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“It was the end of the world” – The Lifeworld of Elite Male Rugby Union Players Living with Injury. An Interpretative Phenomenological Analysis

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Abstract

Background: Professional rugby is an aggressive sport. Consequently, injuries are an inevitable part of a rugby player's career. It is therefore crucial for sports medicine professionals to understand the subjective experience of injured athletes in order to optimise their care.

Objectives: The purpose of this study was to take a lifeworld perspective to explore how living with injury was meaningful to professional rugby players.

Methods: A purposive sample of 5 participants were recruited and data collection undertaken via semistructured interviews. Audio-recordings were transcribed verbatim and analysed using interpretative phenomenological analysis methodology to develop the themes.

Findings: Three master themes emerged from the analysis, each comprising of two subthemes; 1) Sense of uncertainty (1a. Fear of the unknown, 1b. Lack of control), 2) Experienced Change in Relationships (2a. Lived human relations, 2b. Coping), 3) Sense of Self (3a. Isolation and Belonging, 3b. "Being" an athlete).

Conclusion: Participants' described the challenge to their sense of sense of self and 'being' athletes', as the isolation from the team deprived them of their sense of belonging. Participants illustrated the experienced significance of their relationships, the uncertainty over their lives and the unique strategies to cope. Emotions of anxiety, grief, anger and shock reverberate throughout their accounts.

Key Words: *qualitative, athletes, identity, sense of self, phenomenology, rugby*

Introduction

Rugby union is an extremely high contact, physical sport and is the most popular collision sport worldwide (Brooks and Kemp, 2008). During rugby, the highest proportion of injuries occurs in the lower limb ranging from 41-55% with head and non-catastrophic injuries representing the second highest proportion at 12-33% of all injuries (Ball, Halaki and Orr, 2016). It consequently has one of the highest rates of injury of any sport with similar rates compared American Football, Australian Rules and Ice hockey (Lorentzon et al., 1988; Meyers and Barnhill 2004; Orchard, 2002). This high incidence of injuries occurs in elite levels, contributed to by the large body mass, competitiveness, aggression and speed (Roberts et al., 2008). Williams and colleagues report an injury incidence of 81/1000 player hours in elite male rugby union (Williams et al., 2013).

In South Africa, the average annual incidence of catastrophic injuries such as acute spinal cord injuries across all ages was 2 per 100,000 players (Badenhorst et al., 2018). Regardless if injuries are categorised as catastrophic or not, the long-term consequences can be devastating for the athlete, their family and friends (Quarrie, Cantu and Chalmers, 2002). Rugby union injury literature has been dominated by quantitative research to inform injury prevention and rehabilitation strategies to reduce the overall risk of injury (Ball, Halaki & Orr, 2016; Brooks & Kemp, 2008). However, less attention has been paid to the subjective experience of the elite athlete, living with injury.

The psychological and psychosocial consequences of a physical injury in athletes from a range of different sports has been well documented (Carson and Polman, 2012;

Forsdyke et al., 2016; Ivarsson et al., 2017; Podlog, Heil and Schulte 2014; Wadey et al., 2012). This research generally focuses on the psychological implications of injury within the context of either retirement, rehabilitation or return to play (Ardern et al., 2012). A range of emotions, cognitions and behaviours have been reported such as anxiety, depression, fear, grief and social isolation. Other research has documented coping strategies, psychological readiness to return to sport and “hardiness” in response to injury (Ardern et al., 2012; Carson and Polman, 2012; Heil and Schulte 2014; Ivarsson et al., 2017; Podlog et al., 2015; Wadey et al., 2012). Despite being viewed by professional rugby players as “part and parcel of the game”, physical injury was reported as their most frequent identified stressor (Arvinen-Barrow, Massey & Hemmings, 2014; Nichols et al., 2006). Research in the context of rugby has explored the injury experience in players who sustain a catastrophic injury (i.e. acute spinal cord injuries). Themes included the injury incident, contributing factors to the injury and the physical and emotional experience (Badenhorst et al., 2018). Other, less catastrophic injuries can also be an emotional experience as outlined by Carson and Polman (2012). Rugby players who sustained an ACL injury requiring reconstruction reported their anxiety and participants highlighted the importance of social support pre-return to competition. These studies provide healthcare professionals with an insight into the subjective experience of injured athletes and this knowledge may help in understanding injury prevention and rehabilitation. However, there is a paucity of research exploring the experience of ‘living with injury’.

Arvinen-Barrow et al (2017) documented the psychosocial impact of career ending injuries in elite male rugby players (Arvinen-Barrow, Hurley & Ruiz, 2017). In their study, Interpretative phenomenological analysis (IPA) was used as it facilitates the emergence of themes beyond that of the current evidence base (Arvinen-Barrow,

Hurley & Ruiz, 2017). The psychosocial consequences of the injury dominated their experience and affected the quality of the transition into retirement. A range of experienced emotions including shock and anger, social problems and a changing sense of their own sense of athletic identity resulting in financial concerns and engagement in pre-retirement planning. This study focused on career ending injury and post-injury career transition. To the best of the authors knowledge, a broader study exploring the meaning of living with injury in elite male rugby players has not been published.

Over the past century, there has been a shift from the biomedical model of healthcare to a more holistic approach (Hess, 2015). Although the research has highlighted the benefits of a holistic approach to injury rehabilitation, return to play guidelines are still dominated by a biomedical model (Reid et al., 2007). Regardless of the model adopted, the athlete's voice is missing and warrants exploration to understand their needs (Hess, 2015; Verhagen and Bolling, 2018). By holistically treating each athlete as an individual, there is the potential to optimise their care (Arvinen-Barrow, Massey & Hemmings, 2014). Within the rugby culture, players will seek out appropriate treatment for physical but not psychological issues as this is perceived as an area to handle independently. This may be due to the perception those who don't play through the pain barrier may be regarded as "soft" (Arvinen-Barrow, Hurley & Ruiz 2014). It is therefore important to develop an understanding of the athletes' individual experience to optimise care and a phenomenological approach allows for in-depth and meaningful responses (Grindstaff, Wrisberg and Ross, 2010). Thus, the aim of this study is to delve into the lifeworld of elite male rugby union players living with injury.

Research Methodology

In this study, interpretative phenomenology was implemented as a framework to facilitate exploration of individuals' lived experience (Converse, 2012). Interpretative phenomenology seeks to understand individuals' experience by exploring meaning through a detailed exploration of the phenomena as it is lived through (Smith, Flowers and Larkin, 2009). In this study, an interpretive phenomenological approach was employed to explore the phenomena of interest which is normally taken for granted: the lifeworld of elite male rugby union players living with injury (Cassidy et al., 2011; Heidegger, 1962; Lopez and Willis, 2004; Warriner and Lavalley, 2008).

Methods:

An interpretative phenomenological analysis was undertaken for the data collection and analysis, as described by Smith, Flowers and Larkin (2009). This approach was adopted as it provides a framework for the exploration of lived experiences. It is an underutilised framework in the sports medicine field but has been widely used in other healthcare domains, such as the experience of living with Parkinson's disease and following a stroke (Bramley & Eatough, 2007; Pallesen, 2014)

Participants

Five participants were purposefully recruited to this study. IPA methodology accepts small sample sizes as it allows for the information to be analysed in sufficient detail providing a rich and meaningful account of an individual's experience (Smith, Flowers and Larkin, 2009). Male professional rugby union players that were aged 18 years or older with a musculoskeletal injury sustained within the last 12 months were considered for inclusion. Individuals who were injured outside of this timeframe or who had a concussion were excluded. Participants were given pseudonyms and specific details of their injury along with their team and nationality have been excluded to

maintain their anonymity as they played at the highest level in rugby. Contextual information is provided in Table 1.

Table 1 Participant demographic details.

Participant	Injury (body-part)	Time out of competitive sport (months)	Injured at time of interview	Level of rugby	Return to sport
Karol	Neck	4	Yes	Professional Club	Yes
Mark	Neck	>12	Yes	International	Yes
Hubert	Broken leg	8	No	International	Yes
Paul	Knee & ankle	12	Yes	International	Yes
Malcolm	Shoulder	6	No	International	Yes

Recruitment

Recruitment emails were sent to the administration team of all professional rugby clubs in Ireland, United Kingdom, Australia, New Zealand and South Africa asking for permission to recruit participants (see Appendix 1). Once permission was granted by the club, a copy of the participant information sheet and consent form was sent to the club to be distributed to potential participants. Public messages were also published on social media sites (e.g. Facebook, Twitter, Instagram and LinkedIn, see Appendix 2). Once a potential participant contacted the researcher about the study, a copy of the participant information sheet and consent form was forwarded to the individual. The first five volunteers who fit the inclusion criteria were recruited. Ethical approval was granted by the School of Research and Ethics Governance Panel, University of Brighton.

Data collection

Semi-structured individual interviews were conducted using the format described by Smith, Flowers and Larkin (2009). An interview guide was developed specifically focused on the phenomenon of interest by the first and fourth author which can be found in Appendix 3. All interviews were conducted via Skype by the first author (a masters physiotherapy student), including a pilot interview on an injured male collegiate rugby player to practice creating a comfortable environment for participants whilst trying to avoid leading the participant or allowing the researcher's pre-suppositions to influence the discussion. This interview was not used for data analyses. The interviews were audio recorded using a Sony Dictaphone. The interviewer made notes throughout the interview, documenting initial impressions, non-verbal communication that may influence interpretation, personal reflections and to delve into interesting points raised by the participants. Interviews came to an end when the researcher felt that the participants had exhausted their meaningful experiences and rich, thick descriptions had been elicited. Duration of these interviews ranged from 35 to 55 minutes.

Data Analysis

The analysis was conducted by the first author, based on the interpretive process outlined by Smith, Flowers and Larkin (2009). Firstly, the audio recordings were transcribed verbatim and anonymised by the lead author. He then immersed himself in the data by reading and re-reading each transcript in hard copy to get a sense of the whole. The next step was an exploration of the key thematic meaning structures which reflected the most meaningful accounts of the participants lived experiences (Smith, Flowers and Larkin, 2009). The transcript was read line by line and exploratory

comments were expressed as “descriptive”, “linguistic” and “conceptual” comments and emergent themes (comprising the ‘thematic’ meaning identified in the data) were developed. An example of this is shown in table 2. This was cross examined by the second and fourth author (both academic physiotherapists experienced in qualitative research) who raised questions and challenged the initial depth of the analysis. Each transcript was reviewed by the third author to ensure familiarity with the data.

The next stage involved grouping emergent themes from each interview transcript into “super-ordinate” themes. This involved printing each theme which were then arranged and re-arranged into groups which either resonated or contrasted with each other until linked themes emerged. Table 3 provides a tabulated example of this process for Karol's transcript. Finally, the superordinate themes across all five interviews were reviewed as a whole, noting differences and similarities and collated into the final “master themes” listed in Table 4.

Table 2 Example of data analysis

Initial Comments		
Transcript	Exploratory Comments (Analysis)	Emergent Themes
<p>P: ... with my first injury I was highly motivated and <u>it come back to bite me in the ass...</u> with the second injury... it was all <u>those emotions and feelings were coming back of...</u> <u>what's, what's gonna happen?</u></p> <p>... <u>I love doing fishing and diving</u> and stuff like that, I couldn't do those things... <u>so I took it to the bottle</u> and started drinking am, a lot... you know, <u>3 or 4 days a week, it was sort of getting...</u> I wouldn't say <u>ridiculous</u> but... that was sort of just <u>my out</u>, and it helped me to I guess, <u>let my hair down a wee bit...</u></p> <p>... <u>really see some happiness</u> but they always talk about <u>that there's no happiness at the end of the bottle</u> and when you <u>wake up in the morning being hungover</u> and you still gotta go do your rehab all you feel like doing is <u>sinking [a bottle]</u> I don't want that, I</p>	<p>'It come back bite me in the ass' – Was his motivation all for nothing? Get a sense that it was wasted energy, that he would have just got injured again regardless.</p> <p>Repetition of 'what's' – Is this to emphasize his feeling of uncertainty and being lost?</p> <p>If you can't do the things you love, then who are you? Couldn't fish or dive, the things he loves to do – He didn't have anywhere to destress and turned to alcohol instead. Was he lost? Depressed? Use alcohol to let his hair down – Found relaxation in the alcohol? 'took it to the bottle' – Used drinking as a coping strategy Using alcohol to mask the psychological pain of his injury experience? 'Let my hair down' – Does he ever have a chance to relax being in a high performance environment?</p> <p>Underlying impression that he was in a very dark place and was heavily reliant on alcohol for happiness. Was he depressed? Did he lose his identity? Fear of retirement – Uses alcohol to hide from the possibility of retirement</p>	<p>Uncertainty Frustration</p> <p>? Lost</p> <p>? Sense of loss of identity Injury affecting hobbies ? Lost ? Depression Maladaptive coping strategy ? Stress</p> <p>Searching for happiness ? Fear of retirement Depression ? Sense of loss of identity</p>

<p>don't want to have that pain... I <u>could potentially retire so you start to have a few more beers</u>... you tend to <i>spiral downwards</i> because you <u>never actually find... what you're look for</u>... you're always trying to search for something but <i>it's just fools gold</i>.</p>	<p>Unsure exactly what he means here. Is there difficulty with articulating something this complex? Search for something...spiral downwards – Has he lost who he is? Is he searching for who he is? Is he searching for meaning in life that he's lost since his injury? Is he mourning the loss of his pre-injury self?</p> <p>By the term fool's gold, does he mean that what he is searching for isn't there? Is the meaning of life gone for him?</p>	<p>? Mourning the loss of pre-injured self ? Loss of meaning ? Searching for his old self</p>
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KEY: Highlighted text denotes linguistic comments, ***italic text denotes conceptual comments***, underlined text denotes descriptive comments.

The content of the analysis and relationships between the themes were scrutinised by the other members of the research team. Differences between the researchers were negotiated until consensus was reached.

¹Table 3. Excerpt for organising emergent themes into superordinate themes for Karol:

B) Loss of identity, worth and purpose	B) Psychological consequences of injury	B) Isolation/Missing team environment
135. Self-doubt	131. Lacking confidence	112. Lack of social support from team
118. Changing identity	156. Depression	105. Missing team comradery
58. Changes in identity	84. Depression	19. Not being wanted
21. Loss of worth	154. Depression	173. Longing to be involved with team environment
161. Lacking sense of purpose	68. Anxiety over future career	158. Boredom
166. Lacking sense of purpose	98. Stressed	111. Lack of social support
61. Changing identity	79. Injury causing sleep issues	44. Fear of being alone
85. Referring to self as broken	52. Frustration	162. Missing competing
17. Loss of self-worth	54. Depression	113. Fear of isolation
83. Losing his purpose	63. Financial concerns	104. Strong desire to be with a team
60. Is rugby worth it?	72. Financial anxiety	13. Missing team environment
4. Searching for purpose	34. Anxiety	115. Social exclusion
10. Negative view of self	36. Muscle loss anxiety	172. Isolation
56. Loss of purpose	1. Anxiety	107. Isolation from team
35. Loss of sense of self	82. Psychological struggling	109. Injury reducing social contact
121. Loss of pre-injured self	49. Stressed	163. Isolation

¹ Table 1 displays an excerpt to provide the reader with a more detailed view of some superordinate and emergent themes. Emergent and superordinate themes were assigned a number to quantify total amount of themes.

Table 4 Development of master themes from the subordinate themes across five interviews. Letters A to E correspond with participants and numbers quantify the subordinate themes for each participant.

Master Themes	Superordinate Themes (Participants Listed A-E)
<ul style="list-style-type: none"> • Sense of Self <p>Sub-themes:</p> <ol style="list-style-type: none"> 1. Isolation and 'Belonging' (highlighted green) 2. 'Being' an Athlete (highlighted orange) 	A3 – Isolation, boredom and lacking team involvement
	A6 – Psychological consequences of injury (anxiety, frustration, unhelpful thinking strategies)
	A8 – Losing sense of self and purpose
	B1 – Loss of Identity, worth and purpose
	B2 – Isolation and the lack of team involvement
	B3 – Psychological consequences of Injury
	C1 – Roller coaster journey through rehabilitation
	C5 – Psychological consequences of injury (unhelpful thinking, mental health issues, negative emotions)
	C6 – Loss of identity, worth and purpose
	C8 – Isolation
	D3 – Loss of identity, worth and purpose
	D6 – Psychological consequences of injury (anxiety, depression, negative emotions, negative thinking strategies)
	E1 – Ups and Downs of Rehabilitation
	E5 – The 'beast' that is professional sport
	E7 – Psychological consequences of injury
	E8 – Losing identity and purpose
	E9 – Isolation and the struggle of lack of team involvement
<ul style="list-style-type: none"> • Experienced Change in Relationships <p>Sub-themes:</p> <ol style="list-style-type: none"> 1. Coping (highlighted green) 2. Lived Human Relations (highlighted orange) 	A1 – Injury affecting relationships and confidence
	A5 – 'Coping through coaching' and other adaptive coping strategies
	A9 – Injury affecting activities of daily living, ability to exercise and life
	B5 – Role of others (positives and negatives)
	B6 – Adaptive coping strategies
	C2 – Life restrictions and support from others
	C9 – Adaptive coping strategies and the positives of injury experience
	D2 – Support from others and role of others
	D1 – Rehabilitation and self-development
	D5 – Positive thinking strategies
	D7 – Adaptive coping strategies (reflection and goal setting)
	E2 – Lack of support from medics and coaches and the negative relationships with them
	E3 – 'Controlling the controllables' and adaptive coping strategies
	E4 – Maladaptive coping strategies, goal setting and reflection
	E6 – Injury amplifying negative relationship with partner
	E12 – Injury affecting hobbies and activities of daily living
	A2 – Fear of the future and life after rugby

<ul style="list-style-type: none"> • Sense of Uncertainty <p>Sub-themes:</p> <ol style="list-style-type: none"> 1. Fear of the Unknown (highlighted green) 2. Lack of Control (highlighted orange) 	A7 – Uncertainty and lack of control
	B4 – Uncertainty surrounding career and fear re-injury
	C3 – Fear of re-injury and retirement
	C4 – Lack of control over injury and career
	D4 – Fear for career and re-injury
	E10 – Fear of retirement and lack of control
	E11 – Financial concerns
	C7 – Inability to achieve goals

Trustworthiness

To establish trustworthiness of the data, methodological transparency was sought throughout the data collection and analysis, referred to by Smith, Flowers and Larkin (2009) as the “independent audit”. This involves documenting each stage of the research in a manner that can be independently scrutinised. Therefore, all data was recorded as the steps shown in Table 2 and 3. Each step was discussed with the co-authors who challenged interpretations to address any pre-cognitions from the lead author that was not reflected in the participants quotes. Throughout this study, the lead author remained sensitive to the importance of considering his own pre-cognitions, his influence over the participants and the interpretation of the data. As recommended by Smith, Flowers and Larkin (2009), a reflexive log was kept of reflections on the interview process. These were used to encourage critical thinking and provide transparency (Smith, 2006). An interpretive process was adopted to help make sense of the data, identify patterns for both within and between the interviews and during the development of the themes. This involved a cyclical process of reading the data as a whole, undertaking the data analysis and then reviewing the researcher’s view of the analysis and the whole. The research team facilitated this interpretive approach by challenging the lead author on his interpretations and providing alternative perspectives on the data interpretations and theme development. The team worked

together to communicate the research methodology and process, as well as the findings and their interpretations.

Findings

[Insert figure 1 here]

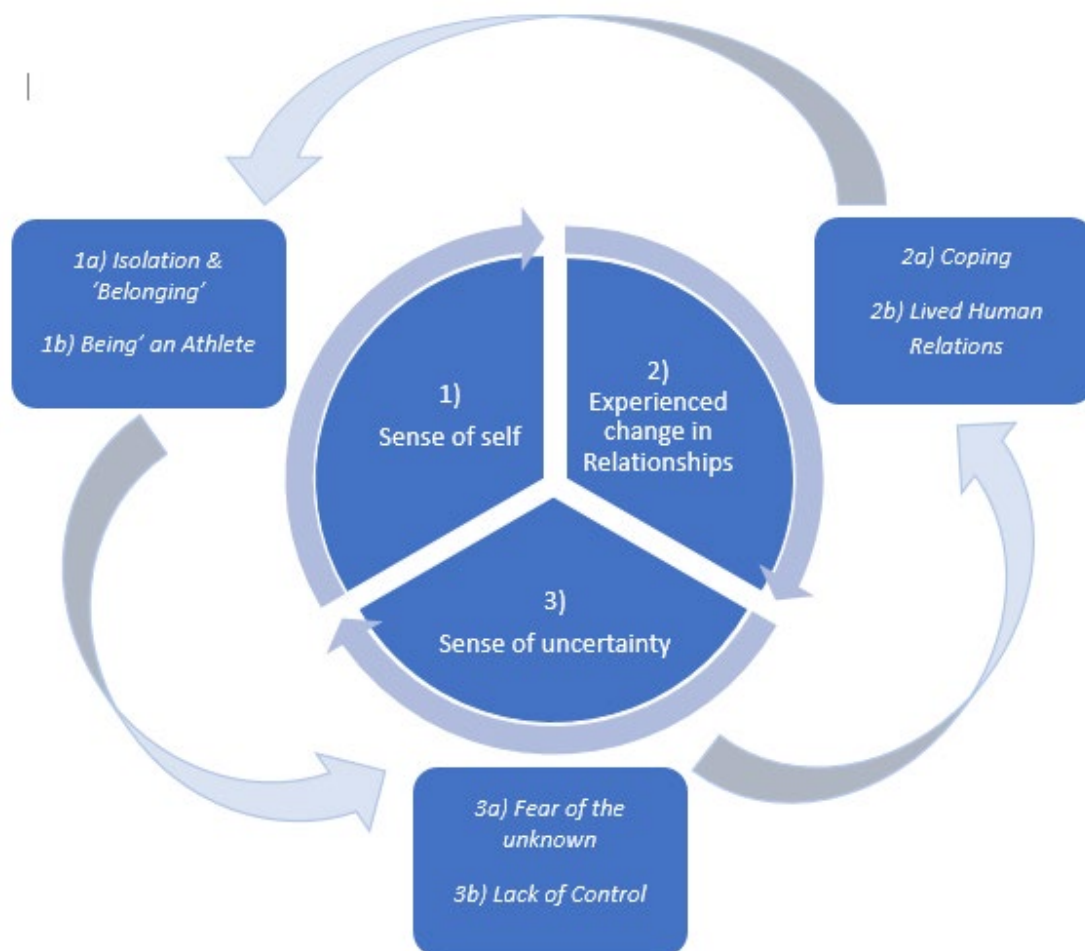


Figure 1. The inextricably intertwining nature of the master themes and subthemes.

Based on the analysis, three master themes were identified in order to communicate the **qualitative meanings of living with injury** (and their relationships) based on the raw data. Each theme comprised of two subthemes.

Sense of Uncertainty

The sense of uncertainty was described in various ways in the participants accounts. Each participant described uncertainty related to the termination of their career, the uncertainty of the future, their relationships, financial concerns, the lack of control, the fear of re-injury and the threat to their sense of self.

Mark expressed two aspects of uncertainty, fear for his rugby career and fear for the rest of his life. **These fears resonate with the other participants' accounts, where the injury experience illuminated a sense of shock along with the potential for retirement.** Participants' descriptions of this appeared to be meaningful as it elicited many different emotions including anxiety, fear, frustration, confusion and shock.

"... this could affect the rest of my life... that fear... the life point of view but then also a career point of view.... I had mapped out how I wanted to end rugby, I wanted to end it on my terms... So just having that chucked in the mix and then someone saying 'oh well this could potentially be it'... it's just... getting my head around, planning for something else other than rugby..."

(Mark, p1)

The sense of uncertainty is further illuminated by Paul's statement that *"you never know what's around the corner"*. This expression appears to highlight that although retirement is destined in all rugby careers, there is a sense that it was not considered an inevitable part of their lives until the injury struck.

This was echoed within the first subtheme, the fear of the unknown. Paul's description appears to anticipate life without rugby where there is an underlying sense of anxiety with the possibility of forced retirement.

*"... what would happen if I retired now, what would I do... after rugby and after my ankle injury I sort of struggled with that because, if it was to all end today, what would I do? **I don't know what I'd do**..."*

(Paul, p5)

Participants' descriptions illuminated a link between the fear of the unknown and the second subtheme, the lack of control. The underlying sense of lacking agency over

² All text highlighted in bold throughout this section indicates that the participant put a strong emphasis on the word or phrase.

their lives was echoed in all participants accounts. Karol and Hubert expressed their financial concerns and being out of contract while pondering whether teams and coaches were interested in them as part of what appeared to be an extremely anxious period in their lives.

*"... it was... scary to think that it could be all taken away from me in an instant... it's not necessarily in my control as well which... I guess it's quite scary to think that it could get taken... could just get taken away... this great life that I have could be gone in an **instant**."*

(Hubert, p3)

"... you're sort of living under that stress of... where your next pay checks gonna come from... whether people even... looking at you as realistic opportunities for their teams..."

(Karol, p4)

The **sense of lacking control over** their careers was further highlighted by Malcolm, who stated that the *"uncertainty eats you alive"*. This sense of uncertainty was expressed by Paul with an underlying impression of fear and self-doubt.

*"...I'd had a big previous injury...which...**hit me straight away and haunted me a lot more**... so there was a lot of sort of fear and doubt of...could this be one of my last... injuries?... will I return with this injury? ... because with my previous injury... it was only supposed to be 6 months... it took me 9-10 months so... all these emotions and feelings were coming back..."*

(Paul, p2)

The sense of uncertainty, fear of the unknown and lack of control described by participants during their injury experience appeared to influence the participants' relationships to the extent that they are inextricably intertwined with the second theme.

Experienced Change in Relationships

The **second theme is the experienced change in relationships**. Participants described the perceived significance of the injury related to experienced changes in their relationships with loved ones, teammates and medical staff. As experienced by the

participants, the injury not only had implications for their sense of themselves, but also their relationships with others. The subtheme also reflects the participants' perceived implications for their relationships with those who shared this world with them. A second subtheme – coping – highlights the meaningful strategies that participants' described to survive in their world with injuries.

Participants' descriptions illustrated the experienced significance of connections and support from loved ones. The significance of the family, friends and loved ones described by Malcolm and the "reassurance" received from "those people", that they "will be there no matter what" resonates with several of the participant's accounts.

"... early on it was really shit 'cause... I had to get help doing everything from my partner... going to the toilet, going to the shower just... all the... little things... I relied heavily... on my partner... my flatmates... kind of felt a little bit useless not being able to do...normal stuff..."

(Hubert, p2)

"... it's quite interesting the support that shows itself... our assistant manager stayed with me for an extra day... after the injury... he was very relaxed... just him being around I found it quite comforting whereas, if I was left to... my own devices... I probably would have found it far more stressful..."

(Karol, p3)

However, Paul's description illustrated the perceived realisation "that family is gonna be there every single day for you" which was contrasted by a memorable experience with his coach when struck by injury. Paul conveyed an expectation "they would treat you like family, but they didn't".

"...I had a wee run in with the coach at the time... he told me... I just started crying when he walked in and said "... you need to be a man right now... this is what you need to do"... stuff like that...I guess the biggest thing from that was that he had never been in a situation like this..."

(Paul, p3)

Paul described the experienced significance of a lack of empathy which appeared to lead him to “resent” the coaching staff for leaving him “isolated” and “alone”. On further exploration of the participant’s account, this experience appeared to intertwine with his personal relationships as he “broke-up” with his girlfriend due to “the toll on not only you mentally but on the relationship with your partner”.

Participants’ accounts of their experiences highlighted the significance of engaging in coping strategies to survive during the experience of living with injury. Karol’s account illustrated his determination to work with his physiotherapist and “not just coming back fit but coming back as a better athlete”. This resonates with Malcolm, who placed significance on using the opportunity to “improve on weaknesses” and “achieving something every day” which was “massive” for his “mental recovery”. Karol, Hubert and Paul’s descriptions conveyed the significance of time throughout their injury experience, to plan their futures as the eventuality of retirement became a “reality”.

Hubert described the perceived importance of a discussion with the team sport psychologist where he expressed how “gutted” and “pissed off” he was, as it was a “big year” with many unattainable goals. He also described the significant moment of his journey towards charity work.

“... ‘There are people in wheelchairs out there that will never walk again... you’re gonna walk again... you’re gonna run’ and I was like ‘yeah’, I didn’t really think of it like that... once he... said that stuff to me I was like, ‘fuck, I feel like a spoilt little brat that hasn’t got their toy ‘cos **oh, what I broke my leg?...** I’m gonna walk again, I’m gonna run again, I’m still **getting fuckin’ paid... shit loads** from the rugby union. So really...what I’d done wasn’t that bad... so I started supporting this charity’...”

(Hubert, p7)

This appeared to be a significant moment for Hubert as he described a change in perspective and “seeing what they go through in life” was “massive for any injury”.

In contrast, Paul described his turn to alcohol as a coping strategy, and placed meaning on how “inhibited” he felt with the injury and how “restricting” it was in life. His account of the experience illustrates his perceived difficulty in exercising agency over his life.

“... I love... fishing and diving... stuff like that, I couldn't do those things... so I took it to the bottle and started drinking...a lot... 3 or 4 days a week, it was sort of getting... I wouldn't say ridiculous but... it helped me to, I guess... see some happiness...”

(Paul, p4)

The participants' descriptions conveyed the significance of the injury in their lives, their relationships and the coping strategies described to protect the sense of self. These are inextricably bound with the final theme.

Sense of self

The final theme illuminates the challenge that living with injury imposed on their sense of self. It is comprised of two subthemes, isolation and belonging and 'being' an athlete. Due to the multifaceted nature of belonging to a team, when participants were isolated from this community with whom they had interpersonal relationships, **it appeared to challenge their sense of self**. The second subtheme of 'being' an athlete conveyed the **participants' descriptions** of their inability to exercise control over their expression of 'being' during their injury experience. It also highlights the varying roles involved in their sense of self.

The descriptions conveyed a sense of change from being an athlete and belonging to a team to a more withdrawn and isolated role. In Mark's account, he describes the roles that comprised his sense of self; as a father, a husband, 'being' an athlete and now as a coach. There is an underlying impression that the transition in roles from 'being' an athlete to a coach protected the sense of the self as he maintained a sense of connectedness to his teammates while living with injury. These components to the sense of self were echoed in Hubert's account, where there was a sense of vulnerability when he placed significance on identifying himself with his speed as it is, *“the one thing I have over everyone else in the country”*.

*“.... it was almost like a loss of identity, now I'm just.... just this battler...just a small guy who can pass... but, [names another player] already does that so what am I gonna be good for? ... well, **nothing**... yeah... like a little loss of identity...”*

(Hubert, p11)

Participants' descriptions illustrated feelings of mourning and grieving over the loss of the pre-injured self. Hubert and Paul both described their perception of their former selves as having an underlying sense of invincibility and "*being on top of the world*", until the shock of the injury brought the realisation that they were "*normal human(s)*" who get "*down and depressed*". **There is a sense from the participants account that living with injury may have stripped them of their freedom and control.**

*"... when I got injured I was in the best nick of my life... I'd never been fitter, stronger, like **everything**, I was hitting personal bests...then that just sort of brought me back down, down to earth pretty quickly and then... I... just felt **real useless**..."*

(Hubert, p4)

Paul's description of his account conveyed a sense of grief, mourning over the pre-injured self, relating his experience to "*having someone pass away that you care about*" and knowing that "*you want them back*" but that this may not be possible. This resonates with Hubert and Malcolm who both described themselves as "*broken*" with Malcolm elaborating that the injury "**was the end of the world**" and that when it occurred he was "*crying (his) eyes out*".

*"... when that happened...**everything** just slammed on the brakes... some stuff disappeared... some things I just knew weren't gonna happen...it was just that initial thing of just **fuck**. It's all gone... that's what you commit yourself to...it's all gone... it's all over... you're convinced there's no coming back from it... "*

(Malcolm, p4)

The sense of self was inextricably interlinked with the subthemes of isolation and belonging and 'being' an athlete. **Participants described the significance** of identifying themselves as athletes and belonging to a team as Mark states rugby has been "*the best part of my life for the past 25 years*". They describe feeling "*alone*" and "*forgotten about*" when this "*great life*" was stripped away from them and they were forced into isolation.

“...be... quite down and depressed and a lot of emotion can be... played into it, because you’re away from your team... and that environment... you’re sort of just left out there by yourself”

(Paul, p5)

“... you go from being this full-time athlete, being with the boys all the time to just...housebound and stuck, stuck inside on the couch...you feel like you get forgotten about real quickly...you’re in the public eye all the time...then all of a sudden you’re just not even there...”

(Hubert, p3)

Participants placed significance on the sense of belonging to the team environment, which was illuminated by Paul describing that being around the team when he felt “*broken*” was “*massive*” for his recovery. The transition from ‘being’ an athlete, belonging to a team and then forced “*away from your team and that environment*” was accompanied by a sense of psychological distress and ruminative thinking. **Participants’ illustrated their experience of having excess time** throughout the injury experience, conveying their sense of anxiety and expressing a profound lack of control.

*“...you just got so much time when you’re not playing... to think of the what if’s...so your like, **fuck** what if I don’t have this, what if I can’t... what if I can’t kick as well anymore like what if... yeah, **just everything**....”*

(Hubert, p3)

*“.... I was worried that, was I gonna, be able to play again, you know, all those questions that just, you think, you worry, you think the worst, you go into that **dark place**...”*

(Malcolm, p4)

Discussion

The aim of this study was to explore the meaning of living with injury for elite male rugby union players. Three themes were identified in the analysis, each comprising of two subthemes; sense of uncertainty, **experienced change in relationships** and sense of self. The findings of this study highlight how living with injury was a unique

experience for each participant. Participants' placed significance on a lack of control, the fear of the unknown, the threat of retirement, the significance of their relationships, their coping strategies, isolation and belonging and "being" an athlete. There was an underlying sense of a loss of their identity as athletes; their sense of belonging to their teams, explicitly highlighting the importance of "being" an athlete and team member. The participants illustrated the anticipation of their own futures where there was an uncertainty of what would happen if they were forced into retirement. A variety of emotions reverberate throughout participants accounts including feels of shock, depression, anxiety, fear, grief, frustration and anger. These findings echo the work of Lohne (2009) who adopted a phenomenological hermeneutic approach to extract the meaning of the experience for individuals who suffered acute spinal cord injuries. Participants reported similar accounts such as the unexpected shock of the experience and reported overwhelming feelings of panic, grief, anxiety, loss of control and uncertainty.

The sense of uncertainty consists of two subthemes: fear of the unknown and lack of control. Within the sports medicine literature, fear and lack of control has been well documented but in relation to the fear of re-injury (Carson & Polman, 2012; Carson and Polman, 2008; Podlog et al., 2015). In contrast to the aforementioned studies, participants reported fear but not in relation to re-injury. Instead, participants placed significance on their lack of autonomy which reverberates throughout their accounts and is strongly intertwined with their sense of "being" athletes'. Participants descriptions of their experience illustrated a sense of a loss of control while being dependent on others and feeling "useless" and "inhibited". Similar findings were reported by Arvinen-Barrow, Hurley and Ruiz (2017) where there was a lack of control over their lives and careers. There is a perception of a lack of freedom and control over their lives while the sense of uncertainty that "eats you alive", expresses the struggles of living with injury. Participants' expressed a sense of frustration and vulnerability as the experience appeared to shake their sense of 'being' athletes.

Participants' descriptions illustrated a sense of fear for what their lives would be like without rugby while anticipating the threat of retirement. The accounts of the participants' in this study illuminated the struggles they experienced, and the variety of strategies adopted to cope with the uncertainty of their careers. Their descriptions conveyed a sense of vulnerability, their loss of control over their lives and the

possibility of forced retirement. This uncertainty appeared to be used as motivation for planning for retirement. This echoes the findings of Arvinen-Barrow, Hurley and Ruiz (2017) who reported that elite rugby players were forced to plan their retirement after suffering career ending injuries in an attempt to regain financial security and control over their lives.

The second theme, *experienced change in relationships*, consisted of two subthemes which were lived human relations and coping. To understand the participants' experiences it is important to explore their interpersonal relationships intrinsic to the lifeworld (Todres, Galvin and Holloway, 2007). The accounts of the participants illustrate a sense of debilitating consequences of injury on their relationships and the sense of distress at their new reliance on others. On further exploration of the participants perspective, they described contrasting relationships. Paul described his frustration with the lack of empathy from his coach, who advised him to "be a man" as he cried when the injury struck. This sharply contrasts with the caring role of Hubert's partner and Malcolm's family who "will be there no matter what". Their descriptions illustrated the meaning of relationships with loved ones, as they could connect with "these people" during their injury experience. This echoes the findings from Ogilvie et al. (2012) who conducted a synthesis of the research exploring young peoples' subjective experience of surviving traumatic injury. They highlighted the relationship between the injured person and the significance of their loved ones throughout their injury experience. Individuals cope by using their family as protectors that provide safe keeping for their pre-injured self and validate the persons embodied identity. The role of others and social support during the athletes injury experience has been well documented and resonate with the findings of this study (Arvinen-Barrow, Hurley & Ruiz, 2017; Carson and Polman, 2008; Richman et al., 1989). The benefits of social support cannot be overlooked by healthcare professionals in elite sport (Carson and Polman, 2012). To optimise the experience of living with injury, athletes could be encouraged to use their extra time to maintain relationships with family, friends and teammates.

In this study, the participants' placed significance on a variety of coping strategies, which has been well documented in previous research (Ardern et al., 2012; Bejar, Halaki and Orr, 2017; Nicholls et al., 2006; Tracey, 2003; Wadey et al., 2012). Paul described his experience of using alcohol to "see some happiness" and Hubert

engaged in charity work following a discussion with the team sport psychologist. Some of the other coping strategies adopted in the study included furthering their education, making career plans outside of sport and viewing their injury experience as an opportunity to develop athletic qualities. On further exploration of the participants' accounts, it was not possible to make a binary distinction and separate their coping strategies into adaptive or maladaptive. Instead, participants described a variety of experiences that was meaningful to them and were inextricably bound with elements of growth and development. Similar to the resilience of the participants in this study, Wadey and colleagues (2012) found that athletes displayed high levels of "hardiness" by re-appraising the significance of the injury, confiding in others and executing a plan which transformed the experience into a developmental rather than a detrimental experience. This has important implications for healthcare professionals when formulating a treatment plan and using shared decision making to achieve milestones with the athlete (Barry and Edgman-Levitan, 2012).

The loss of the pre-injured levels of athleticism is a challenging aspect to the recovery process. This was evident in the findings by Arvinen-Barrow, Hurley and Ruiz (2017), where the theme "injury as a loss" was highlighted. This included the loss of the athletic self and the social self when players were forced into retirement. In the current study, the sense of self encompassed two subthemes: isolation and belonging, and "being" an athlete. This is evident in Hubert's description of his loss of speed as a "loss of identity". The challenge to the participants' identities in the current study resonates with a narrative study by Sparkes and Smith (2003). The authors interviewed amateur rugby players who had suffered spinal cord injuries which challenged their sense of self. These difficulties resonate with the findings of this study where the experienced significance of living with injury appeared to induce numerous challenges, particularly to their sense of self, isolation and belonging to a team. They illustrated a yearning for their pre-injured sense of "being" an athlete, while contrasting this with the fear of retirement and who they would be without their sport. Similarly, outside of the sports medicine field, individuals who suffer life-altering injuries are forced to reconstruct their sense of self which can alter one's understanding of life. (Ogilvie et al., 2012). As concluded by Lally (2007), it may be beneficial for athletes to initiate a re-definition of their sense of self throughout their career, as those who maintain a strong commitment to the athletic identity may not cope as well if injury

forces the individual into retirement. Healthcare professionals must be cognizant of the athletes need to maintain a continuous sense of self and collaboratively develop patient goals throughout their experience.

The subtheme of isolation and belonging to a team reflect a challenge to the participants' sense of self. Feelings of isolation is common in team sports when athletes become injured (Wadey et al., 2012). Participants' descriptions conveyed the significance of "being" athletes and the lack of connectedness with their teammates that occurred through isolation from the environment. Participants described themselves as "alone", "forgotten about" and "depressed" and placed significance on anticipating the future, illustrating the anxiety that their sense of belonging to a team may never return. Further exploration of the key thematic meanings revealed the significance of their relationships with loved ones, which appeared to be important to this sense of belonging outside of the rugby environment. Practitioners should be aware that the sense of belonging is a perception that is unique to the individual centered around feelings of value and respect (Martin, Levack & Sinnott, 2015). Therefore, players should be given therapeutic space to discuss their changing sense of self and belonging. Shared goals should be set to help the athlete's regain their sense of belonging during the rehabilitation process.

Limitations

As the interviews were conducted over skype, this may have limited the intimacy that would have been gained from in-person interviews (Smith, Flowers and Larkin 2009). The reflexive process used throughout the analysis and data collection, use of the hermeneutic circle and choice of interview questions were used and designed to minimise the researcher's pre-understandings coming into the data and ensure that the findings were data driven (Smith, Flowers and Larkin, 2009). However, as a phenomenological study the objectives were not to saturate variations in the experiences of elite rugby players or claim transferability of findings. The findings are presented to enable readers to draw their own conclusions and reflect on how this may hold meaning for their own context.

Conclusion

This interpretative phenomenological study sought to explore the lifeworld of rugby union players living with injury. The aim was to illuminate what was meaningful to the

participants about a phenomenon which has been understudied in elite rugby, while presenting the findings in a transparent manner for the reader. The participants' accounts of living with injury highlighted the significance of isolation and belonging, 'being' an athlete, the relationships with others and the strategies adopted to cope while living with injury. Participants expressed feelings of lacking control and uncertainty over their lives while feelings of anxiety, grief, frustration and depression reverberate throughout their accounts. The sense of uncertainty, sense of relatedness and sense of self were key constituents of the individuals' lifeworlds and illuminate the meaning of living with injury for each participant. Giving the athlete a voice is becoming an increasingly important aspect of sports medicine research (Verhagan and Bolling, 2018). More evidence is required to explore the significance of injuries in male rugby players to help improve the quality of the care provided.

Implications for Practice

The findings of this study highlight the significance of living with injury for elite rugby players and practitioners in elite sport may benefit from adopting a lifeworld led approach (Todres, Dahlberg and Gavin, 2007) to sports medicine. A biomedical model has dominated sports medicine, focusing on the physical rehabilitation of the injury. However, care may be improved for these athletes if practitioners are skilled in the holistic management of the person. This may include actively listening to the athlete, acknowledging his/her vulnerabilities and the uniqueness of the injury experience to each individual. Healthcare practitioners could provide a therapeutic space and a culture where players are comfortable in expressing their feelings of grief, anxiety, frustration, anger and depression and the toll this can have on their relationships. Providing them with space may allow the athlete time to consider their options and how they can develop and grow throughout their injury experience. Athletes may benefit from pre-retirement planning through financial advice, occupational and investment endeavours, social networking and developing a broader skillset to facilitate the transition out of rugby (Taylor and Ogilvie, 1994). Practitioners with a focus on player centered care, should work with the athlete to facilitate options that could help them to improve their sense of self and belongingness while maintaining relationships with teammates. Collaborative goal setting through shared decision making that respects the values and skills of the athlete may give the individual a sense of purpose and maintain their sense of identity of "being" an athlete. Healthcare

professionals and coaches have a responsibility to treat the human with the injury. This is highlighted by Paul's statement, which illuminates all participants' accounts, illustrating a sense of yearning to be treated as a human:

“the tough times... you go through not only as a player, but just a normal human being”

(Paul, P2)

Declaration of Interest

The authors report no declarations of interest.

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Appendix 1:

Email Requesting Permission to Recruit

Dear Sir/Madam,

I am a Physiotherapy MSc student at the University of Brighton, England and I am seeking permission to recruit for my study: "The Lived Experience of Musculoskeletal Injuries in Male Professional Rugby Union Players".

With your permission to recruit participants, I will send you more information for potential participants about this study.

Kind Regards,

Luke Murray

MSc Rehabilitation Science (Physiotherapy)

University of Brighton,

England

L.murray4@uni.brighton.ac.uk

+44 (0) 7763710024

Recruitment Email:

Dear Sir/Madam,

Please find attached a participant information sheet which provides further information about this study along with a consent form that should be completed by the individual who is interested in taking part.

The criteria for taking part:

- You are a male professional rugby player
- You have been Injured in the last 12 months (or currently injured)
- You have Skype access

If you could forward this email to any athletes who fit the above criteria I would be very grateful. Please do not hesitate to contact me should you have any questions.

Kind Regards,

Luke Murray

MSc Rehabilitation Science (Physiotherapy)

University of Brighton,

England

L.murray4@uni.brighton.ac.uk

+44 (0) 7763710024

Appendix 2:

Social Media Posts

Are you a male professional rugby player willing to participate in an interview about your experience of being injured? Please share if you know someone that may be interested in taking part or contact me at L.murray4@uni.brighton.ac.uk for more information.

Appendix 3:

Interview Guide	
Consent	<p>Before we begin the interview, can you confirm the following questions:</p> <ul style="list-style-type: none"> • Did you receive and understand the written informed consent that was sent to you? • Do you have any questions before I explain the purpose of the interview?
Purpose of Interview	<p>During this interview, I would like to speak to you about your injury experience and even though I'm a physiotherapy student, I'll be in the role of a researcher today which may affect how I communicate and behave. Therefore, I would like you to explain in as much detail as you can the situations that we will be speaking about. The phenomenon I am mainly interested in is your experience of living with injury and you have the right to withdraw at any stage without giving reason, is all that clear?</p>
Ice-Breaker	<p>Before we focus on the specific topic of your injury experience, can you tell me a bit about your injury?</p>
Phenomenon of interest	<ol style="list-style-type: none"> 1) Can you describe to me in as much detail as you possibly can, what life is/was like with the injury? 2) Can you describe to me, in as much detail as you possibly can an experience that is meaningful to you in relation to the injury? 3) Can you describe to me any other experience that is meaningful to you in relation to the injury?
Probing Questions	<ul style="list-style-type: none"> • Can you tell me more about that? • Can you give me a more detailed description of what happened? • You mentioned X, can you tell me more about that? • What do you mean by..? • Could you give me some examples of what you are saying?
End of Interview	<ul style="list-style-type: none"> • I have no further questions, is there anything else you would like to bring up or ask about before we finish the interview? • Are there any questions/concerns I can help you with? • Thank you for your co-operation today. • If new topics of relevance are discussed after the recorder is turned off, I will ask the participant for permission to include the information.
Reflection	<ul style="list-style-type: none"> • 10 minute reflection on what has been learned from the interview.