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Walsh, R Stephen and Crawley, Lorraine and Dagnall, Neil and Fortune, Donal G (2020) The man who used to shrug – one man's lived experience of TBI. *NeuroRehabilitation*. pp. 1-14. ISSN 1053-8135

Downloaded from: <http://e-space.mmu.ac.uk/626194/>

Version: Accepted Version

Publisher: IOS Press

DOI: <https://doi.org/10.3233/nre-203079>

Please cite the published version

<https://e-space.mmu.ac.uk>

Case Report

The man who used to shrug – one man’s lived experience of TBI

R. Stephen Walsh*, Lorraine Crawley, Neil Dagnall and Donal G. Fortune

Abstract.

BACKGROUND: Stress is common to the experience of TBI. Stressors challenge physical and psychological coping abilities and undermine wellbeing. Brain injury constitutes a specific chronic stressor. An issue that hinders the usefulness of a stress-based approach to brain injury is a lack of semantic clarity attaching to the term stress. A more precise conceptualisation of stress that embraces experienced uncertainty is allostasis.

OBJECTIVE: An emerging body of research, collectively identifiable as ‘the social cure’ literature, shows that the groups that people belong to can promote adjustment, coping, and well-being amongst individuals confronted with injuries, illnesses, traumas, and stressors. The idea is deceptively simple, yet extraordinarily useful: the sense of self that individuals derive from belonging to social groups plays a key role in determining health and well-being. The objective of this research was to apply a social cure perspective to a consideration of an individual’s lived experience of TBI.

METHODS: In a novel application of interpretative phenomenological analysis (IPA) this research has investigated one person’s lived experience in a single case study of traumatic brain injury.

RESULTS: Paradox, shifting perspectives and self under stress, linked by uncertainty, were the themes identified.

CONCLUSIONS: A relational approach must be key to TBI rehabilitation.

Keywords: IPA, TBI, rehabilitation, phenomenology, brain injury, social cure, relational

1. Introduction and literature review

In-depth examination of the single case has a long and fruitful history in cognitive and clinical neuropsychology (McPherson & Della Sala, 2019). Indeed, discussing memory, Shallice writes that “most of the greatest scientific advances from neuropsychological investigations has come from studies of a single patient, or less frequently, a few similar patients, each treated as individuals” (Shallice 2019, p.1). A key strength of the single case in the current context is that it permits an increased understanding of how an individual with brain injury experiences the world. The

research presented herein demonstrates that uncertainty is the fulcrum on which one survivor’s lived experience of traumatic brain injury (TBI) pivots. Once, in his own words, our participant used to be a man who shrugged things off. Now, uncertainty, experienced as a consequence of living with brain injury, has rendered that old shrugging-self eclipsed by a more precarious self. Accordingly, the authors suggest that mitigation of uncertainty should be key to effective rehabilitation following TBI. The primary challenge faced by the researchers in writing this report was to present the reality of uncertainty, as it manifests in the lived experience of our participant, and those around him, in a frame possessing sufficient conceptual rigour. Therefore this paper is guided by the concept of allostasis, specifically the view that coping with stress requires production of

*Address for correspondence: R. Stephen Walsh, Department of Psychology, Manchester Metropolitan University, 53 Bonsall Street, Birley, M15 6GX, UK. E-mail: r.walsh@mmu.ac.uk.

50 strategies that can mitigate uncertainty about the
51 future. In employing IPA the authors provide insights
52 into one survivor's attempt to adjust following a
53 severe TBI. The purpose of this paper is, through
54 focusing intensely on one person's lived experience,
55 to produce transferable knowledge that may usefully
56 be applied in both clinical and research contexts.

57 *1.1. Brain injury*

58 TBI is a leading cause of death and disability in
59 young adults throughout the world: fifty million peo-
60 ple experience a TBI every year, with an estimated
61 yearly cost of \$US400 billion (Maas et al., 2017).
62 TBI may significantly impact a person's social, cog-
63 nitive, emotional and behavioural functioning, which
64 may hamper a return to previous roles (Hoofien et al.,
65 2001). Issues of identity and mood are key aspects
66 of medium to long-term outcome following injury
67 (Scholten et al., 2016), and are arguably more impor-
68 tant to the individual than their functional outcome.

69 *1.2. Allostasis and allostatic load*

70 Stress is common to the experience of TBI (e.g.,
71 Qureshi et al., 2019). Cannon (1932) was one of
72 the first academics to apply the concept of stress
73 to homeostasis in humans (Romero, Dickens, &
74 Cyr, 2008). The idea, borrowed from engineering,
75 acknowledges that external pressures affect people.
76 Explicitly, stress-causing agents (stressors) if acute
77 or prolonged, challenge physical and psychologi-
78 cal coping abilities and undermine wellbeing. From
79 this perspective, brain injury represents a specific
80 chronic stressor (Walsh, Fortune, Gallagher, & Mul-
81 doon, 2014). Noting this, Walsh et al. (2014) posit that
82 the integrated social identity model of stress (Haslam,
83 2004) is pertinent to the study of acquired brain injury
84 (ABI). The model emphasises the need for theorists to
85 consider social and contextual factors that traditional
86 approaches often neglect. This is especially true with
87 individualised conditions such as brain injury, where
88 there is a tendency to focus on the person. The
89 integrated social identity model of stress provides
90 an alternative approach by viewing groups as cen-
91 tral to the experience and perception of brain injury
92 and resulting stress (Muldoon, Schmid, & Downes,
93 2009). This approach is also relevant to under-
94 standing related concepts, and explicitly perceived
95 control (Lazarus & Folkman, 1984). Other integral
96 concepts within the extant stress literature related
97 to ABI, and ABI rehabilitation, include moving

beyond individualism, group memberships, social
identities, context, and perceived control.

An issue that hinders the usefulness of a stress-
based approach to brain injury is lack of semantic
clarity. The term 'stress' requires clarification
because the term denotes both the agent that
causes the response, and the reaction. Furthermore,
over-stimulation of an emergency response results
in 'chronic stress', which is associated with stress
related disease (Romero, Dickens, & Cyr, 2008).
Thus, in order to use the term stress appropriately,
linguistic disambiguation and operationalisation is
necessary. In the present study, the authors link stress
with lack of certainty. This is because uncertainty
is a stressor that undermines the capacity to predict,
plan, and behave efficaciously (Hogg, 2007/2016).
A more precise conceptualisation of stress that
embraces uncertainty is allostasis. Allostatic load is
what happens in terms of neuroendocrine, cardio-
vascular, neuroenergetic, and emotional terms when
stress responses have become chronically activated
(McEwan, 1998). In the context of TBI, allostatic
load describes the situation when brains, organs
whose function is to reduce uncertainty, are unable
to resolve uncertainty (Peters, McEwan, & Friston,
2017). Hence, allostasis is an important concept
because it recognises that stressed individuals
perceive themselves as lacking control (Peters,
McEwan, & Friston, 2017).

Taking things further, brain injury can usefully
be understood as a chronic stressor (Walsh, For-
tune, Gallagher, & Muldoon, 2014). Expanding on
this point, Walsh et al. (2014) argue that the inte-
grated social identity model of stress (Haslam, 2004)
highlights the importance of attending to the social
and contextual factors, often neglected in individu-
alised considerations of illness, and can thus usefully
be applied to the study of TBI. Not least because
the model moves beyond individualistic analyses of
stress. The integrated social identity model of stress
regards groups as central to the experience and per-
ception of stress (Muldoon, Schmid, & Downes,
2009). It is also important to consider the issue of per-
ceived control (Lazarus & Folkman, 1984); Green-
away et al. (2015) having demonstrated that social
identity is a significant predictor of perceived control.

144 *1.3. The social nature of human beings*

In the early twentieth century, Vygotsky and Luria,
founding fathers of modern neuropsychology, strove
for a unified theory of mind (Cole, Levitin & Luria,

148 2010). In more recent years, a free energy princi-
149 ple has been proposed which attempts to provide
150 a unified brain theory with particular reference to
151 action, perception, and learning. Friston (2010), in
152 a consideration of the free energy principle (i.e.
153 any self-organising system that is in equilibrium
154 with its environment must minimize free energy)
155 argues that the crucial characteristic of biological
156 systems is their capacity to maintain homeostasis in
157 an environment that is perpetually subject to change.
158 Moreover, Friston argues that maintaining homeosta-
159 sis requires biological agents to minimize the surprise
160 that they experience. Friston (2010) suggests that
161 there are two methods open to agents in order to
162 avoid surprising states (i.e. uncertainty): (1) Change
163 the world by acting upon it; and (2) Change their own
164 internal states.

165 1.4. Social identity

166 Lieberman (2013) reasons that contemporary sci-
167 ence, including psychology, has a blind spot for ‘the
168 social’. The self is important because it is ‘a super-
169 highway for social influence’ (Lieberman, 2013, p.9).
170 One of the most rigorous and successful ways of
171 conceptualising the self is in terms of social iden-
172 tity (Tajfel, 1974), whereby a person’s sense of self is
173 understood as a derivative of the groups they belong
174 to, together with the social and value significance that
175 accompanies group membership(s).

176 The social identity literature links groups and
177 stress (e.g., Muldoon & Lowe, 2012). Moreover,
178 Haslam, Jetten, Cruwys, Dingle, & Haslam (2018)
179 have developed the social identity approach into a
180 new psychology of health. This provides a strong
181 theoretical foundation for linking a range of condi-
182 tions, including stress and brain injury, to the idea of
183 self. The literature also associates groups with uncer-
184 tainty. Hogg (2007//2016) developed uncertainty –
185 identity theory, which derives from the premise that
186 individuals are unsettled and confounded by indeter-
187 minate factors, particularly when they do not know
188 how they should behave individually, or towards oth-
189 ers. Hogg (2016) claims that uncertainty, because of
190 the impact it has on identity (i.e. ‘self’ understood
191 from a social identity point of view), makes it difficult
192 for individuals to act efficaciously. Concomitantly,
193 individuals become motivated to reduce self-relevant
194 uncertainty.

195 One particularly effective way to reduce self-
196 related uncertainty is through social categorisation.
197 The reason for this is that social categorisation

198 provides individuals with prototypes that offer tem-
199 plates as to how they, and others, should behave.
200 Prototypes based on social categorisation allow indi-
201 viduals to know how they should feel. Consequently,
202 the more uncertain that one is about oneself, the more
203 one will strive to belong to groups (Hogg, 2014).

204 Wilson, Gracey, Evans, and Bateman (2009) give
205 powerful, coherent, and persuasive voice to a clini-
206 cal acknowledgement of the necessity to engage with
207 the biological, psychological, and social aspects of
208 rehabilitation following TBI. Emotional and iden-
209 tity adjustment are key to rehabilitation and, given
210 the understanding of identity set forth in preceding
211 paragraphs, it seems (to borrow from and paraphrase
212 Baddeley, 1993) that a rehabilitation approach that
213 lacks a relational aspect is akin to a vehicle without
214 an engine because rehabilitation is about the ‘bio’,
215 the ‘psycho’ and the ‘social’.

216 1.5. Interpretative phenomenological analysis 217 (IPA)

218 IPA has a focus on the detailed examination of
219 human lived experience (Smith, Flowers, & Larkin,
220 2009). As a psychological approach, IPA is under-
221 pinned by three key areas in the philosophy of
222 knowledge: phenomenology, hermeneutics, and idio-
223 graphy.

224 1.5.1. Phenomenology

225 Maurice Merleau-Ponty, a phenomenological
226 philosopher, was much taken with the usefulness
227 of applying an understanding of human nature as
228 embodied. Crucially, for those interested in TBI and
229 rehabilitation, Merleau-Ponty was also much taken
230 with the idea of the intrinsically social nature of
231 human existence. In essence, Merleau-Ponty con-
232 cluded that human beings cannot exist without others
233 (Bakewell, 2016). ‘Phenomenology helps physicians.
234 It makes it possible to consider medical symptoms
235 as they are experienced by the patient rather than
236 exclusively as a physical process’ (Bakewell, 2016,
237 p.42). IPA is likely the most common contemporary
238 approach to phenomenological psychology in the UK
239 (Langdrige, 2007).

240 Phenomenology is a philosophical approach
241 whose focus is on lived experience. Intentionality is a
242 key idea for those who would harness a phenomeno-
243 logical approach for the purpose of psychological
244 analysis. Intentionality is the idea that when we are
245 conscious, there is always something that is the object
246 of our consciousness. A thing that we are ‘conscious

247 of'. To the perceiver, consciousness, and the object
248 of consciousness, are one (Bakewell, 2016).

249 1.5.2. *Hermeneutics*

250 Hermeneutics is the theory of interpretation and a
251 consideration of hermeneutics highlights the iterative
252 process of a phenomenological analysis. Qualitative
253 analysis is often described in a linear fashion – mov-
254 ing forward through the data. IPA analysis is not
255 linear (Smith, Flowers, & Larkin, 2009) and, as such,
256 it is worth highlighting the recursive nature of IPA
257 analysis

258 1.5.3. *Idiography*

259 Idiography, a concern with the particular, has been
260 a major influence on IPA. This concern manifests at
261 two levels. First, IPA is committed to in-depth and
262 detailed analysis of the phenomena on which it is
263 focused. Second, IPA is concerned with how experi-
264 ential phenomena are understood from particular
265 perspectives. Hence the effective use of single case
266 analysis and the commitment to the single case in its
267 own right. This idiographic focus on the particular is
268 'in contrast to most psychology which is 'nomoth-
269 etic' and concerned with making claims at the group
270 or population level, and with establishing general
271 laws of human behaviour' (Smith, Flowers, & Larkin,
272 2009, p.29).

273 The goal with IPA is thus not generalisable knowl-
274 edge; the goal is transferable knowledge.

275 2. Method

276 2.1. *Research question*

277 With a particular focus on stress, coping and recov-
278 ery, what is the lived experience of TBI?

279 2.2. *Participant*

280 The study recruited the participant, 'P', from
281 existing professional networks. In order to ensure
282 anonymity, the authors report only general partici-
283 pant details. P is a married man, in his forties. He is
284 a father of three teenage children, who works full-
285 time in a professional capacity. Two years prior to
286 the interview, the participant suffered a severe, life-
287 threatening TBI following a high-speed bicycle fall
288 while participating in a race. P was wearing a helmet
289 at the time, but still sustained a serious injury to his

left frontal lobe. To convey a sense of the injury in
his own words P reported:

'I was coming down xxx pass from the car park
towards xxx going fast, because it's downhill. Erm,
nobody knows what happened because nobody saw
what happened. I don't remember anything happen-
ing but I came off my bike erm who knows how, and
hit my head. There is speculation that I may have hit
it against the wall because the wall is very close to
the side of the road there. Like only a foot or so away
from the wall. So if you do go over the handlebars
for whatever reason, there is a good chance that you
are going to hit the wall. Erm so I ended up cutting
my head. So I actually had a wound, It was more than
just a wound, or a bang in the head. It was actually
cut open as well. So I hit something sharp. Erm, in
the process and then must have skidded on my side
quite a long way because the whole of my right hand
side was grazed. Erm, yeah and some walkers got to
me. They heard it. They heard me crash, and they
got to me and they basically held me together. They
basically held my head together. . . .

So what had happened is that I'd basically, I'd, it
was a complete, I dunno what you call it, whole piece
of skull. It was a depressed fracture. So a whole piece
of skull had snapped. About the size of a saucer I
suppose. A tea cup saucer, a whole piece of skull had
been broken and then pushed into my brain. And the
eye socket had hinged and apparently there's some
sharp bits at the back of your eye socket and that
had sort of, one of those had gone up because it had
hinged. It had gone up. Punctured the membrane.
Gone into my brain. Erm and there was bleeding
on the brain.

So it was a severe injury and basically the walkers
got to me and sort of kept me together. From what I've
heard, I understand there was an ambulance at the top,
or not too far away anyway and the ambulance was
called. I think that the second person on the scene
was a nurse and then they got the road ambulance.
The road ambulance basically stabilised me. Got me
to xxx hospital. xxx hospital then took one look at
me and said we're not touching you. And then I got
airlifted to Yyy which is the head trauma centre. Erm,
they cleaned me out on that Saturday and they did the
big op on the Tuesday'.

2.3. *Interview*

The interview process took place on University
premises and lasted for approximately one hour dur-
ing which the participant (P) read an information

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340 sheet, completed a consent form, and had the oppor-
341 tunity to ask questions about the research at hand.

342 2.4. *Transcription*

343 The interview was recorded on an audio device
344 and transcribed immediately afterwards by the inter-
345 viewer (SW).

346 2.5. *Analysis*

347 IPA analysis is an iterative, recursive process. As
348 such, we felt that it makes sense, adds coherence, and
349 renders our analysis more transparent, to report, and
350 discuss, our results in a manner that mirrors that in
351 which we produced them. Smith, Flowers and Larkin
352 (2009) make clear that there is no ‘right’ way to
353 do IPA. One advantage of the manner in which we
354 present our results in this paper, in combination with
355 method and discussion, is that it makes our sense-
356 making of the participant’s sense-making transparent.
357 This double hermeneutic is absolutely fundamental
358 to IPA and, in our opinion, it emphasises the golden
359 thread of narrative that runs throughout our report –
360 uncertainty is at the heart of the lived experience of
361 TBI.

362 IPA analysis was conducted in the manner sug-
363 gested by Smith, Flowers and Larkin (2009): 1.
364 Reading and re-reading; 2. Initial noting; 3. Devel-
365 oping emergent themes; 4. Searching for connections
366 across emergent themes. In order to break the narra-
367 tive flow and deconstruct the transcript we utilised a
368 suggestion that Smith et al offer and worked through
369 the transcript backwards, paragraph by paragraph,
370 as well as reading from start to finish in the usual
371 manner.

372 After working on initial coding of the transcript the
373 first author passed on a synopsis of initial codes to the
374 remaining authors for their input. These initial codes
375 were accompanied by the transcript, as annotated by
376 the first author.

377 Linguistic comments; comments pertaining to con-
378 cepts; and descriptive comments (i.e. pertaining to
379 meaning and concerns). All of the co-authors dis-
380 cussed and agreed initial coding at this stage. The
381 initial codes are outlined below.

382 2.6. *Linguistic comments*

383 There was interesting movement between the
384 active voice and the passive voice, between engaged

and detached, and between first person and third per-
son.

Examples:

In the opening part of the interview, P talks about
a whole piece of skull snapping and ‘it was a severe
injury’. He doesn’t say ‘I had’ but rather ‘it was’.
This reflects his experience. In describing the injury
he begins from a position of detachment.

Similarly, a little later, P says: ‘So obviously, my
brain had already processed that there was something
going on’.

This seems a rather distanced way for P to speak
of himself. Slightly jarring.

The language used during the interview serves to
position P as passive. ‘I ended up in xxx’

However, there is a shift in gear after about 5 min-
utes into the interview when P says: ‘I had a serious
confabulation’.

Not ‘my brain had’ or ‘the injury rendered me
confused’ but ‘I had’. It’s interesting that the next
sentence evidences concern with using the correct ter-
minology. Is this about validating his experience? It
later transpires that P has had previous mental health
issues. Is the change of gear because he is on ‘safer
ground’ talking about mental health than TBI?

It is notable that, excepting on one occasion, the
language P used for family members might be read as
rather distant and does not use any names. ‘My wife’,
‘she,’ ‘they,’ ‘the kids,’ ‘my mother,’ are the order of
the day. It may be that this language is indicative of
distance, or detachment.

A line that jumped off the page at us on first reading
the transcript is where P says that he latches on to
‘an idea then peck people’s heads about it’. This is a
most vivid use of language and it serves to position
P as both engaged, and as an outsider poking in. It
is reminiscent of Socrates and the gadfly. Perhaps
we are reading too much into this line, but it does
convey a somewhat ominous feeling of discomfort to
the reader.

When linking his experience of TBI to his depres-
sion, P takes possession of the narrative:

‘I equate (TBI) as very similar to my experiences
with depression’.

It may be that the same thing is at play here as
in the section mentioned earlier where there was the
shift in gear to ‘I’.

As the interview proceeds we move back to the
more passive version of P.

‘My personality is quite project-focused’.

Not ‘I am’, instead, P is quoting himself. He
is very much in the observer role here and it conveys

an impression of unemotional detachment from the thoughts described. Almost cold.

‘I’m not going to let this little brain injury thing stop me’

P refers to his marriage as ‘the relationship’.

Not ‘my relationship’/‘my marriage’ etc. Again, this might be perceived as detachment. Also, there is evidence of loss (on the family’s part) behind the way language was deployed here.

As the interview approaches the half-way point we have another shift of gear back to ‘I’. This shift was prompted by the question about uncertainty and we think it is because the device of ‘project focus’ is being used to position P as having some element of control over his life and circumstances.

‘I can keep going a bit more’

It seems that positioning and control is also behind P’s description of what was a life- threatening and life-altering TBI as a

‘serious bump on the head’

2.7. *Concepts*

There were some fascinating concepts in this transcript.

The first concept we picked out was the concept of project and project focus. For example, P says that ‘I see my life in terms of projects’

Across the entirety of this interview, uncertainty loomed large and it is interesting how the concepts of the project and uncertainty are almost oppositional, or counterbalancing, in terms of each other. The impression we derived from the transcript is of finely balanced coping:

‘It may be a bounce back reaction and it’s like I’m on my second life now so I’m just going to go for it. But there is that niggling idea that I’ve damaged my brain. Whether that’s noticeable on a day to day level and whether that has any effect on any future deterioration of any sort. I don’t know. But there’s part of me that goes . . . It just give you that sense of mortality and it’s like I don’t know how much longer I’ve got with a fully functioning mental capacity. So you kind of have a project and this is like what I want to achieve now because its, I don’t know, just in terms of work, it’s like thinking through to retirement at 65 is like I don’t know if I have that long left. That might be something that everyone thinks at my age, or not, I don’t know. But from my perspective it’s like I don’t know how many good years I’ve got’.

A second concept that we identified in the transcript is the link to depression. At several points, P links his previous experience of depression with his current experience of TBI:

‘But then I see it’s (i.e. the TBI) very similar as to when I was diagnosed with the depression. People start or at least it feels like they start treating me differently because they now see you as a medical case and in both of these I’ve always argued, it’s like stop medicalising me’

‘And it feels the same with my depression’

There is also a conceptualisation of the person that is both social and personal. There is, on the one hand, a thread invoking an almost unconscious need for recognition of context, and a holistic view of P’s being in the world, running through the entire transcript. On the other hand, there is a view that P is very much an individual. It seems that this was evident to P who felt the need to express it explicitly at the end of the interview:

‘Another thing I want to say is that the whole person-centred element is quite erm current. And you know you get quite person-centred learning and person-centred counselling. So just from my experience the whole person-centred approach to dealing with brain injury and listening to their experience. What I struggle with medically is that the medical system focuses on the patient and it is all about the patient and patient care. And fails to see a more holistic view in terms of the family and the kids. So if I go to the doctor and say I’ve had a brain injury, they’ll say ‘ok’ and I’ll deal with you and they may listen to you. But the family and the kids, they’re their own problem. Not part of the solution and the listening process’.

Perceptions and differences in perceptions figured prominently in the interview: P sees his injury as a predominantly physical thing. For his family, it’s a psychological event. P is blasé about it whereas for his family it is traumatic. For P it is a progression, and for his family it is a triggering event:

‘I see it more as a progression thing rather than a purely post injury before and after because I see there were things happening in my life, in me and my relationship prior to the accident. Whereas I think they tend to see it, they have the accident very much as a, an event that triggered things. Whereas I see there was an event, and it may have

535 triggered things, changed things, but it may have
536 just accelerated what was already happening and
537 I see it within a much longer time frame”

538 There is also a divergence of perspectives: For the
539 family the injury was a shared, traumatic experience.
540 Whereas for P it is experienced as a distant event:

541 “I’m sort of distant from it in a way because they
542 don’t talk to me that much and when I try to ask
543 them then there seems to be this conflict about
544 what they say they’re thinking and what my wife
545 says is reporting to me what they’re thinking. It’s
546 just a big muddy”.

547 Then there are the differences with regard to P’s
548 immediate family and those one step removed who
549 see his as a miraculous recovery:

550 “There’s a bit of conflict between her and my
551 family because my mum is like ‘oh what a mirac-
552 ulous recovery,’ you know, we’re all so pleased
553 and Mary (pseudonym) is like ‘You should try
554 living with him’. (Both Laugh). It’s not all roses.
555 So that has led to a bit of a fall out as well. Because
556 its perspective and how close. Anyone who is like
557 one step removed from me seems to think like I’m
558 fine”.

559 2.8. *Descriptive comments (Meanings and* 560 *concerns)*

561 The TBI has some overlap with P’s experience of
562 depression in terms of what it means to him. But the
563 different use of language around each suggests that
564 the depression has been processed in a way that the
565 TBI has not. For example, P tended to use the first
566 person when speaking about his depression and the
567 third person when speaking about his TBI. Is it that
568 the depression is experienced as resolved?

569 2.8.1. *Uncertainty*

570 A couple of years after his accident, P returned to
571 compete in, and complete, the event in which he had
572 suffered the TBI. It may be that P’s return to the event
573 where he almost died means significantly more to him
574 than the mere ‘box to be ticked’ that he talked about
575 in the interview, or a consequence of ‘project focus’.
576 P’s description of the event he was taking part in at the
577 time of his injury as ‘The bruiser’ is, perhaps, telling.
578 We think that P’s description of the accident as a phys-
579 ical event for him but as a psychologically traumatic
580 one for his family is also telling. The accident means

581 different things to different people. There is consider-
582 able uncertainty attaching to it. There seemed, to us,
583 to be scant overt emotion attaching to the TBI from
584 P’s perspective. However, we could not help but won-
585 der, on reading the transcript, whether the repetition
586 of the event may not have had something to do with
587 a desire to resolve and reduce uncertainty. Even if
588 this processing was taking place outside of conscious
589 awareness.

590 Lastly, there seems to be something pertaining to
591 both meaning and concern in that P experiences his
592 TBI as an event falling on the continuum of his life:

593 ‘I always used to describe myself, before I was
594 depressed, as the man who shrugs. I used to
595 just shrug stuff off and I didn’t have any strong
596 feelings or care. It was like if you want to do
597 that, that’s fine. I’m not bothered. And since the
598 depression and maybe even more now, I’ve kind
599 of felt like I am standing up more for myself and
600 how that comes across is probably just rude and
601 aggressive (laughs). Particularly if that is in con-
602 trast to how I was 15 years ago or whatever. Then
603 it is suddenly like, you’re being a bit aggressive
604 here. Being a bit selfish and a bit self-centred and
605 all the rest. Whereas to me it is simply like I am
606 trying to get my point across.’

607 Whereas for others in P’s immediate family, the
608 event is like a light switch moment. It is clear that
609 there is loss implied in his family’s experience. It is
610 less clear whether P is sharing that experience of loss
611 at an emotional level.

612 Another very important aspect is that P is still ‘a
613 valid human being’.

614 For P: “one particular stress (is) around the sort of
615 long term effects and changes, I equate as very sim-
616 ilar to my experiences with depression. Erm, in that
617 two things. One is that my kind of denial and inabil-
618 ity to see how I’ve changed. It’s clear that my wife
619 and she reports some of our friends, see that I behave
620 differently. And that I am somehow quite different.
621 And that’s not seen with my work colleagues. So it is
622 only people who are close and sort of live with me or
623 have experienced me closely see those changes that
624 maybe even I don’t see. Some of them I can accept on
625 a kind of intellectual level. But I don’t see that I am
626 radically different now as I was then. Because that’s
627 a conflict, I think that’s quite stressful. But then I see
628 it’s very similar as to when I was diagnosed with the
629 depression. People start or at least it feels like they
630 start treating me differently because they now see you
631 as a medical case and in both of these I’ve always

argued, it's like stop medicalising me. You're treating me like I'm a case book and I just find that really stresses me. I'm still a person. I'm still a valid human being. It feels like other people are always interpreting you and analysing you through that perspective of 'you've got a brain injury' or 'you've behaved differently' or 'your personality has changed' or whatever it is. And it feels like you are no longer being taken at face value."

3. Themes and discussion

IPA begins with, but should go beyond, a standard thematic analysis (Brocki & Wearden, 2006). Following initial coding, we identified four themes. In line with the guidance offered by Braun and Clarke (2006), these themes were produced/arrived at by organising those codes that had been identified in the first stage of analysis into bigger patterns of meaning that spoke directly to our research question. We also tried to take on board the advice of Smith and Osborne (2003, p.71) to imagine a magnet with some of the themes pulling others in and helping to make sense of them.

As the analysis proceeded recursively in steps, developing emergent themes and searching for connections across emergent themes merged, producing connected themes: 1. Paradox/contradiction; 2. Shifting perspectives/discontinuity; 3. Self under stress. Uncertainty was an overarching theme.

In order to keep on the phenomenological track, the four aspects of life-world (temporality [experience of time], spatiality [experience of space], embodiment [experience of being in a body], and inter-subjectivity [the relational aspect of lived experience]) guided the authors. These acted as focal points during theme exploration. It is also necessary to state that, in line with the IPA guidance offered by Smith, Flowers, and Larkin (2009), theme construction primarily derived from coding notes. The purpose of conducting analysis in this way was to facilitate breaking up of transcript narrative flow. This represents a manifestation of the hermeneutic circle, where the themes identified capture and reflect understanding (Smith, Flowers, & Larkin, 2009).

3.1. Paradox

The 'paradox' theme is important. Before coming to the specifics of the case at hand, it is worth noting that one significant, and generally unconsidered,

paradox is that the experience of TBI is simultaneously intensely individual and intensely social (Walsh, Fortune, Gallagher, & Muldoon, 2014). Historically, approaches to brain injury rehabilitation have been rooted in individualism. These individualistic ways of understanding TBI were, and remain, important. However, individual selves can also be understood as reflective of social constructs which arise from social contexts. Hence, it is useful to view TBI as having a social aspect.

The social and individualistic frames for understanding TBI are not 'either/or'. Yes, it is paradoxical that TBI is both individual and social. However, Bowen, Yeates and Palmer (2010) propose that in order to understand fully what lies within the brain, neuropsychological inquiry must look outwards to social relations and context.

Furthermore, it has not escaped our notice that there is also a contradiction in our using a single case study to explore 'the social'.

In considering the lived experience of P, we find much that is paradoxical. For example, P is both detached (e.g., 'Erm, so yeah. I'm sort of distant from it in a way because they don't talk to me that much and when I try to ask them then there seems to be this conflict about what they say they're thinking and what my wife says is reporting to me what they're thinking'.) and engaged (e.g., 'I latch onto an idea then peck peoples heads about it'); active (e.g. 'I'm quite project focused. And I think I have become more so since the injury') and passive (e.g., 'So obviously, my brain had already processed that there was something going on'; 'my personality is quite project focused'); individual and social (explored further in 'self under threat' theme); ABI is seen as both a continuum with the past (e.g., 'I always used to describe myself, before I was depressed, as the man who shrugs. I used to just shrug stuff off and I didn't have any strong feelings or care. It was like if you want to do that, that's fine. I'm not bothered. And since the depression, and maybe even more now, I've kind of felt like I am standing up more for myself and how that comes across is probably just rude and aggressive (laughs). Particularly if that is in contrast to how I was 15 years ago or whatever. Then it is suddenly, like, you're being a bit aggressive here. Being a bit selfish and a bit self-centred and all the rest. Whereas to me it is simply like I am trying to get my point across.') and as a break with the past (e.g., 'And this is probably where it is a sticking point, I see it more as a progression thing rather than a purely post injury before and after because I see there were things happening in my

731 life, in me and my relationship prior to the accident.
 732 Whereas I think they tend to see it, they have the
 733 accident very much as a, an event that triggered
 734 things. Whereas I see there was an event, and it may
 735 have triggered things, changed things, but it may
 736 have just accelerated what was already happening
 737 and I see it within a much longer time frame’).

738 Platt (2001) discusses the use of paradox in
 739 Shakespeare and argues that a recognition of the
 740 paradoxical nature of the world is a prerequisite for
 741 cognitive growth. According to Platt, this applies to
 742 both characters and audience (intrinsicly social and
 743 individual!). We argue that Shakespeare, perhaps the
 744 shrewdest observer of human nature to ever write in
 745 the English language, picked up on something that
 746 we, as psychologists focused on rehabilitation, can
 747 usefully apply to thinking about rehabilitation fol-
 748 lowing brain injury – the idea that paradox needs to
 749 be recognised in order for a person to move forward
 750 and grow post TBI.

751 Vygotsky (1978) offers an extraordinarily useful
 752 set of thinking tools to contemporary psychologists
 753 wishing to grapple with what appears to be para-
 754 dox. Cole and Scribner (1978, p.6–7) report that
 755 ‘Vygotsky saw in the methods and principles of
 756 dialectical materialism a solution to key scientific
 757 paradoxes facing his contemporaries’. A central tenet
 758 of this method is that phenomena should be stud-
 759 ied and understood as processes in motion, and in
 760 change. Thus, when Vygotsky speaks of his approach
 761 as “developmental” this is not to be confused with
 762 a theory of child development. The developmental
 763 method, in Vygotsky’s view, is ‘the central method
 764 of psychological science’. The dialectic represents
 765 opposing directions of thought united in a contin-
 766 uous whole. This way of approaching paradox in
 767 a holistic manner allows us to transcend binary
 768 thinking and, in Vygotsky’s view, should facilitate
 769 an enhanced understanding of the human psyche
 770 (Daniels, 2008).

771 As one of the research team (DF) was examin-
 772 ing the transcript for the first time, that hoary old
 773 ‘two roads diverged in a yellow wood’ came to their
 774 mind. A question arose as to whether P’s narrative
 775 represented a ‘real’ (i.e. as others might consider it)
 776 or interpersonal/intrapersonal divergence. In the spe-
 777 cific case of P, and the broader context of TBI cases
 778 generally, these questions are there to be thought
 779 through. On discussion, amongst the authors, the
 780 diverging road image spoke to the image of a ‘Y’.

781 One group of researchers who have spent consid-
 782 erable time on precisely this aspect of TBI, in terms

783 of a ‘Y’ shaped model of the rehabilitation process,
 784 are Wilson, Gracey, Evans, and Bateman (2009). Pic-
 785 tured as a ‘Y’ the top left of the ‘Y’ is seen as
 786 pre-injury self-representations, and the top right of
 787 the ‘Y’ is seen as the self in current context. The gap
 788 between both is the experience of self under threat.
 789 Alternatively, discrepancy. Hence, the model fits eas-
 790 ily with both Vygotskian understanding of lifespan
 791 development as process, and the Allostatic brain lit-
 792 erature which regards stress (in this case ABI) as a
 793 generator of existential uncertainty.

794 It is noteworthy that TBI survivors often seem cog-
 795 nitively intact to interviewers (and others) and that
 796 the person with TBI does not perceive changes in
 797 themselves in the same manner that their family mem-
 798 bers do (Newby, Coetzer, Daisley, & Weatherhead,
 799 2013). This is discussed further below. Rehabil-
 800 itation, according to Wilson, Gracey, Evans, and
 801 Bateman (2009) is about bringing the discrepant arms
 802 of the ‘Y’ in the survivor’s rehabilitation process
 803 together as TBI survivors integrate their pre- and post-
 804 injury selves, as well as those around them, and the
 805 world in general.

806 It is a paradox that P is both the same but differ-
 807 ent, and the reasons are both individual and social.
 808 Under the spotlight of TBI, the consequence of this
 809 unresolvable paradox is uncertainty.

810 Newby, Coetzer, Daisley, & Weatherhead (2013)
 811 report that disinhibition and social isolation are
 812 common following TBI. Moreover, because sur-
 813 vivors often do not experience the same changes as
 814 those around them, others do not perceive that they
 815 require rehabilitation. This discerned continuity, as
 816 evidenced by P in this report, as well as the perception
 817 of disinhibition on the part of the family, may reflect
 818 an attempt to mitigate uncertainty. This process is thus
 819 best understood holistically. Research has shown that
 820 individuals experience greater change during times
 821 of uncertainty, and when stress is high (Tedeschi &
 822 Calhoun, 1996).

823 The uncertainty and stress literature (e.g., Peters,
 824 McEwan, & Friston, 2017) outlines how, in contexts
 825 where uncertainty remains unresolved, individuals
 826 encounter allostatic load. Habituation is key to well-
 827 being for those faced with long-term exposure to
 828 allostatic load. Probability appraisal, in turn, is key
 829 to habituation. Those who habituate do so by broad-
 830 ening their probability expectations of goal states
 831 divergence (Peters, McEwan, & Friston, 2017). In
 832 other words, people predict that they will often be
 833 wrong in their predictions. They become reconciled
 834 with uncertainty.

835 Conclusion - Paradox: The certainty of uncertainty
836 relieves uncertainty.

837 3.2. *Shifting perspectives*

838 Perspective-taking is about seeing, and appre-
839 ciating, things as others do. Perspective-taking is
840 purposeful. Attempting to walk in another's shoes,
841 so to speak. Things that one can take a perspective on
842 include situations, states, and objects (Echterhoff &
843 Higgins, 2011). One reason that we take perspectives
844 is to understand others and predict their behaviour. As
845 outlined earlier in the paper, allostatic load, related
846 to uncertainty, feeds into chronically activated stress
847 responses.

848 In P's narrative, perspective-shifting attempts are
849 apparent throughout. P is concerned with how oth-
850 ers see him, he shifts between 1st and 3rd person
851 when referring to himself. Considered from an allo-
852 static load framework, TBI generates a tsunami of
853 uncertainty and delivers a double hit because: a) TBI
854 constitutes an existential threat to the survivor, and
855 those around them, and is thus both an acute and
856 chronic source of uncertainty; b) An important pur-
857 pose of our brains is to come up with strategies that
858 reduce uncertainty. TBI impacts the organ's capacity
859 to do this. Crucially it also impacts on the capacity to
860 draw on social resources that might aid in uncertainty
861 reduction via social support.

862 One way that TBI can influence the capacity to
863 draw on social resources is via damage to those
864 regions of the brain that impact a person's capacity
865 to mentalise effectively damage which impacts a per-
866 son's capacities to mentalise (i.e. decode the mental
867 states of others; Bowen, Yeates, & Palmer, 2010). We
868 perceived, perhaps mistakenly, some lack of capac-
869 ity to appreciate the perspective of those close to P,
870 associated with comments where P expressed frus-
871 tration with being regarded as a 'medical case' and
872 'different'.

873 P also referenced his experience of cognitive-
874 behavioural therapy (CBT) from his pre-TBI
875 depression: "when I had my depression, I did a CBT
876 course which is supposed to help. I maybe didn't take
877 it as seriously as I could but there were elements of it
878 that were useful at the time. But my wife says that I
879 became much more aggressive as a result of it. Now
880 I think we also have friends who did couples coun-
881 selling prior to that and that was all about erm one of
882 them being more assertive and I think she frames my
883 CBT course in the same frame as their couples coun-
884 selling and she has in her head that I was supposed to

885 come back from the CBT more assertive and says I
886 was more aggressive. That wasn't what the CBT was
887 about but that is how she was interpreting"

888 This lead us to a consideration of how engage-
889 ment with a formal therapy prior to a brain injury
890 may influence the reaction and coping with a life-
891 threatening event, i.e. the brain injury itself. There
892 was some blunting of affect discernible in the tran-
893 script which could be attributed to the TBI and/or
894 perhaps the influence of a pre-TBI depression; P
895 presented awareness of 'doing' as a coping mech-
896 anism however the 'feeling' was not as apparent. It
897 is noticeable that P refers to the depression as 'my
898 depression' which implies an ownership or internal-
899 ization of it and he also acknowledged that there were
900 aspects of the CBT which he found useful during that
901 time. It could be that the CBT provided an alternative
902 explanation from the medical model and therefore
903 the 'label' under the psychiatric classification sys-
904 tem could be challenged and under his control. P also
905 referenced throughout the script his action-oriented
906 personality and there could be a link with action-
907 orientation and the implementation of behavioural
908 activation strategies that are prevalent in CBT as a
909 response mechanism. The use of actions can give a
910 sense of control, particularly when someone is cop-
911 ing with dys-executive changes brought about by a
912 brain injury (Evans, Emslie, & Wilson, 1998). There
913 is less evidence in the script of application of the
914 CBT cognitive skill strategies to the TBI. The TBI
915 itself is presented in a more medical light through
916 the linguistic presentation of how it occurred and its
917 impact. Another possible reason for presenting the
918 TBI in a medical light may be that the CBT became a
919 stressor as the perceived external reaction to it (from
920 his wife) was one of reproach and therefore, alter-
921 ing cognitive and, in turn, communication style, may
922 have been consciously avoided. P also highlighted in
923 his own words a common criticism in the literature
924 of the CBT approach in that in some cases it may
925 become overly focused on formulations at the indi-
926 vidual level of experience (Gaudiano, 2008) and that
927 it made him consider a more 'holistic' approach in
928 terms of addressing relationship issues—i.e. that ther-
929 apy would include significant others in the context of
930 a systemic approach.

931 A person's capacity to navigate their social world
932 is compromised by TBI because it upsets delicate
933 social ecosystems in subtle ways (e.g. Newby, Coet-
934 zer, Daisley, & Weatherhead, 2013). We can see this
935 in P's transcript, for example, in a section where he
936 says that, following the TBI, 'I felt that I was fine

937 apart from the tiredness. My wife says that I have
 938 changed and that I was a lot different. She says that
 939 I, kids have noticed differences as well. When I talk
 940 to my kids, they say that it is not that different. My
 941 wife is saying that it is more different than they have
 942 said. But there's a whole different perspectives thing
 943 going on'. We can see that, in line with the obser-
 944 vation made by Newby et al, the TBI is a manifest
 945 source of uncertainty.

946 On the descriptive side, it seems that there is the
 947 appearance of some emotional detachment and the
 948 almost clinical description of the TBI event as if
 949 from a third party perspective. Might the
 950 engagement with therapy pre-TBI have influenced
 951 current cop-ing style? Or is there a worry that if the
 952 emotions are experienced, then the depression may
 953 re-emerge? It does come across as being more part of
 954 a nar-rative than a specific event and there is a sense
 955 of almost annoyance at other's reactions. On consid-
 956 ering the transcripts, we were drawn to the coping
 957 responses; doing the projects (e.g." my personality is
 958 quite project focused") yet we also made reference
 959 to retreating (I think we've both kind of retreated to
 960 our safe spaces, which is not interactive); we can see
 961 that P seems to be engaging with the practical - but
 962 not the interpersonal.

963 It is often the case that people close to TBI sur-
 964 vivors experience changes that the survivor does not.
 965 It is also clear that there are biological, psychologi-
 966 cal, and social aspects to the complex emotions (on all
 967 sides) associated with TBI (Newby, Coetzer, Daisley,
 968 & Weatherhead. 2013).

969 In order to most effectively address allostatic load,
 970 in a rehabilitation context, we argue that the clini-
 971 cal focus needs to be on relational approaches (i.e.
 972 as per Bowen, Yeates, & Palmer, 2010). Social con-
 973 text and relationships are therefore vital. We need to
 974 ensure that the capacity for shifting perspectives is as
 975 functional as possible

976 3.3. *Self under stress*

977 It is clear from the transcript that P embodies a self
 978 under stress. This is not at all unusual in the context
 979 of TBI.

980 At this point, it is important and necessary to out-
 981 line exactly what we mean when using the word
 982 'self'. In the contemporary neuropsychological reha-
 983 bilitation literature ideas of personality have been
 984 superseded by concepts of cognitive representations
 985 of 'self' (Yeates, Gracey, & Collicutt McGrath,
 986 2008). Within the social identity approach, Simon

(2004, p.9) suggests that multiple possible identities
 987 emerge from interaction between individual brains
 988 and their environments. Simon (2004) deploys the
 989 idea of identity in a broad sense to cover phenomena,
 990 and processes, discussed by others under the heading
 991 'self' (Simon, 2004, p.2). We have followed Simon's
 992 lead with regard to defining 'self' and 'identity' in
 993 this paper.
 994

995 So, identity can be understood as the product of
 996 self-interpretation processes which take place as the
 997 result of social interaction (Simon, 2004). Hence we
 998 are dealing with what might be regarded as a dialectic
 999 (or paradox) where one pole of the concept of self is
 1000 social, and the other is individual.

1001 Social identities are those selves, based on valued
 1002 group memberships, that constitute who, as indi-
 1003 viduals, it is that each of us understand ourselves
 1004 to be. At our base, each of us has social identi-
 1005 ties, selves, that are relational and founded upon
 1006 relationships.

1007 Walsh, Fortune, Gallagher, and Muldoon (2014)
 1008 argue that in order for identities to be viable following
 1009 TBI, survivors must be able to perform their identi-
 1010 ties. It may be that this performative aspect of identity
 1011 was the driver of P's re-participation in a race that
 1012 had almost killed him on his previous attempt. Hogg
 1013 (2016) discusses social identity in the context of exis-
 1014 tential threat and it is relevant that the idea of social
 1015 identity itself, and social identity as a body of the-
 1016 ory, was born out of existential threat in the theory
 1017 founder's own life¹.

1018 Following TBI, the neuropsychological rehabilita-
 1019 tion literature "consistently shows that TBI devastates
 1020 relationships of all kinds" (Newby, Coetzer, Daisley,
 1021 & Weatherhead, 2013, p.272.). Hence, according to
 1022 Newby et al. (p.123) identities (or self-constructs) are
 1023 rendered fragile and left threatened by TBI.

1024 Threatened identity is linked to the experience of
 1025 uncertainty and people are motivated to reduce uncer-
 1026 tainty (Hogg, 2016). Furthermore, as outlined earlier
 1027 in this paper, uncertainty is intrinsic to the experience
 1028 of allostatic load. It may well be that the experience
 1029 of uncertainty ties into P's projects (e.g. "I see my
 1030 life in terms of projects. The whole doing the same
 1031 event (after the injury) was a project. It was a big
 1032 project, and I was just very focused on that. It wasn't
 1033 a catharsis thing. I didn't do it because it, because I
 1034 had to do it, it was because previously it was on my

¹The founder of Social Identity Theory, Henri Tajfel, was a Pol-
 ish Jew who survived imprisonment by the Nazis as a consequence
 of hiding his Jewish identity.

tick list”) and in terms of psychology, factors relating to efficacy (e.g. Bandura, 1995).

Hogg (2016, p.10) suggests that social categorisation is ‘particularly effective at reducing uncertainty because it furnishes group prototypes that describe how people (including self) will and ought to behave and interact with each other’. To a significant degree, being able to competently self-categorise reduces uncertainty because the groups that we belong to prescribe our behaviour when acting as members of those groups. Conceptually, this is very close to the metaphoric identity mapping (e.g. Ylvisaker et al., 2008) with which many of us are more familiar.

Indeed, it may well be that there is utility in assessing social categorisation skills in order to reduce uncertainty for those living with TBI (based on Hogg, 2016)

Ontologically, human beings are social creatures (e.g. Daniels, Cole, & Wertsch, 2007) and most usefully in terms of TBI rehabilitation, according to Simon (2004), people are most usefully understood in terms of process, rather than essence. Relatedly, we need to think in terms of people rather than brains - people have relationships with other people, brains don’t. This point manifests powerfully in the current paper when P talks about himself not being a medical case and still being a ‘valid human being’

” So one particular stress around the sort of long term effects and changes, I equate as very similar to my experiences with depression. Erm, in that 2 things. One is that my kind of denial and inability to see how I’ve changed. It’s clear that my wife, and she reports some of our friends, see that I behave differently. And that I am somehow quite different. And that’s not seen with my work colleagues. So it is only people who are close and sort of live with me or have experienced me closely see those changes that maybe even I don’t see. Some of them I can accept on a kind of intellectual level. But I don’t see that I am radically different now as I was then. Because that’s a conflict, I think that’s quite stressful. But then I see it’s very similar as to when I was diagnosed with the depression. People start, or at least it feels like they start, treating me differently because they now see you as a medical case and in both of these I’ve always argued, it’s like ‘stop medicalising me.’ You’re treating me like I’m a case book and I just find that really stresses me. I’m still a person. I’m still a valid human being. It feels like other people are always interpreting you and

analysing you through that perspective of ‘you’ve got a brain injury’ or ‘you’ve behaved differently’ or ‘your personality has changed’ or whatever it is. And it feels like you are no longer being taken at face value.”

This tension between being a ‘valid human being’ and being a ‘medical case’ also shows that, as well as being exceedingly uncertain, the internalised perspectives and judgements of others have a huge voice in P’s experience. This tension is adding to the uncertainty that is hovering with regard to physical and psychological integrity, mortality, and the myriad other issues facing P.

We know from the literature that a person’s adjustment to life post TBI is dynamic. As such, relationships are important and, we argue, in thinking about adjustment, we need to adopt a relational approach. A relational approach that commences with the survivor’s relationship with himself or herself (Newby, Coetzer, Daisley, & Weatherhead, 2013).

P describes his experience of TBI as akin to his diagnosis with depression. P perceives that people are treating him differently because he’s a ‘medical case’. Again, this experience conveys the impression of threat and uncertainty.

Luders, Jonas, Fritsche, & Agroskin (2016) report that social exclusion has been found to increase aggressive behaviour. We get the sense from the transcript that, probably unintentionally, P feels that he has been, to some degree, marginalised. Luders et al. (2016) argue that even in unfavourable situations, highlighting potential benefits, and highlighting different ways of appraising the threat might change the perceived nature of threat and thereby help prevent negative outcomes. In other recent research, Greenaway et al., (2014) report that reminding people that they have some control over potentially threatening events eliminated threat effects.

4. Conclusion

The key goal of this report is not to generate generalisable knowledge. Rather, the intent was (is) to develop transferable knowledge that might be usefully applied in both clinical and research contexts.

There are many moving parts evident to those focused on a consideration of the lived experience of individuals who have experienced TBI. Paradox, shifting perspectives and self under stress were all to

the fore in the transcripts that were the basis for this study. The thread that bound these factors together was uncertainty.

In contemplating the apparent tension between a need to focus on the individual, and the social, in the context of rehabilitation following TBI, we were faced with a question as to where the line should be drawn between individual and social psychology. Our conclusion, and our argument, is that, rather than conceiving of the individual and social as binary opposites, rehabilitation should approach the individual and social as dialectic components of lived experience. A relational approach that considers the relationships a given person has, as well as the presence (or sometimes the absence) of significant others within rehabilitation, is required.

Furthermore, because of the prominence of uncertainty in the lived experience of P, it is our conclusion that reducing uncertainty (allostasis) must be a key component of post-TBI rehabilitation. This last point in particular is crucial. Based on the evidence presented in this report, we suggest that key components in this endeavour are likely to be social identities and self-categorisations: both of the TBI survivor, and those around them.

Conflict of interest

None to report.

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