viewed himself. While these did not reach statistical significance, the effect sizes for these changes were moderate. Similarly, there was a small improvement in loss, though the low score left little scope for improvement, resulting in a similarly very small effect size. There were no changes on the SCCS or the RAS, however, it should be noted that Michael's score on relationship satisfaction was the highest possible and so there was no room for improvement. Lastly, there was a small decrease in adjustment which showed a medium effect size and was not statistically significant.

Amy's scores showed a positive, statistically significant change in relationship continuity. She also showed an improvement in her wellbeing score, though this did not reach

statistical significance. Lastly, there was a decrease of one point in relationship satisfaction that was not statistically significant.

In their feedback, the couple highlighted finding the Trees particularly helpful. For Michael they seemed to reaffirm how good the relationship was and how strong they have always been together, while for Amy they allowed her to focus on the positives in the relationship, the joy still present in her life, and the people around her who support her, rather than the changes after the injury. Both partners also reported that the therapy was a positive experience that allowed them to talk openly and start making positive changes in their relationship, such as starting to go out together again.

## Case B: Caroline and Tony

Caroline (50) and Tony (55) were a white British couple who have been together since their late teens and early 20s. Tony suffered an intracranial bleed almost 19 years ago. There were no exclusion criteria on the maximum time that passed since the injury, and it was felt the feedback from a couple in these circumstances could still be helpful towards developing this intervention. While Tony was aware that "something was different", he did not feel his personality had changed. However, his pre-injury HISDS score was 113 and the present pre-intervention score reduced to 78, suggesting some discontinuity. Similarly, he scored 69 on the EBIQ, suggesting he was experiencing some negative effects of the injury. Unfortunately, the length of time for the pre- and post-injury comparisons made it difficult to know which changes may have been caused by the brain injury and which may have been caused by unrelated factors, such as ageing or different life circumstances. However, Caroline reported that since the injury Tony was more irritable, had a pessimistic outlook, and took less initiative in activities. In line with this, she presented with clear relationship discontinuity on the initial questionnaires. The couple also faced an additional burden as, during the course of

the intervention, their child was experiencing health issues which put extra stress on the couple. As a result, parenting and associated conflict came up much more often in the sessions than it did for other couples.

The first few sessions allowed the couple to both remind themselves of what brought them together, as well as clarify what the issues were as Tony was not always aware of the extent of them. The individual Trees of Life highlighted the couple's limited enjoyable activities, particularly for Caroline. This then started a conversation which, over the course of the sessions, continued to highlight the need for Caroline to prioritise her own wellbeing and share responsibility, stepping back from the role of "the carer" and into the role of "the wife". This re-balancing of roles was particularly important for increasing relationship continuity. Additionally, the lack of activities seemed to increase the feelings of discontinuity, as some of the key memories of the pre-injury relationship revolved around holidays and adventures together. It was acknowledged that adventures may look different at this different stage in their lives, however, the couple could reinstate ideas such as 'date night' to spend enjoyable time together, as they did before the injury.

As with the previous couple, the letters proved to be a particularly powerful tool with both partners reporting strong emotions in that session. The written format of the letter seemed to allow Tony to express thoughts that Caroline reported she has not heard before, as well as allowing Tony to connect emotionally with the upset Caroline was feeling. This prompted a spontaneous reaction from Tony where he reached out to Caroline to comfort her when she became upset. Caroline reported this was the first time in a long time Tony has done this. During the within-couple witnessing session, however, it became clear that Tony struggled to notice Caroline's more subtle signs of needing support and struggled to find ways to provide comfort. More structure was offered here to encourage Caroline to provide clear

signals when she needed support, and for Tony to establish ways in which he could offer it.

This addressed self and relationship continuity, helping Tony become a more responsive partner again.

The couple reported finding the outsider witness session surprisingly positive, opting for another professional. They reported that hearing how their story made the witness reflect on their own life was impactful. The witness was also able to highlight stories about both partners showing that they care, albeit in different ways, strengthening the narrative that not all has changed within the relationship. This seemed further solidified by their certificates, as the couple remarked on how similar their promises to each other were, which strengthened the narrative that they "have always been very similar". As Caroline expressed concern about whether improvements would be maintained without further input from the sessions, we highlighted the need to refer back to the written materials they produced and ensure ideas they came up with, such as date night, were followed up on.

**Table 5**Score Changes for Tony

Questionnaire	Mix-Max	Mean in	SD	Pre-	Post-	Change	RC	Effect
	Score	Population		Score	Score			Size
CSIS	6 - 30	17.2	6.8	24	23	-1	5.33	-0.15
SCCS	12 - 60	38.9	8.1	38	36	-2	8.40	-0.25
HIDS Present	20 - 140	74.8	20.6	78	103	25*	16.15	1.21a
RSES	0 - 30	15.4	5.6	21	17	-4	5.15	-0.71
BIGI-Loss	0 - 22	10.7	5.3	4	8	4	5.88	0.75
BIGI - Adjustment	0 - 18	11.8	3.3	16	18	2	5.64	0.60
RAS	7 - 35	23.2	7.0	25	27	2	5.82	0.29
WEMWS	14 - 70	51.0	7.0	46	46	0	5.82	-

Note. SIBIQ – Self-Identity after Brain Injury Questionnaire; SCCS – Self-Concept Clarity Scale; HISDS – Head Injury Semantic Differential Scale; RSES – Rosenberg Self-Esteem Scale; BIGI – Brain Injury Grief Inventory; RAS – Relationship Assessment Scale, SD – Standard Deviation; RC – Reliable Change Criterion; \* indicates statistically significant changes; \* indicates large or very large effect size.

 Table 6

 Score Changes for Caroline

Questionnaire	Mix-Max	Mean in	SD	Pre-	Post-	Change	RC	Effect
	Score	Population		Score	Score			Size
BRCM	23 - 115	63.2	22.1	50	58	8	12.25	0.36
RAS	7 - 35	12.2	4.8	19	23	4*	3.99	$0.83^{a}$
WEMWS	14 - 70	51.0	7.0	33	46	13*	5.82	1.86ª

Note. BRCM – Birmingham Relationship Continuity Measure; RAS – Relationship

Assessment Scale; WEMWS – Warwick-Edinburgh Mental Wellbeing Scale; SD – Standard

Deviation; RC – Reliable Change Criterion; \* indicates statistically significant changes; a indicates large or very large effect size.

Tony's score significantly improved on the HISDS with a very large effect size, suggesting an improvement in how he views himself following the sessions, however, this should be interpreted with caution as Tony felt this varied depending on how he felt on the day. There were also small improvements in adjustment and relationship satisfaction, showing medium and small effect sizes respectively, though they were not statistically significant. It should be noted that Tony scored the maximum score for adjustment. All other scales showed either no change or small negative changes, with effect sies ranging from medium to very small, though none were statistically significant.

Caroline's relationship satisfaction and wellbeing scores increased significantly, indicating improvements in these areas, with large and very large effect sizes respectively. The wellbeing score in particular showed a large shift, with Caroline additionally reporting she felt she was coping much better. Caroline's relationship continuity score also increased, though did not quite reach statistical significance and showed a small effect size.

In their feedback, both partners reported that the Trees of Life and the letter-writing were amongst the most impactful sessions, as they allowed both partners to express their feelings and think about what made their relationship good and what needed to be re-instated. Caroline highlighted that the sessions made her realise that the things which brought them together and that they shared have not changed, suggesting increased relationship continuity. She reflected on the importance of being a wife, not a carer, while Tony reported that he felt the sessions allowed him to be a little calmer and offered hope for the couple's future. Nonetheless, both partners agreed more work needed to be done and they hoped to start putting more time aside to spend together.

## Case C: Ellen and Bill

Ellen (47) and Bill (51) were a White British couple who have been together for about 20 years. Bill suffered a hypoxic brain injury eight years ago and has been very aware of the changes it resulted in, frequently discussing his perceived shortcomings and limitations. He appeared to be hyper-aware and always self-monitoring for what he struggled to do. His questionnaire scores were reflective of this, as he scored 60 on the EBIQ, indicating some effects of the injury, while his pre-injury HISDS score was 109 and reduced to 62 post-injury. This hyper-awareness resulted in Bill being quite critical of himself and frequently bringing up things he felt other people managed easily without an issue. Bill was therefore the only

injured partner who clearly presented with issues with self-continuity. Ellen presented relationship discontinuity on the questionnaires.

One of the main effects of the injury was that their time spent together no longer felt enjoyable or natural. Furthermore, Ellen felt she often fell more into a parenting or carer role which increased the distance between them. The appeared to be an overlap between how Ellen approached their child with some additional needs and how she approached Bill, which frustrated Bill. However, Ellen reported she struggled to find a way to highlight issues to him in a way that he would understand but without being as direct as she was with their child.

Bill reported particularly valuing the summary of their shared ethics and values, which he kept a copy of and often referred to. While discussing the effects of the injury, the importance of not assuming that the effects are always negative (White, 2007) became apparent. When discussing the lack of time spent together, it transpired that this was less problematic for Ellen, as she used the time away from Bill to run errands. We eventually discovered that the issue was not that the couple did not spend time together, but that they did not spend it doing activities they both valued and enjoyed. As such, time together now constituted watching TV in the evenings, while prior to the injury the couple was active and enjoyed trying out new experiences. This discovery resulted in a lively conversation between them, exchanging memories of past adventures, which suddenly did not fit with the usual description of "mechanical interactions". This then laid the foundations of work focused on engaging in active interests away from home. None of this would have been discovered if we simply assumed that spending less time together was inherently bad and did not explore it in the way set out by White (2007).

The Trees of Life segment was again praised by both partners as particularly helpful. The branches of the Tree prompted discussion around shared goals, particularly on how to be better partners to one another. The Tree also facilitated discussions on the power dynamic within the relationship. We discovered that at times issues arose when Bill attempted to take initiative but approached matters differently than Ellen would have, which left her feeling frustrated and Bill feeling he failed. Discussions focused on intentions highlighted that Bill's attempts showed thoughtfulness, which the couple agreed mattered more than how the issue was then dealt with. Ellen reported that these discussions helped her to "let go" of minor problems where their approach differed. This, in turn, helped to restore a more balanced and continuous power dynamic, as well as moved Bill away from the narrative of always getting things wrong.

The couple found the letters to be a very powerful aspect of the intervention. Ellen, in particular, reported that it allowed her to be more open about her feelings, which she has struggled to share since the injury occurred. This was heightened by the within-couple witnessing session, where Bill was able to hear that Ellen was not always trying to criticise him, which allowed Ellen to find ways to communicate her feelings more openly.

Furthermore, this session prompted conversations about Bill's caring role in the relationship, thoughtfulness, and being a parent, which helped to restore further continuity. Similar to previous couples, the continuity narratives were further affirmed and developed by the outsider witness session with another professional, which the couple reported finding very helpful.

#### Table 7

Score Changes for Bill

Questionnaire	Mix-Max	Mean in	SD	Pre-	Post-	Change	RC	Effect
	Score	Population		Score	Score			Size
CSIS	6 - 30	17.2	6.8	24	23	-1	5.33	-0.15
SCCS	12 - 60	38.9	8.1	50	47	-3	8.40	-0.37
HIDS Present	20 - 140	74.8	20.6	62	88	26*	16.15	1.26ª
RSES	0 - 30	15.4	5.6	9	17	8*	5.15	1.43ª
BIGI-Loss	0 - 22	10.7	5.3	8	9	1	5.88	0.19
BIGI - Adjustment	0 - 18	11.8	3.3	12	15	3	5.64	$0.90^{a}$
RAS	7 - 35	23.2	7.0	25	27	2	5.82	0.29
WEMWS	14 - 70	51.0	7.0	33	44	11*	5.82	1.57ª

Note. SIBIQ – Self-Identity after Brain Injury Questionnaire; SCCS – Self-Concept Clarity Scale; HISDS – Head Injury Semantic Differential Scale; RSES – Rosenberg Self-Esteem Scale; BIGI – Brain Injury Grief Inventory; RAS – Relationship Assessment Scale, SD – Standard Deviation; RC – Reliable Change Criterion; \* indicates statistically significant changes; \* indicates large or very large effect size.

**Table 8**Score Changes for Ellen

Questionnaire	Mix-Max	Mean in	SD	Pre-	Post-	Change	RC	Effect
	Score	Population		Score	Score			Size
BRCM	23 - 115	63.2	22.1	36	45	9	12.25	0.41
RAS	7 - 35	12.2	4.8	13	17	4*	3.99	$0.83^{a}$
WEMWS	14 - 70	51.0	7.0	37	44	7*	5.82	1.00 <sup>a</sup>

Note. BRCM – Birmingham Relationship Continuity Measure; RAS – Relationship

Assessment Scale; WEMWS – Warwick-Edinburgh Mental Wellbeing Scale; SD – Standard

Deviation; RC – Reliable Change Criterion; \* indicates statistically significant changes; \* indicates large or very large effect size.

Bill's scores showed statistically significant improvements in the HISDS and the RSES, suggesting he viewed himself more positively post-intervention. Both of these effect sized were very large. His wellbeing score also showed a significant improvement, similarly showing a very large effect size. There were also small improvements in his adjustment and relationship satisfaction scores, with large and small effect sizes respectively, though they were not statistically significant. Lastly, there were very small to small, non-significant negative changes in the CSIS, the SCCS, and the loss subscale.

Ellen also showed statistically significant improvements in relationship satisfaction and wellbeing, with both results showing a large effect size. Her relationship continuity score did increase, showing a small effect size, though did not reach statistical significance.

In their qualitative feedback, both partners mentioned the letter-writing exercise as particularly helpful. Ellen also highlighted the Trees of Life and the outsider witness session as some of the most helpful sessions. She noted positive changes in the relationship in how Bill responded to her, realising she needs to communicate her feelings clearly, and stepping away from the carer role. Bill similarly mentioned most of the sessions being helpful and making him more aware of his reactions to things, while also noting Ellen giving him more time to process things and his own tendency to be self-critical. The couple reported starting to set aside more time to spend together, which they found enjoyable and felt this helped them feel more comfortable around each other, as they did prior to the injury. However, Ellen did mention some concerns over ensuring the improvements are maintained and continue once the sessions finished, therefore, we also discussed steps that need to be put in to ensure this happens.

#### **Discussion**

#### Benefits for the Person with the Brain Injury

The intervention aimed to improve participants' self-continuity with the expectation that associated self-concept, self-esteem, grief, and wellbeing would also improve. If injured partners were dissatisfied with their relationship, improvements were also predicted. Selfcontinuity significantly improved only for Michael, with Tony and Bill both showing a nonsignificant decrease of one point. It should, however, be noted that all participants scored highly compared to the mean of the population (Rajendran, 2023) on this questionnaire and only Bill reported noting specific issues with how he viewed himself. Nonetheless, all participants experienced statistically significant benefits in at least one associated area. Bill appeared to benefit the most, with positive significant changes in self-concept, self-esteem, and overall wellbeing. Tony reported a significant improvement in his self-concept on HISDS, while Michael reported a significant improvement in his wellbeing. There were also some non-significant improvements in self-concept, self-esteem, and loss for Michael, and adjustment for Tony and Bill, with Tony reaching the maximum adjustment score. All other areas showed no change or non-significant negative changes. It was also notable that several very large and large effect sizes were observed, most notably across multiple score changes for Bill who presented with more self-identity issues. In terms of their feedback, participants reported benefits such as re-affirming their strengths and the community around them (Michael), being able to stay calmer (Tony), and a more positive self-esteem (Bill).

All participants reported higher levels of relationship satisfaction compared to their partners, suggesting they perceived fewer issues, with Michael scoring the maximum score.

While not significant, improvements were noted both on questionnaires and in feedback.

Michael described how the interventions have affirmed for him how "solid" the couple were.

Tony felt he was communicating better with Caroline and had hope for their future together.

Bill felt his relationship now felt more comfortable and he enjoyed spending more time with Ellen.

Overall, participants in this study reported limited issues with self-continuity. Some argue that the representation of the "shattered self" is limited in the literature and does not represent the full range of experiences. Gelech and Desjardins (2011) reported that participants experienced self-continuity, which was challenged by professionals and others who highlighted changes in their personalities. Such issues may potentially arise if individuals have limited insight into changes. It is possible that this was the case for Michael and Tony, who reported not being able to identify changes though reported being frequently informed of them. This suggests that self-continuity should be approached carefully so that any discussion around changes is not further invalidating. However, the intervention did not appear to lower these constructs, as scores did not decrease significantly.

#### Benefits for the Uninjured Partner

The primary aim of the intervention for uninjured partners was to improve relationship continuity as well as associated relationship satisfaction and wellbeing. All of the participants initially presented with discontinuity and showed improvement, though only Amy's change in score was statistically significant and showed a large effect size. Caroline and Ellen showed statistically significant improvements in satisfaction and wellbeing, with very large to large effect sizes in these areas, while Amy showed a non-significant improvement in wellbeing which reached a medium effect size. Her relationship satisfaction score decreased by one point, which was not a significant change. All uninjured partners reported benefitting from the sessions. Amy reported being able to "find joy" around her rather than feel "stuck" and was able to start letting go of all responsibility in the relationship. Both Caroline and Ellen

highlighted moving away from caring roles and towards partner roles. Furthermore, all couples started re-engaging with activities they used to enjoy prior to the injury, such as date nights.

While all participants showed improvements in continuity, other life events may have affected the impact of the therapy and therefore the improvements which were seen. These included factors such as the ongoing need to provide care, or children's ill health which impacted the relationship. Nonetheless, the couples also spoke positively of changes in their relationships, despite this not always being reflected in the RAS.

#### What Participants Found Useful

The Couple's Tree of Life (Chimpén-López et al., 2022) was mentioned by all couples when asked about the most helpful aspect of the intervention. It appeared that the Trees helped to highlight identities of uninjured partners beyond the one of a "carer". The loss of personal identity as the price of becoming a carer has been highlighted in other life-changing conditions (Dickson et al., 2010). This loss has been linked with changes in the dynamics of the relationship, leading to dissatisfaction. Such a change can potentially increase the discontinuity of a relationship, as partners might become "stuck" in their caring role, which may be what Amy was describing. It might therefore be helpful to remind uninjured partners of other important aspects of their lives, moving them towards a role of a "partner" which encourages a more continuous view of their injured spouse. All of the couples spoke about enjoying reminiscing, as this reminded them of the positives in the relationship and why they were together. In fact, a recent meta-analysis has shown that reminiscence of relationship-defining memories has been positively associated with relationship outcomes such as satisfaction, quality, or intimacy (Majzoobi & Forstmeier, 2022). The other parts of the Tree also highlighted how their values and shared dreams are still present, thus highlighting

continuity, and encouraged the couples to think about how the pre-injury aspects can be brought back - for example by increasing shared activities.

The ability to speak openly in a safe space was something that the couples frequently highlighted as a benefit of the sessions. Yeates (2013) argues that the therapist provides a secure base (in attachment terms) which allows the couple to communicate effectively. In turn, such communication and affection can improve family coping (Meredith, 2020). This includes sessions which focus on the issues, which narrative therapy does not seek to deny.

All couples also reflected on the usefulness of including an outsider witness, though the type of witness created different experiences. There was a tendency for the friend-witness to be swayed by their general knowledge of the couple and answer reflective questions based on what they knew about them, rather than what they heard in the session. However, the couple also had a unique opportunity to build on the work they had begun with the witness outside of the session, by continuing these discussions with their friend. This has been a recommended strategy in other narrative couples interventions (Hawkins et al., 2019). On the other hand, the couples who opted for another professional spoke about benefiting from hearing positive things from someone who knew nothing about them, and which were purely based on what they witnessed in the room on the day.

#### Limitations of the Intervention

The intervention was not without its limitations. There were multiple documents created during the course of the sessions, however, there was a missed opportunity for a narrative letter to be written by the therapist following the outsider witness session. These sessions tended to cover a lot of ground and usually produced rich imagery and metaphors that the couples connected with. It would have been beneficial to consolidate this in written

form so that the couples could refer to it in the future. Narrative therapy clients have previously stated that letters could be more impactful than sessions alone and contributed to positive outcomes (J. C Freeman et al., 1997).

Additionally, Caroline and Ellen expressed concerns over the longevity of the effects of the treatment once it ended. It was suggested that in the future the last few sessions are spaced at monthly intervals to allow a gradual decrease in intensity. This could also offer opportunities to work on re-building routines and activities which may have dispersed since the injury. The Continuity Theory (Atchley, 198) outlines how re-introducing familiar behaviours, environments, and roles can enhance external continuity. It is possible that the current intervention plan prioritised internal continuity at the expense of external continuity with limited time available.

Lastly, while the plan for the intervention was to address continuity, this was not always the priority for the couples. At times it was therefore more appropriate to address issues affecting relationship satisfaction directly, such as parenting or chore division. It may also be possible that, due to the nature of the issues being brought, some opportunities to highlight continuity may have been missed. While it may not be possible to avoid these confounding matters entirely, it may be helpful to have more structured discussion points and follow-up exercises for couples to complete jointly with the explicit aim of enhancing continuity, so that the primary aim of the intervention is always retained.

#### Limitations of the Evaluation

Due to the issues with recruitment, the initial criteria of requiring couples to present with relationship- *and* self-discontinuity was dropped. As a result, all of the participants with a brain injury reported a relatively high level of self-continuity, leaving little room for

improvement. It is possible that continuity becomes less meaningful as time passes, with personality changes caused by normal patterns of change (Helson et al., 2002) rather than the injury. The largest change in relationship continuity occurred for the couple who had the shortest time since the injury. It might be therefore possible that there is an optimal timeframe in which these comparisons are made, both for the benefit of the injured individual as well as their partner.

Another limitation was the potential incompatibility of the RAS for the purpose of the study. Topics such as affection or open communication featured frequently in the discussions for all couples, however, the RAS is brief and does not specifically relate to detailed aspects of a relationship. An alternative measure, such as the Revised Dyadic Adjustment Scale (Anderson et al., 2014), may have therefore been better suited for the task.

The number of questionnaires used, particularly with injured partners, increased the chances of Type 1 error occurring, increasing the likelihood of a false positive result. This is particularly pertinent with results where changes occurred in a single area, unsupported by other related concepts. An example of this would be Tony's results where changes occur in the HISDS score but are unsupported by any other questionnaires. As such, results should be interpreted with caution. However, for participants such as Bill, who show multiple statistically reliable changes with very large effect sizes, this is less likely to be an issue.

One possible approach to account for the increased likelihood of Type 1 error would be to adjust the alpha level. A commonly used approach is the Bonferroni correction (Coolican, 2014). This involves dividing the alpha level by the number of tests performed; in this case, dividing .05 by 32 = .0015, giving an alpha level of .0015. However, this would mean that only very large pre-post differences would count as reliable change, and the

possibility of obtaining evidence that the therapy may have more modest benefits is eliminated. In terms of considering whether the therapy shows promise, this option also does not take into account the evidence of change across all participants. Therefore, as an alternative, the probability of change across all participants was examined. There were 32 reliable change tests performed, and 21 of these showed a positive change, with 11 showing no change or a slight negative change. If the therapy were ineffective, then the probability of these outcomes would be roughly equivalent. Assuming that they are equivalent, the probability of 21 out of 32 outcomes being positive is .03 (Kowalski, 2023). In other words, if the therapy were ineffective, the probability of obtaining the set of results that was obtained is .03. Considering all outcomes across all participants, therefore, suggests that there probably is a positive effect.

There is also a possibility of demand characteristics occurring. As mentioned, at times participants opted to return the end questionnaires directly to the researcher via email. Even in cases where they were returned to Headway staff, the participants were aware that the researcher would check the scores to provide feedback in a future debrief session. This may have therefore prompted them to be more positive in their answers. Attempts were made to minimise this effect by stressing to participants that they are helping to develop this therapy and that honest feedback will help, as well as ensuring that the questionnaires are not completed in the presence of the researcher. However, the possibility of this affecting the results remains.

Finally, the results based on such a small sample may be skewed by the negative life events affecting couples at the time of the therapy. Had the sample population been larger, any beneficial or damaging extraneous factors would likely have negated one another when

considering the overall effects. The use of a control group would also have allowed for greater consideration of extraneous factors.

#### **Conclusion**

It appears that narrative therapy could be a beneficial tool for couples and individuals struggling with relationship and self-continuity following a brain injury. Sessions may need more adaptations to promote greater external continuity, rather than focus as heavily on internal continuity. Additionally, it may be useful to have cleared and detailed guidance on how continuity can be promoted in sessions to ensure opportunities are not missed, even when other issues take precedence. Further research should explore these adaptations with more sensitive instruments to measure changes in specific aspects of a relationship. Studies with control groups would also be needed to provide a rigorous evaluation of effectiveness. Nonetheless, if further research and adaptations into this intervention show further success and effectiveness, it could have some positive implications for services. As narrative therapy is often used by professionals outside of therapy professions, such as social workers, it could be offered across a wider range of services, increasing access to such support. Interventions such as the Tree of Life were originally designed so that individuals such as teachers, volunteers, religious leaders, and others from across many different walks of life could deliver them with some training. A structured, narrative based intervention could therefore prove a cost-effective option for services to implement and offer.

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# Press Release: Research is Lacking in Couples Interventions for Those Affected by Brain Injury

A review of current literature on interventions offered to couples following a brain injury has shown that research in this area is lacking. This review is the first to provide an overview of the current state of the literature on couples therapy after a brain injury. While studies published to date are mostly showing some benefits in the quality of the couples' relationships, interventions are too varied, and samples are too small to determine the most effective interventions.

Many relationships are negatively affected by the changes that follow one of the partners surviving a brain injury and the new demands of providing care, which can lead to distress (Baker et al., 2017) and lower quality of marriage (E. E. Godwin et al., 2011). On the other hand, research shows that both injured individuals and their partners cope better when they have strong, positive relationships (K. M. Godwin et al., 2013; Ostwald et al., 2009). It, therefore, follows that we should have a good understanding of couples interventions after a brain injury, to aid our understanding of what support should be offered. Interventions aiming to address relational issues are slowly beginning to be examined. A literature search was therefore conducted in August 2022, in order to determine the current state of research in this area. It identified nineteen articles which spoke about interventions offering couples therapy to improve the relationship between partners after a brain injury.

The findings of the review highlight that researchers need to ensure they identify what exactly in a relationship they are trying to improve. This could be aspects such as communication, closeness, empathy, conflict, and so on. Currently, this is not always clear in the intervention. Outcomes also need to be measured more precisely, for example, if an intervention aims to improve communication, researchers need to ensure they use instruments

which are sensitive enough to pick up changes in this specific area. Researchers also need to be clearer on what processes in a relationship are affected and therefore how their intervention targets the processes that might break down in the aftermath of the injury. More attention should be given to individual differences such as gender and culture to ensure interventions are still effective or adapted as needed.

There were a number of different types of interventions used and advocated for, including emotionally focused therapy, cognitive-behavioural therapy, counselling, and other approaches. Many included education on topics such as the effects of brain injury and emotions, and most targeted communication. Preliminary findings suggest some positive results following the majority of the interventions, though more research and analysis are needed. The publications included in this review provide a good level of detail regarding the interventions, which should enable clinicians to use the interventions more widely. If the above-mentioned findings are taken into account in future research, studies will produce more trustworthy and precise results.

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# Press Release: Narrative Therapy Can Help Individuals Struggling with Their Identity and Couples Struggling with Their Relationships After a Brain Injury

New research shows that therapies focused on re-telling stories about our lives can help improve how people view themselves after a brain injury and to improve their spousal relationships. An intervention based on narrative therapy has shown benefits to individuals living with a brain injury and their partners.

Brain injury can have life-altering effects, both for individuals who survive it and for their partners. Individuals often report not feeling like themselves anymore, which can negatively impact their self-esteem and overall wellbeing (Carroll & Coetzer, 2011; Levack et al., 2010). Similarly, their partners can often report feeling that they no longer know the person they live with and changing their roles from a partner to a carer (Bodley-Scott & Riley, 2015). This, in turn, impacts their relationship satisfaction and wellbeing (Perlesz et al., 1999).

Three couples took part in an intervention, aiming to enable them to see their relationship and identities as continuous post-injury. All injured individuals showed some improvements in at least some of the measures which focused on their sense of identity, self-esteem, and wellbeing. All partners also showed at least some improvement in the sense of continuity of the relationship, and most also benefitted in terms of relationship satisfaction and wellbeing.

A ten-session intervention plan was put together based on established narrative techniques and adapted to target the sense of identity and relationship being continuous postinijury. The selected techniques largely focus on separating problems from the person and looking at stories of alternative outcomes, which highlight the true values, beliefs, and hopes

of a person. These are often unchanged after a brain injury, although how they are expressed may differ. The intervention aimed to highlight instances where individuals still had the same traits, values, accomplishments, and dreams as pre-injury, demonstrating that their identity has not changed completely. At the same time, the intervention did not seek to deny changes or difficulties they were experiencing. Similarly, the intervention highlighted how the things that brought the couple together in the first place were likely still present in their relationship. Where changes needed to be made, the intervention encouraged couples to return their relationship to its pre-injury state, through aspects such as the balance of roles in the relationship or shared enjoyable activities which may have been stopped post-injury.

This study demonstrates that narrative therapy can be helpful for individuals and couples following a brain injury and changes how they perceive their identities and their relationships. Findings from this research can be used to further develop an intervention and may prove of use to clinicians working in this area.

#### References

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## **APPENDICES:**

# Appendix A

# **Table of Rejected Articles**

Author, Year	Title	Reason for Rejection
Behn, N., Marshall, J.,	Setting and achieving individualized social	"Communication partners" were other participants,
Togher, L., & Cruice, M;	communication goals for people with acquired brain	not partners/spouses.
2019	injury (ABI) within a group treatment	
Bishop, D., Miller, I.,	Family Intervention: Telephone Tracking (FITT): a pilot	Results are presented for all caregivers together –
Weiner, D., Guilmette, T.,	stroke outcome study	results for spouses/partners are not differentiated.
Mukand, J., Feldmann, E.,		
& Springate, B.; 2014		
Dausch, B. M., & Saliman,	Use of Family Focused Therapy in Rehabilitation for	The paper is focused on family members more
S.; 2009	Veterans With Traumatic Brain Injury	generally and does not discuss specific couple
		needs.
Elbogen, E. B., Dennis, P.	Cognitive Rehabilitation With Mobile Technology and	The study included family members of friends rather
A., Van Voorhees, E. E.,	Social Support for Veterans With TBI and PTSD: A	than partners specifically. No improvements in any
Blakey, S. M., Johnson, J.	Randomized Clinical Trial	relationship aspects were measured.
L., Johnson, S. C., &		
Belger, A.; 2019		
Fisher, A., Bellon, M.,	Family-directed approach to brain injury (FAB) model:	The paper does not focus on improving any aspect
Lawn, S., Lennon, S., &	a preliminary framework to guide family-directed	of the relationship and addresses family more
Sohlberg, M.; 2019	intervention for individuals with brain injury	broadly, rather than couples specifically

Gan, C.; 2020	Solution-Focused Brief Therapy (SFBT) with	The paper does not differentiate between family
	individuals with brain injury and their families	members or partners/spouses
Graham, K. M., Kreutzer, J.	Can a couples' intervention reduce unmet needs and	The paper only measures secondary outcomes
S., Marwitz, J. H., Sima, A.	caregiver burden after brain injury?	focused on caregiver burden. Primary outcomes
P., & Hsu, N. H; 2020		related to the relationship as well as details of the
		intervention are better described in another paper.
Kelly, A., Ponsford, J., &	Impact of a family-focused intervention on self-concept	Results are presented for all caregivers together –
Couchman, G.; 2013	after acquired brain injury	results for spouses/partners are not differentiated.
Klonoff, P. S., Koberstein,	A family experiential model of recovery after brain	The paper does not differentiate between family
E., Talley, M. C. and	injury	members or partners/spouses
Dawson, L. K.; 2008		
Kreutzer, J. S.,	A structured approach to family intervention after brain	The main focus of the intervention appears to be
Kolakowsky-Hayner, S. A.,	injury	supporting family members' coping after BI rather
Demm, S. R., & Meade, M.		than the relationships between them.
A.; 2002		
Kreutzer, J. S., Marwitz, J.	Practical approaches to effective family intervention	The article only describes general intervention ideas,
H., Godwin, E. E., &	after brain injury	no specific intervention provided and nothing
Arango-Lasprilla, J. C.;		specific to couples.
2010		
Kreutzer, J. S., Stejskal, T.	A mixed methods evaluation of the Brain Injury Family	Results are presented for all family members
M., Godwin, E. E., Powell,	Intervention	together – results for spouses/partners are not
V. D., & Arango-Lasprilla,		differentiated.
J. C.; 2010		
Kreutzer, J. S., Stejskal, T.	A preliminary investigation of the brain injury family	Results are presented for all family members
M., Ketchum, J. M.,	intervention: impact on family members	together – results for spouses/partners are not
		differentiated.

Marwitz, J. H., Taylor, L.		
A., & Menzel, J. C.; 2009		
Mackenzie, C., Paton, G.,	The living with dysarthria group: implementation and	Improvement in communication was focused on
Kelly, S., Brady, M., &	feasibility of a group intervention for people with	mechanical aspects rather than relational ones.
Muir, M.; 2012	dysarthria following stroke and family members	
McCarthy, M. J., Garcia, Y.	Development and validation of a quality of relationship	Results are presented for all family members
E., Dunn, D. J., Lyons, K.	intervention for stroke survivor-family caregiver dyads	together – results for spouses/partners are not
S., & Bakas, T.; 2020		differentiated.
Östlund, U., Bäckström, B.,	A Family Systems Nursing Approach for Families	The paper does not differentiate between family
Saveman, B. I., Lindh, V.,	Following a Stroke: Family Health Conversations	members or partners/spouses
& Sundin, K.; 2016		
Perlick, D. A., Straits-	Implementation of multifamily group treatment for	The paper does not differentiate between family
Troster, K., Strauss, J. L.,	veterans with traumatic brain injury	members or partners/spouses. 2 other publications
Norell, D., Tupler, L. A.,		report more relevant and couples-specific results of
Levine, B., & Dyck, D.		this study.
G.; 2013		
Purdy, M., & Hindenlang,	Educating and training caregivers of persons with	Results are presented for all family members
J.; 2005	aphasia	together – results for spouses/partners are not
		differentiated.
Rietdijk, R., Power, E.,	Improved Conversation Outcomes After Social	"Communication partners" were family members,
Attard, M., Heard, R., &	Communication Skills Training for People With	friends or carers, not specifically partners/spouses
Togher, L.; 2020	Traumatic Brain Injury and Their Communication	
	Partners: A Clinical Trial Investigating In-Person and	
	Telehealth Delivery	

Rosenthal, M., & Young,	Effective family intervention after traumatic brain	No specific aspect of relationships was addressed
T.; 1988	injury: Theory and practice.	other than a general recommendation for family or
		marital therapy.
Sim, P., Power, E., &	Describing conversations between individuals with	"Communication partners" were family members,
Togher, L.; 2013	traumatic brain injury (TBI) and communication	friends or carers, not specifically partners/spouses
	partners following communication partner training:	
	Using exchange structure analysis	
Stejskal, T. M.; 2012	Removing barriers to rehabilitation: Theory-based	Case examples discussed do not address issues with
	family intervention in community settings after brain	the relationship itself for couples.
	injury	
Terrill, A.; 2018	Couples-Based Positive Psychology Intervention	Conference poster only. Not enough details of the
	Improves Depressive Symptoms, Participation, and	study to assess if and how the relationship itself was
	Quality of Life After Stroke	affected.
Terrill, A., Einerson, J.,	Promoting Well-Being in Stroke Survivors and Care-	Conference poster only. Not enough details of the
MacKenzie, J., Reblin, M.,	Partners Through a Dyadic Positive Psychology	study to assess if and how the relationship itself was
Cardell, B., Majersik, J., &	Intervention	affected.
Richards, L.; 2019		
Terrill, A., Einerson, J.,	Promoting resilience in couples after stroke: Testing	Conference poster only. Not enough details of the
Reblin, M., MacKenzie, J.,	feasibility of a dyadic positive psychology-based	study to assess if and how the relationship itself was
Cardell, B., Berg, C., &	intervention	affected.
Richards, L.; 2016		
Terrill, A., Reblin, M.,	A Couples-Based Intervention Improves Depressive	Conference poster only. Not enough details of the
MacKenzie, J., Cardell, B.,	Symptoms in Stroke Survivors and Care-Partners	study to assess if and how the relationship itself was
Berg, C., Majersik, J., &		affected.
Richards, L.; 2017		

	T	
Terrill, A., Sefandonakis,	Improving Activity Engagement in Stroke Survivors and	Conference poster only. Not enough details of the
A., Einerson, J., Allen, B.,	Care-Partners Through a Positive Psychology	study to assess if and how the relationship itself was
& Lundstrom, L.; 2019	Intervention	affected.
Terrill, A. L., Reblin, M.,	Intimate Relationships and Stroke: Piloting a Dyadic	Details of intervention outlined in a previous paper –
MacKenzie, J. J., Baucom,	Intervention to Improve Depression	this paper does not evaluate the effects of the
B. R., Einerson, J., Cardell,		intervention on the relationship therefore inclusion
B., & Majersik, J. J.;		would not add any new information.
2022		
Van Der Gaag, A., Smith,	Therapy and support services for people with long-term	Results are presented for all relatives/carers together
L., Davis, S., Moss, B.,	stroke and aphasia and their relatives: a six-month	- results for spouses/partners are not differentiated.
Cornelius, V., Laing, S., &	follow-up study	
Mowles, C.; 2005		
Worrall, L., Brown, K.,	The evidence for a life-coaching approach to aphasia	No structured intervention details were provided,
Cruice, M., Davidson, B.,		and no specific adaptations outlines for couples.
Hersh, D., Howe, T., &		
Sherratt, S.; 2010		
Yeates, G.; 2012	Social cognition, so what (3)? Empathic connection in	Article unavailable.
	couples' relationships following acquired brain injury	
	(ABI): Social cognition predictors and couples therapy	
	intervention	

#### Appendix B

#### **Ethical Approval Confirmation**

Application for Ethical Review ERN\_21-1608

Susan Cottam (Research Strategy and Services Central)

Mon 16/05/2022 16:32

To: Gerard Riley (Psychology)

Cc: Urszula Gajewska (ClinPsyD Clinical Psychol FT)

Dear Dr Riley

Re: "Does Narrative Therapy Improve Self-Continuity and Relationship Continuity in Couples with Brain Injury"
Application for Ethical Review ERN\_21-1608

Thank you for your application for ethical review for the above project, which was reviewed by the Science, Technology, Engineering and Mathematics Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at <a href="https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx">https://intranet.birmingham.ac.uk/finance/accounting/Research-Ethics/Links-and-Resources.aspx</a> ) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (<a href="https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx">https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx</a> ) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.

Kind regards

#### Mrs Susan Cottam

Research Ethics Manager Research Support Group University of Birmingham

#### **Appendix C**

#### **Recruitment Leaflet**



DOES NARRATIVE THERAPY IMPROVE WELLBEING AND RELATIONSHIPS FOR COUPLES WITH BRAIN INJURY?



#### VOLUNTEERS WANTED

Are you unhappy with the person you have become because of the brain injury?

Are you or your partner unhappy with what has happened to your relationship because of the brain injury?

At the University of Birmingham, we are developing a psychological therapy to help people deal with these problems.

Are you interested in taking part in the research project to develop this therapy?

If you would like to find out more, please ask

Headway staff or contact Ula Gajewska at [removed].

Version 2 05/05/2022

#### Appendix D

#### **Participant Information Sheet**

Does narrative therapy improve wellbeing and relationships for couples with brain injury?

#### Participant Information Sheet

#### Aims of the study

You and your partner are invited to take part in a study looking into whether a treatment called *narrative therapy* can help to improve the relationship and psychological wellbeing of couples living with brain injury. This information sheet will give you more information on the study to help you decide whether you would like to take part. If you would like to discuss the study further, please contact [removed].

Narrative therapy looks at the stories that people tell one another about what has happened to them in life. Sometimes these stories can be upsetting and unhelpful. The therapist tries to help the person develop a more positive story. It has been used to help people with brain injury in the past. In this research, we are interested in whether it can help people with brain injury whose story is that they have 'lost' their identity and they are now very different to who they were before the injury; and couples whose story is that their relationship has been lost and is now very different to what it was before the injury. We think that a more useful and less upsetting story is that, although things have changed, there are still important things about yourself and your relationship that are the same. The research will explore whether this alternative story can help improve the relationship and wellbeing of couples.

#### What will we have to do in the study?

First, you will be asked to complete some brief questionnaires to check whether you are eligible to take part. Once this is confirmed, you will be asked to complete some questionnaires on your wellbeing and your relationship at the start of treatment. These will be completed individually, and you will not see the answers your partner gives on the questionnaires. You and your partner will then take part in around 10 sessions of a treatment called *narrative therapy*. Sessions will last up to 60 minutes each and will ideally be weekly. The therapy will involve different techniques, such as reviewing important life events. It may involve inviting important others to join you in one session but only if you wish. All of this will be discussed and agreed with you beforehand. The plan can also be adapted to your preferences. At the end of the therapy, you will be asked to complete the same questionnaires again and give some feedback about the therapy.

### Do I have to take part?

No, you do not need to take part if you do not wish to. Participation is entirely voluntary. If you decide to take part, we will go over all the details of the study with you and ask you to sign a consent form before the study begins.

#### Who can take part?

If you answer 'yes' to all of these questions, then you are suitable for this study:

o Did you live together for at least 5 years before the brain injury?

- o Do you still live together now?
- o Has it been at least 1 year since the brain injury happened?
- Are you able to take part in a discussion about what has happened to you and your life together that may last up to an hour?
- o [For the partner with the brain injury] Do you feel that you are a very different person now compared to who you were before the injury?
- o [For the partner without a brain injury] Do you feel that the relationship is very different now compared to what it was before the injury?

#### Are there any risks?

As with any therapy, topics discussed might be potentially upsetting to you. You will be supported by a clinical psychologist in training, with experience of working in mental health, to assist you through these difficult discussions. You will also be supported to access additional support services if needed.

Narrative therapy is an established therapy and has been used with individuals struggling with the effects of brain injury before. However, not every type of therapy suits all individuals, and there is a risk that you may not find this beneficial. If, after starting treatment, you feel that the therapy is not helpful or is causing more distress, you will be given the choice to withdraw from the study.

If you are unhappy with any aspect of the study, you can contact Dr Gary Law - Programme Director for the Doctorate in Clinical Psychology by calling [removed] or emailing [removed].

#### What are the benefits?

The aim of the therapy is to improve the relationship and well-being of couples, and you may benefit in this way. Furthermore, you would be contributing to research on these issues, which has the potential of improving future services provided to people in similar circumstances.

We are unable to offer payment for taking part in the study. However, your travel expenses will be paid.

## What if I change my mind?

You can withdraw from the research at any time, without providing a reason. If you do so, any data collected about you will be destroyed immediately and will not be used in the study.

If you wish, you can continue the therapy but instruct us not to use any of the data we have collected about you. If you do this, again any data collected about you will be destroyed immediately and will not be used in the study. You will continue to receive the therapy. You are free to instruct us not to use your data at any point until you complete the final questionnaires at the end of therapy. At this point your data will be anonymised and analysis will begin, meaning withdrawal will not be possible.

#### What will happen with my data?

All data will be handled in accordance with the Data Protection Act 2018. Your data will be stored in electronic form on a secure, password-protected storage system owned by the

University of Birmingham. Any paper documents (e.g. questionnaires) will be scanned and uploaded to the storage system as soon as possible, and the paper copy destroyed. A file containing your name and contact details will be stored on the system, but this will be kept separate from any other data collected from you. The files containing other data that you provide will not contain your name or any other identifying information.

The file containing your name and contact details will be destroyed once the study is finished. The other files, which will contain only anonymised data, will be kept for 10 years, in line with University's requirements.

A brief summary of the findings with no personal details will be written at the end of the study. You will be asked whether you would like to receive a copy of this. The results of the study will also be published in an academic journal. This publication will contain no personal information about you, and it will not be possible for other people to identify individuals from the publication.

#### Will information I give be confidential?

We will need to keep information about your name and contact details for the duration of the study so that we can contact you. Other information that you give will be stored in anonymised documents and it will not be possible to identify you from these documents.

Only the researcher team will have access to these documents. The University may wish to conduct a research audit and the auditor may access the anonymised documents, but they will not access the one containing your name and contact details.

However, if you say or do things that raise concerns about your safety or the safety of others, I will be obliged to pass this information on to the relevant authorities (e.g. social services). If this happens, I will tell you that I am passing on the information.

## Who is involved in organising this research?

This study is organised by Ula Gajewska, a trainee clinical psychologist, and supervised by Dr Gerard Riley, from the University of Birmingham. It was approved by University of Birmingham's Science, Technology, Engineering and Mathematics Ethical Review Committee. (reference number ERN\_21-1608) and will follow an approved risk management plan (reference number Riley\_220128).

## What if I need more support?

During or after the study, you may feel that you need additional support with problems that you are experiencing. There are a number of services and options available to you. We recommend contacting your GP if you are concerned about your wellbeing, as they can refer you to local services. If you are concerned about your safety, you can contact emergency services or present at your local A&E. You can also access the following services:

#### **Samaritans**

A free, confidential listening service offering non-judgemental support for anyone struggling to cope. Open 24/7.

Tel. 116 123

Website - <a href="https://www.samaritans.org/">https://www.samaritans.org/</a>

#### **Headway Birmingham and Solihull**

Specialist service supporting people with acquired brain injury.

Tel. 0121 457 7541

Website - <a href="https://www.headway.org.uk/">https://www.headway.org.uk/</a>

#### Birmingham and Solihull Urgent Mental Health Helpline

A free helpline managed by Mind, offering advice and support for those in need of urgent mental health help. Open 24/7.

Tel. 0121 262 3555

Website - <a href="https://www.bsmhft.nhs.uk/service-user-and-carer/how-to-get-urgent-mental-health-help/">https://www.bsmhft.nhs.uk/service-user-and-carer/how-to-get-urgent-mental-health-help/</a>

### **Birmingham Relate Centre**

Relationship counselling service.

Tel. 0121 643 1638

Website - <a href="https://www.relate.org.uk/">https://www.relate.org.uk/</a>

#### **Shout**

National Crisis Text Service. Open 24/7.

Tel. Text the word SHOUT to 85258.

Website - <a href="https://giveusashout.org/">https://giveusashout.org/</a>

#### I would like to take part!

If you have read all the information and feel you would like to take part in this study, please contact the researchers by emailing [removed]. We will then contact you and arrange a meeting so that we can go over details of the study in person. You will have an opportunity to ask any questions or clarify anything you need to before commencing.

At the meeting I will give you each a consent form and some questionnaires (to check that you are eligible for the study). If you decide you would like to take part, you should complete the consent forms and questionnaires, and then email them to [removed] or post them back to me using the stamped addressed envelope that I will leave with you. I will then contact you again to arrange the first therapy session. After the third session, there will also be an opportunity for you to discuss whether you wish to carry on with the therapy.

#### Questions

If you have any further questions or concerns, please email [removed] .

## Appendix E

#### **Consent Form**



# Does narrative therapy improve wellbeing and relationships for couples with brain injury?

# Consent Form

Please initial each statement in the box provided. By signing below, I confirm the following:

	I have read and understood the Participant Information Sheet (version 2,
	05/05/22).
	I understand that participation in this research means I will be asked to complete
	questionnaires about myself and my relationship, and to complete a course of
	narrative therapy. I understand that the expected length of treatment is ten 60-
	minute sessions.
	I understand that any therapy has the potential to cause some distress.
	I understand that if I disclose any risk to myself or others to the researchers, they
	will have to notify relevant authorities about this.
	I consent to my data being stored on the secure University of Birmingham data
	storage system.
	I consent to my anonymised data being used in a write up and publication of the
	results.
	I understand I am free to withdraw from the therapy at any time without providing $\overline{\boldsymbol{a}}$
	reason.
	I understand that I can ask for my data not to be included in the study at any time up
	until the final meeting with the therapist. I understand I can continue with the
	therapy even if I choose not to have my data included in the research.
N	AME: DATE:
SI	GNITURE:

Version 2 05/05/2022

## Appendix F

# **End of Session Questions**

#	Question
Q1	Is there anything that went particularly well or that was particularly helpful today?
Q2	Is there anything that wasn't very helpful or didn't go well today?
Q3	What could be improved next time?

# Appendix G

# **End of Therapy Feedback**

#	Question
Q1	What was your first impression of the therapy?
Q2	How easy or difficult was it to talk about and hear about different issues?
	What made it easier to talk about and hear about them?
Q3	What did you think about doing the Trees of Life?
Q4	Did you have an outside witness involved? How did you find this session?
	If not, what made you decide against this step?
Q5	How did you find the ending session and the 'ceremony'?
Q6	Overall, were there any particular aspects of the therapy that you found particularly
	enjoyable or helpful?
<b>Q7</b>	Overall, were there any particular aspects of the therapy that you found particularly
	difficult or unhelpful?
Q8	Do you think the therapy has changed anything for you or for your relationship?
	Why / why not?
Q9	Would you recommend this therapy to other couples with similar issues?
Q10	Any other comments: