Using a daily diary approach to understand the psychological experiences of making weight
Abstract

Making weight refers to the process of reducing body weight to compete in weight categorised sports. The current study explored judo athletes’ psychological experiences of making weight. Six International standard judo athletes participated for the length of time they required to make weight. An unstructured diary was used to collect data daily, supported by a follow-up interview. Data was analysed using a holistic content analysis. Emergent themes included initiating the making weight process, competing demands of dual roles, temptation, impacts of restricted nutrition, and the desire for social support. Athlete stories provided rich descriptions of their experiences, revealing the extent to which difficulties were concealed and the process of making weight was normalized. Their accounts highlight the challenges associated with social support but the value of emotional disclosure. Future research should explore the potential uses of diaries as a form of disclosure.

Keywords: making weight, diary, stress, coping, weight categorisation
It has been well documented that the ability to cope with stress is crucial to success in sport (Nicholls & Polman, 2007). An emerging body of research has sought to examine the stressors and subsequent coping responses in a variety of sports, including cross-country running (Nicholls, Levy, Grice, & Polman, 2009), cricket (Thewell, Weston, & Greenlees, 2007), decathlon (Dale, 2000), golf (Nicholls, 2007), rugby (Nicholls, Backhouse, Polman, & McKenna, 2009), sailing (Weston, Thewell, Bond, & Hutchings, 2009), soccer (Finn & McKenna, 2010), volleyball (Holt, Berg, & Tamminen, 2007), and wrestling (Kristiansen, Roberts, & Abrahamsen, 2008). Overall, this research has indicated that although there are a number of common stressors in sport, there may be some stressors that are of particular relevance to certain sports. Thus while themes such as relationships with important others and pressure to succeed may be commonly cited general stressors, for some sports (e.g., cricket) more specific themes such as the behavior of the opposition (Thelwell et al., 2007) are also cited as stressors. One specific stressor that has been highlighted as important across a number of sports is the ability to make weight prior to competition (Kristiansen et al., 2008). Despite the number of sports requiring an athlete to make weight (e.g., horse racing, wrestling, amateur and professional boxing, taekwondo, rowing, judo) it is surprising that current understanding of the psychological stressors and strategies used to cope with making weight is sparse.

The process of making weight has been suggested to include frequent, rapid, and large weight loss and regain cycles (Steen & Brownell, 1990). In Smith’s (2006) physiological profile of amateur boxers making weight, all 156 athletes reduced their body weight by 1.7% to 2.7% over the final 24 hours before weigh-in. Similarly, Dolan, O’Connor, McGoldrick, O’Loughlin, Lyons, and Warrington (2011) reported that the majority of jockeys in their study lost 2kg, 24-48 hours before a race day to make weight.
In order to achieve such rapid weight loss a variety of aggressive methods have been cited, including dehydration, food restriction, fasting, and for some, vomiting, laxatives, and diuretics (Steen & Brownell, 1990). Dolan et al. (2011) described that gradual, rapid, passive, and active methods of weight loss were employed by athletes, often putting their health at risk. Although weight categorisations in sports such as judo are intended to make competition fairer, it has been argued that this categorisation puts pressure on athletes to cut body weight down to a minimum in order to compete in the lowest possible division under the belief that an advantage will be gained over opposition (Hall & Lane, 2001).

Research into the practices of jockeys has suggested that 50% of female jockeys attempting to make weight will experience difficulties (Leydon & Wall, 2002). Similarly, applied reflections such as those by Wilson and Close (2013) suggest that some methods jockeys employed to make weight (such as rapid dehydration) may not be essential and may be largely cultural practice.

While research on the psychological impact of making weight has been limited, existing research has tended to focus on the negative emotional impact (Choma, Sforzo, & Keller, 1998; Filaire, Maso, Degoutte, Jouanel, & Lac, 2001; Hall & Lane, 2001; Koral & Dosseville, 2009; Landers, Arent, & Lutz, 2001). Koral and Dosseville (2009) examined the impact of a four-week weight loss strategy on 20 judo athletes’ emotions and fitness. Results demonstrated that although there was no reduction in performance, athletes experienced a significant increase in negative mood states (anger, fatigue, and tension). Similarly, Choma et al. (1998) suggested that wrestlers using rapid weight loss methods experienced greater mood negativity as well as impairment of short term memory. More specifically, Filaire et al. (2001) reported that negative mood states included increased tension, anger, fatigue, and confusion, as well as decreased vigour. Further, this study also
suggested that food restriction adversely impacted the physiology of the judo athlete and consequently impaired performance. Although such studies indicate the negative emotional impacts of making weight there is little current research that focuses on the athlete experience of making weight.

In addition to the psychological impact of making weight, research has also suggested that participation in weight restricted sports, specifically horseracing, may be related to the development of eating disorders (Hauserblad & Carron, 1999). In comparison to the three percent prevalence of eating disorders reported in refereed sports (Zucker, Womble, Williamson, & Perrin, 1999) Leydon and Wall’s (2002) study examined the dietary habits of 20 professional jockeys, finding that four of these jockeys showed signs of disordered eating. This was attributed to the repeated use of extreme weight loss practices and inadequate dietary intake. Further, their study also suggested that male jockeys had a similar risk to female jockeys of developing an eating disorder. More recently, Caulfield and Karageorghis (2008) examined the impact of making weight on mood and attitudes towards eating amongst 41 professional jockeys. Their study reported significantly elevated negative mood profiles and the presence of disordered eating attitudes when jockeys were at a minimal weight. Consequently, conclusions from these studies were that endeavours to make weight put considerable strain on the psychological wellbeing of jockeys. Whether this strain is also experienced in weight categorised sports such as judo remains unseen and requires further research.

In summary, research that has focused on the making weight process has suggested the negative impact of making weight on the physical and psychological wellbeing of athletes, with some research also indicating performance impairments. Despite these research suggestions, little more is known about the psychological impacts
of making weight, particularly in sports other than horseracing. It is here that an important
distinction should be made regarding the weigh-in practices of different sports. In judo
and other weight categorised sports the weigh-in occurs before competition, providing a
period for athletes to take on fluids and energy prior to competing. A distinction should be
made between this process of making weight and that which occurs in weight restricted
sports such as horseracing, which require the athlete to remain within a weight restriction
for the duration of competition. Athlete’s experiences of making weight are likely to vary
according to this distinction. This study will focus on judo which has a variable length of
time between weigh-in and competition, ranging from minutes to 12 hours.

The current research aimed to qualitatively explore the psychological experiences
of judo athletes during the making weight process. Against the backdrop of previous
research it was proposed that stress and coping may be useful determinants to enhance our
understanding and consequently participants were asked about the stressors they faced
during this time period and the associated coping strategies that were used. Yet in line
with a narrative approach participants were asked to narrate their own stories through the
use of unstructured diaries and interviews, thus results include but are not restricted to
these themes of stress and coping. We look to present the lived experiences of judo
athletes making weight.

Method

Participants

Participants were three male and three female International standard judo athletes
who were actively competing at the time of the study. Participants were aged between 18-28 years (M=23.3, SD=3.6) and had between 5-18 years of competitive judo experience.

All participants had vast previous experience of making weight, reporting previous use of
dehydration, food restriction, fasting, saunas, and vomiting. In order to meet the aims of the study, participants were required to be competing in the upcoming season in a weight category that was lower than their usual body weight. This inclusion criterion ensured that all participants would need to make weight prior to competition.

Following institutional ethical approval, participants were recruited through information letters that were sent to a number of judo clubs. These letters outlined the aims of the study and the requirements of participation. Participants were informed that this was a longitudinal study that would involve their participation for the length of time that they deemed necessary to make weight for one self-selected competition. The start of the making weight process was classified as the first day that any conscious effort was made towards the end goal of losing weight. Participants varied greatly in the time that they required to make weight from 5-42 days. While it is recognised that this length of time demonstrates great variation between participants, it also highlights the differing practices and methods of making weight that may take place among judo athletes. Because the aim of the study was to examine the individual experiences of making weight this variance was seen as a strength that would add to the richness and variety of the stories that were generated by participants.

Procedure

In line with a narrative approach we sought to understand each participant’s experiences during the process of making weight. The use of narrative inquiry has been well advocated in sport and exercise psychology, with research illustrating the contribution that such an approach may make to our understanding. As Douglas and Carless (2009) highlight, the creation of personal stories will allow individuals to make sense of their lives, communicate their experiences, and reflect on future possibilities.
Narrative inquiry focuses on the meaning that is actively construed through the creation of stories (Smith & Sparkes, 2009) allowing us to focus on both what and how a story is told (Sparkes & Smith, 2013). This narrative focus on story telling holds exciting possibilities when considering that stories may not only be portrayed through verbal expression, but may also be presented in written form. Predominantly, sport and exercise psychology research has focused on the use of verbal narratives, through the use of interviews and life history interviews. Yet written forms such as diaries lend themselves well to a narrative approach, encouraging participants to write in a storied structure.

To supplement the use of written diaries and to gain an understanding of the complexities of making weight, this study used multiple methods of data collection. In accordance with Lazarus (1999), it is suggested that single methods of data collection may not fully capture the complexities of the stress and coping process. In particular, Lazarus highlighted that research methodologies should consider how to capture both changing and stable variables as they occur over time. Given the number of potential changes that might be suggested to occur during the process of making weight, this study aimed to follow Lazarus’ recommendations, using hand-written diaries as the predominant method of data collection, as well as additional follow-up interviews.

Research Diary

Previous research has suggested that participant research diaries may be used to capture stressors and coping strategies as they occur, and to highlight fluctuations across time (e.g., Almeida & Kessler, 1998; Day & Thatcher, 2009). In addition, Day and Hudson (2012, p25) suggested that “the use of diary methods allows for a range of stories to be told, to a variety of intended listeners, and for a variety of reasons”. Thus
suggestions are that the use of written diaries will allow the participant to select and tell their stories and experiences of making weight in their own words and style.

While there are a number of advantages to the use of research diaries (Alaszewski, 2006; Day & Hudson, 2012), of particular relevance to this study is the suggestion that diaries may be especially useful when researching on potentially sensitive topics. As Hydén (2008) proposed, sensitive topics will often be defined and influenced by the power relations between interviewer and participant. The research diary may serve to lessen the dominant position often assumed by the researcher, by allowing the participant more control. Diaries can allow participants a more empowered position, promote awareness and advocacy (Ryan, 2006), and facilitate the expression of emotions (Hudson & Day, 2012). Furthermore, it may be suggested that diaries offer an appealing alternative to interviewing, which currently serves as the predominant qualitative method of data collection. The use of written diaries may allow participants an alternative method of communicating their experiences. For example, as Day and Thatcher (2009) reported, diaries can often prompt written internal dialogue and allow for a greater understanding of meaning making as individuals strive to make sense of their own stories.

Despite the growing frequency with which diaries have been used as a method of data collection, their design has varied considerably from using highly structured, pre-set questions to more unstructured, free writing designs (Furness & Garrud, 2010). Structured diaries used to assess coping have included checklists of potential coping strategies and ratings of their effectiveness. While this approach has been well used in sport and exercise psychology, Somerfield (1996) criticised this, emphasising that a structured style may fail to fully capture participants’ experiences of coping and the meanings and intentions that underpin coping strategies. In contrast, an unstructured approach may allow for greater
insight into the emotional and cognitive process of coping, yet in doing this the researcher’s ability to control and direct content towards the research aims is limited. The current study used an unstructured approach. This choice was driven by the limited previous research and understanding in this area, resulting in the need for exploration, depth of detail, and for the researcher to engage as an active listener (Creswell, 1998).

Following institutional ethical approval, participants met with the researcher for an initial briefing session. The aim of this meeting was to explain the use of the diary. Each diary contained an instruction sheet asking participants to record their making weight experiences as well as suggesting that participants should describe and explain the stressors that occurred as a result of making weight and the strategies used to cope with these stressors. During the initial meeting it was highlighted to participants that the researchers were interested in both positive and negative experiences. This clarification of coping was strongly emphasised after initial diary pilot testing revealed an emphasis on positive coping strategies and suggestions from pilot participants that the term coping implied that only successful strategies should be recorded. Following suggestions from Day and Thatcher (2009) it was also outlined that there was no correct or standard way of completing the diary, that anything could be written or drawn in the diary, and that any writing style could be used. Apart from the instruction sheet and the prompt questions on stress and coping, there were no further specific questions or prompts, allowing each athlete to narrate their own experiences while making weight. Each page of the diary contained a dated heading as an encouragement for participants to complete the diary each day.

Diary data collection started at the point that athletes began to make a conscious effort towards losing weight and lasted up until their final weigh-in. During this period of
Making weight the researcher maintained frequent contact with participants through text message, e-mail, and informal meetings at training sessions to establish rapport and trust. This focus on rapport building follows the reflections of Day and Thatcher (2009) who highlighted the importance of maintaining participant commitment and interest whilst undertaking longitudinal diary based research, in order to avoid the traditionally high drop out rates found in similar diary based studies. Yet the establishment of rapport in diary-based research may be somewhat challenging given the limited presence of the researcher while data collection takes place. In addition, the challenge presented here was to create a balance between being present at training sessions to establish rapport, but to avoid assuming the position of scrutineer by continually referring to and checking diary entries. Instead the researcher aimed to establish a more authentic relationship with participants through his presence at training sessions, allowing participants to engage both in informal discussions and those that focused on diary writing.

**Interviews**

A diary-interview method was used in order to ensure sufficient depth and clarity of data. Participants handed the research diary back to the researcher after the final weigh-in and a follow-up interview was arranged within a one-week time frame. Day and Thatcher (2009) suggested that participants will often expand on the information written in diaries, using them as an aid to memory and adding further information. Prior to the interview the researcher immersed themselves in the diary data, and attempted to achieve the qualitative posture of indwelling (Maykut & Morehouse, 1994) through the process of reading and re-reading the diary content. Indwelling is suggested as a reflective process whereby the researcher identifies those characteristics of the situation or person most relevant to the issue being pursued. Theoretical and procedural memos were taken
regarding themes that arose and any entries which required more clarity or explanation were highlighted. Questions were then formed to explore the participants’ experiences of making weight, with interviews focusing on the themes that were detailed in the written diary. The use of an interview allowed participants to further narrate their experiences of making weight. The aim of the interview was not to triangulate the data from the diaries but rather to add depth and detail, allowing the researcher further understanding of the participants’ experiences. This practice follows recommendations from Lincoln, Lynham, and Guba (2011, p5) who endorse that the use of multiple methods will add “rigour, breadth, complexity, richness, and depth to any inquiry”. In addition, it is proposed that the use of supporting, follow-up interviews allowed dialogue between researcher and participant and further maintenance of rapport and mutual understanding, which may be challenging to gain from diary methods alone.

Follow-up interviews were audio recorded and lasted between 40-80 minutes. Interviews were transcribed verbatim, including notes which would allow the researcher to make links between diary pages and interview discussions.

Data analysis

Content analysis has been shown to be the dominant form of analysis in sport and exercise psychology (Culver, Gilbert, & Sparkes, 2012) and is often associated with structured diagrams and hierarchical themes, which are ranked in accordance with their frequency of occurrence. Consequently, this method of analysis is often central to post-positivistic qualitative methods. Yet, it may also be proposed that content analysis can provide a flexible and appropriate method of analysis for an interpretive paradigm by taking a more inductive approach and allowing for patterns and themes within a narrative to emerge (Day, 2013; Lieblich, Tuval-Mashiach, & Zilber, 1998). In this study a holistic
content analysis was used. This method of analysis focuses on the themes of the narrative as a whole, thus in the context of this study, this analysis was used to examine the emerging themes in the context of the overall athlete story of making weight.

The first stage of analysis focused on gaining understanding and familiarity with the story of each participant. Diaries and follow-up interviews were re-read together alongside notes from interviews and interviewer reflections to gain immersion in the data. As themes began to emerge analytical memos were written and discussed between the researchers. For example, the researchers focused on discussing the meaning of an emerging theme and the impact this theme had on identity and relationships. For each theme that began to emerge, the data from both interviews and diaries was examined. Each theme was viewed in the overall context of the story that was told and emerging themes were arranged chronologically. For each theme that emerged the researchers questioned the associated meanings (e.g., how does the participant present this theme?), the implications and changes that may have occurred as a result of the theme (e.g., how does the emergence of this theme impact the relationship with family?), and the overall context of the theme in the participant story (e.g., how does this emerging theme fit with existing understanding?).

Authenticity and Trustworthiness

The criteria suggested below for enhancing the quality of this work were grounded in a relativist ontology. Consequently it is suggested that knowledge is subjective and constructed and that our understandings will be relative to our cultural and social frames of reference and thus open to a range of interpretations. Guided by Lincoln et al. (2011) and Tracey (2010) this study used a number of criteria, taken from an ongoing list of characteristics suggested to enhance the quality of qualitative research. These criteria are
not proposed as absolute or universal, rather as suggested by Sparkes and Smith (2013) such lists of characteristics may be open-ended, subject to constant reinterpretation, and derived from the adopted standpoint of the researcher. Consequently, the selection of criteria was based on the context and purpose of the present study.

First, the study used an audit trail to enhance the transparency of the work. The aim here was to provide a clear and detailed pathway of decisions (Johnson & Waterfield, 2004) which was maintained by the first author and regularly scrutinised by the second author to ensure clarity. Authenticity was improved by increasing self-awareness through the use of a reflexive journal (Tracy, 2010). In keeping this journal the first author examined and noted their perceived impact on the research process and provided a self-reflective commentary about their subjective feelings and concerns after each interview (Emerson, Fretz, & Shaw, 1995). The purpose of this was twofold. Initially, this was used as a tool to increase the researcher’s awareness of their own subjectivities while interviewing and analysing the data (e.g., where the researcher identified with themes that were present in their own sporting experiences). Secondly, reflections were used during analysis as themes were developed. This served as a memory aid for each interview and provided useful insight where discrepancies occurred. The second author acted as a critical friend throughout the research process, a role in which the researcher provides a theoretical sounding board to encourage reflection (Sparkes & Smith, 2013). In this role the second author regularly reviewed the data collection and analysis and fostered reflections on decisions and interpretations, as well as challenging assumptions and emerging themes. During data analysis, an independent analyst was also used. The role of this individual was to examine and challenge interpretations of the data. Where
disagreements occurred during data analysis, the original transcripts and diaries were revisited.

Results

Results are presented as evolving themes that portray participants’ experiences of making weight. In line with previous research on making weight in sport (e.g., Koral & Dosseville, 2009), the experiences of participants in this study were inherently negative, portraying the difficulties associated with making weight. Participants’ stories not only uncover these difficulties and their attempts to cope with them, but also reveal the extent to which they attempted to disguise problems from others and normalised the process of making weight.

Initiating the making weight process: From well-planned intentions to early difficulties

For the majority of participants, the initiation of making weight was well planned in an attempt to avoid previous strategies that had resulted in negative physical and psychological consequences. For example, Jane exemplified this decision making:

I’ve done that before [rapid weight loss] and it makes me feel like crap! Like literally like crap! Because really the day before I’m fighting I do not want to be up till 2 in the morning in a sauna, not at all, I want to be in bed by eight. (Diary entry, 14 days till competition).

For all participants, rapid weight loss strategies were viewed as inherently negative and were avoidable by using gradual methods which were perceived as more adaptive, appropriate, and easy to maintain. Yet while intentions were well planned “I’m at a good starting weight… I’m not too worried about my weight” (Jane, diary entry 13 days till competition) subsequent difficulties with making weight and tracking weight often led to changes, not only in participants’ strategies but also in their positive interpretations of
these strategies. This was exemplified in Jane’s initial positive outlook concerning the
ease of making weight, which notably changed soon after starting the process, focusing
instead on her difficulties “I got made to eat chocolate- depressed… training hurts, I’m
really light to be fighting these people [during training], plus it makes me really hungry”
(diary entry, 9 days till competition). These difficulties were reported early in the process
of making weight, for example on day two Ollie wrote “when I got to the gym I felt
STRESSED (emphasis participant’s own) as I was tired and really didn’t feel motivated to
train.”

Although planning, preparation and avoiding the use of previous strategies were
all perceived as important to participants at the start of the making weight process, these
did not negate the difficulties that were experienced once the process of making weight
began. All participants eventually required the use of rapid weight loss methods, but for
two participants (Karen and Louise) time constraints and other life stressors meant that
these rapid methods were the only methods used. During interview Louise suggested:

There was a voice in my head saying ‘no, you can’t do it’ [make weight] that
made me feel really bad. But at the same time I wanted to prove myself wrong I
was willing to do anything to get under the weight, so I stopped eating.

As a consequence of their choice of rapid strategies, these two participants initiated
weight loss with an awareness of the potential negative impacts of their behaviours.

Although planning and preparation may be well advocated strategies for reducing
stress in sport, their effectiveness was limited when weight loss failed to reach expected
goals. Consequentially, all participants reported an increase in negative thoughts and
adjustments to their weight loss strategies. This theme highlights the potential difficulties
of planning and preparation when progress and success may be measured by factors such as weight loss which may be difficult to control.

**Competing demands of making weight and maintaining life roles**

Throughout diary entries, the difficulties associated with balancing training, external commitments, and making weight were frequently discussed. In this sense, a disparity was highlighted between participants’ usual ability to cope with their dual role (as an athlete and as a parent/worker/student) and their increased difficulty coping while making weight. Similar to all participants, Karen wrote about these competing demands:

> I weighed myself and I saw I was over my weight and it really worried me because I thought I wouldn’t make it, I started to lose hope a bit. By this time I was tired, I’ve had a lot of mock exams and balancing the two was hard...they weighed us at training I was [weight]. I got worried and started reducing what I ate and drank but the consequence was that I had lost a lot of energy to train all day, which resulted in me going to sleep in the car when I was supposed to be revising for an exam.

(Diary entry 4 days till competition).

Karen’s comments demonstrate how making weight was seen to negatively impact her role both as an athlete and as a student. Although making weight was an accepted and inherent part of her role as a judo athlete, the need to make weight threatened her ability to succeed not just in the athletic domain but also in her other life commitments.

Similarly, Ollie also discussed the negative impact of balancing making weight with other life commitments: “I’ve been turning my alarm off in my sleep, then I wake up late for work. I have literally been finding it a lot harder to get out of bed… it’s just shattering” (diary entry, 22 days till competition). Thus the impact of making weight was not restricted to the athletic domain but also the ability to maintain usual life roles. This
impact provided a difficult dilemma as successfully making weight often meant that the athletic role needed to be prioritised over other life roles.

The difficulty of balancing dual roles while making weight was often attributed to the increased time and focus on eating behaviours. Jane described during interview:

If I am just focusing on that [making weight] then it’s easy. Like if I have nothing else to do, nothing else going on, no training camps, nothing like that, everything is fine you just get on with it... it’s when everything else comes along at the same time that you get stressed.

Rather than focusing on her dual role, Jane demonstrates the difficulties of balancing making weight and training. Thus although making weight was perceived as an integral part of competition preparation, it was also perceived to demand an increased focus and consequently detracted from other important aspects of preparation.

For participants, making weight also required high levels of control, which were not always possible because of other commitments. For example, Neil lost control over his diet schedule as a result of work, training, and family commitments, writing: “the main stress was time, not having time to eat the controlled meals that I had arranged for myself, just trying to fit everything in” (diary entry, 19 days till competition). Thus while participants initially attempted to plan and prepare their weight loss strategies, there were often uncontrollable events or demands that proved difficult.

Temptation

As a result of having a restricted diet all participants experienced temptation while making weight. This temptation generally took one of two forms, being either prompted by others or unprompted. Participants were then either successful or unsuccessful at resisting this temptation.
Unprompted temptation was described as an increased awareness of food and drink opportunities unprompted by the deliberate actions of others. Mark provided an example of this temptation: “I went into the petrol station, looked around at what I wanted to eat and then came out with nothing and felt instantly better. Not any less hungry but just satisfied, instantly better that I had self-control” (diary entry 15 days till competition). Diary entries suggested that this form of temptation was easier to cope with and was usually always successful, particularly as Mark suggests, because unprompted temptation could be resolved through self-control.

The second form of temptation was prompted by others and was experienced when being offered food or drink. For participants, it was this form of temptation that was suggested as more difficult to resist. Participants described that this form of temptation was often associated with perceived societal norms and expectations to accept food and consequently the negative perceptions associated with not eating. Participants’ responses to this form of temptation were often influenced by timing. For example, when this temptation was experienced in the early phases of making weight a common response was to have a small portion, avoiding the negative perceptions of others. As Jane described during interview:

I think when it’s a couple of weeks before you can kind of like, have we call them cracks, you can afford to crack a little bit away from your diet, you think that a square or a couple of squares of chocolate isn’t going to have that much impact. Yet, this type of strategy became increasingly difficult in the later stages of making weight. Karen described feeling pressured by others two days before her weigh in:

My mum ordered a takeaway and I looked at her like THANKS!!!… I ate it. I had the chips and stuff and then I wanted to make myself sick but I knew I couldn’t,
my mum would kill me. And so I had another sauna, shower, I had two that night.

My mum wasn’t very happy about it…but I can’t believe that she’s done this and I’m going to be over regardless of what I eat. (Diary entry 2 days till competition).

Similarly, Mark described the difficulties associated with being offered food by others:

The temptations are there and it’s rude not to. Like at kids’ parties, or someone’s birthday and someone will say ‘oh have a piece of cake’ and I will reply ‘really I am dropping weight for this competition’ and they are thinking oh, well you shouldn’t be here then. (Diary entry, 35 days till competition)

Temptation prompted by others was frequently associated with a need to accept food and an aim to avoid drawing attention to what may be perceived as unhealthy eating behaviours. During interview Jane described: “I think there is also pressure with bulimia and stuff, there’s this whole thing, especially with saying no to food that there is something wrong”. Participants demonstrated awareness that their eating behaviours may be perceived negatively by others, but often felt that such perceptions were ill informed.

In particular, this perception was also highlighted by male participants, for example during interview Neil suggested:

Someone would offer me beer or a bit of cake, something I know I shouldn’t be eating and I just have to say no. I know it’s a bit lame, I’m a guy and I just have to sit and have fruit, it’s lame so I just have to say I’m trying to be healthy or something… That’s better than saying I’m on a diet.

As a consequence of their concerns, efforts were often drawn towards hiding eating behaviours in an attempt to appear “normal”, but such actions were then underpinned by guilt and the need to engage in further actions towards weight loss.

Although participants recognised that their behaviours were often unhealthy, the everyday
temptations offered to them by others often made them feel isolated and that others lacked understanding. As Louise described: “My room mate didn’t really understand, she was 100 kilos … to her it didn’t really matter. She was just sitting there eating chicken and crisps. She was just sat there watching TV while I was worrying” (diary entry 4 days till competition). This limited understanding from others often caused participants to hide their weight loss behaviours and avoid discussions.

*The Impact of Hunger and Restricted Nutrition*

Participants described the difficulties associated with coping with increasing levels of hunger and thirst. At the start of the making weight process participants were more able to cope with hunger. For example, Mark specifically selected unhealthy foods:

I almost cut out what is good for me, or better for me. So less quantity and more calorie, more satisfying (laughs). Things that I have been craving…. something small but sweet, even if it’s a nice healthy bar I have it covered in chocolate (diary entry, 20 days till competition).

Strategies such as selecting unhealthy food were useful in the early phases of making weight but more difficult in the later stages where weight loss often needed to be more drastic. For example during interview Jane suggested: “in the last week I don’t want to see food”. Despite attempts to cope participants often struggled with strict dietary regimes: “I just needed something, just something better than what I had been eating... when I am making weight I don’t cook, I just prepare cold food” (Jane, diary entry 12 days till competition).

For participants the implementation of dietary restriction often also had emotional implications. Participants reported experiencing heightened depression, frustration, agitation, and anger in response to hunger and having a restricted diet. Louise described:
I’m in a bad mood and I tell people to just give me some space and let me get on with what I am doing. And then I think that after a little while they realise that I’m under a lot of pressure and they say sorry. It’s horrible but I get through it, I’m just cranky from not eating. (Diary entry 3 days till competition).

Similarly Jane described her emotional responses: “I get a bit needy, I know I am being stupid and it’s just neediness but you want someone to sympathise with you... it’s those sort of feelings where you haven’t got anything to smile about” (diary entry, 7 days till competition). Participants described a range of negative emotions and events where relationships with others were adversely impacted. Yet in addition, these emotions were accompanied by an awareness that often prompted them to explain to others why they were behaving in these ways. Thus from previous experiences participants were able to minimise the impact of their negative emotions by understanding the causes and explaining these causes to others.

As a consequence of restricted food and drink participants described increased levels of tiredness and physical fatigue. For example, Ollie’s descriptions of making weight focused heavily on his tiredness. He reported becoming increasingly tired and fatigued over the four week period to the extent that it impacted both his psychological and physiological wellbeing. He described during interview how being tired made him more stressed at work, feel more irritable and aggressive towards colleagues, suggesting that “it got to the point where I was so tired some mornings, where I couldn’t even be bothered to go and get a drink”.

Although restricted nutrition and hunger was an expected and previously experienced stressor participants still cited this as a key difficulty while making weight. Although initial strategies allowed for the consumption of some desired foods, the later
need to lose weight often resulted in increased frustrations, reports of mood disturbance, and the use of distraction techniques to avoid thoughts of food and drink. In addition, participants described that their low mood was accompanied by feelings of physical fatigue and tiredness. Although the consequences of a restricted diet had a number of negative impacts, participants in the current study demonstrated awareness that their low mood was explainable (and consequently acceptable) to others. Thus emotional disclosure was used as an effective stress reducing strategy.

**Desire for Social Support**

Although all participants were experienced athletes and had made weight on many occasions, all described times or events during the process when they desired social support that was often unavailable. On occasions where support was received participants were able to recognise the motivation that this support provided. For example, Karen described: “I was so tired, I really felt like giving up, but I didn’t, I had my Dad standing at the side and he was cheering me on... I think that that was the only thing that got me through” (diary entry, 2 days till competition). Yet often, participants felt in need of support but were unsure where to seek it. Jane exemplified this difficulty, suggesting during interview that others often did not recognise the difficulties that she was going through while making weight: “when you get bruises you have something to show for it, I have something to complain about, but when you are dieting you don’t really have anything to show for it”. Thus social support was often needed to help participants to cope with the emotional impact of making weight.

The second reason for needing social support was to increase motivation while making weight. Jane highlighted this theme writing
When you are on your own and you are stressed it’s like ‘oh my god’ and you think you are going insane and you don’t have anyone there to just tell you no, it’s fine go on this run with me, give you a bit more motivation… it’s such a lonely process, going to the gym and you don’t have people who are doing it as well and [friend] comes in with a plate of pizza. (Diary entry, 8 days till competition).

Although social support was needed to motivate participants to achieve their goals, it was also frequently recognised that existing support networks may not support them in the unhealthy behaviours that they were engaging in. As Louise described:

My housemates, for instance, they keep saying it is really unhealthy and you shouldn’t be dropping weight so regularly. And I just keep saying that I am doing it for my sport which in a way is unhealthy, keep going up and down. So it’s still in the back of my head that it’s unhealthy but I know that if I want to do what I want to do in judo then I will have to overcome this and make weight. (Diary entry, 3 days till competition)

Although support was not gained for the unhealthy eating behaviours in which they were engaging, participants did describe experiences when others noticed their weight loss:

“there’s a photo taken of me on [social networking site] the night after I made weight and everyone is commenting on it saying ‘you look really skinny’ I do look skinny, I look tiny… but when people say you look skinny you feel happy that people are noticing” (Jane, interview).

Thus although participants recognised that existing support networks were present, people in these networks did not always understand the demands and necessities of making weight. Further, unhealthy eating behaviours were often hidden from those within support networks.
networks but the results of these behaviours (i.e. weight loss, change in body shape) were evident and the resultant praise was perceived as satisfying.

Discussion

Employing a diary-interview method of data collection, this study explored the making weight experiences of six judo athletes. Investigating the day to day diary entries of these athletes has provided an understanding of their lived experiences and revealed their difficulties associated with making weight. We now reflect on some of the main characteristics of these experiences and illuminate the contribution that the use of written diaries can make to sport and exercise psychology research.

For all participants, planning and organisation were perceived as key to successfully making weight. As suggested by Leyden and Wall (2002), experienced athletes will refine their making weight strategies based on previous experiences. Yet despite well-planned intentions, the process of making weight often presented unexpected stressors and difficulties. Although all participants had vast experience of making weight this did not prevent them from experiencing unexpected stressors. This confirms findings from earlier research by Dugdale, Eklund, and Gordon (2002) who suggested that over two thirds of their Olympic level participants reported their main stressor experienced was unexpected. For participants in the present study, unexpected stressors included difficulties in losing weight, temptation, and difficult relationships with others. Devonport, Lane, and Biscomb (2013) proposed that unexpected stress may produce stronger emotional responses and impaired coping in comparison to expected stress. Indeed, participants in this study were more willing to accept those stressors that were expected (e.g., emotional changes as a consequence of hunger) using more adaptive coping strategies, but reported difficulties coping with unexpected stress. Further, in
similarity to participants in Dugdale et al.’s study, although stressors were unexpected they were also often familiar and had been previously experienced. As suggested by Thatcher and Day (2008), truly novel (or unfamiliar) stressors may be uncommon in high level sport, particularly given the competitive experience needed to achieve a high performance level. Yet Thatcher and Day continued that sporting experience may also allow athletes to develop pre-conceived expectations regarding competition, which may make them susceptible to stress when these expectations are no longer met. In accordance with this, participants’ initial positive expectations regarding their plans for making weight often meant that they did not expect many of the stressors encountered, despite having experienced these before.

In addition to the unexpected nature of some stressors, results also further highlighted two main factors which ameliorated the difficulties in coping while making weight. The first of these factors was the dual role experienced by participants. Previous research has suggested that dual roles may be an enriching experience, but that tensions may exist when balancing competing role demands (Leberman & LaVoi, 2011). As Baxter (1990) suggested, in order to negotiate the tensions of duality, choices often need to be made between selecting one identity over another, or satisfying neither role. Although participants were accustomed to coping with a dual role, the need to make weight added an increased demand on the athletic role over other roles, often leading to feelings of guilt, particularly where such choices were made to the detriment of other people.

The second factor which was described to ameliorate difficulties while making weight was the constant temptation that was experienced by participants. Previous research has suggested that a combination of behavioural and cognitive coping efforts will
be most effective in preventing temptation (Humke & Radnitz, 2005). Although such studies advocate the use of cognitive strategies such as willpower and self-punitive thoughts, in the current study this form of coping was problematic given the influence of others. Whereas previous research has focused on the influence of temptation on negative stimuli (such as smoking and alcohol), in this context eating was actively encouraged by others. As a consequence participants were able to engage in behavioural coping strategies such as avoiding particular situations, but described the use of cognitive strategies as more problematic.

Although participants described a range of strategies for coping with making weight, one consistent concern was the need to hide, avoid, or disguise their unhealthy eating behaviours. Previous literature has suggested the presence of disordered eating attitudes (Caulfield & Karageorghis, 2008) and the relatively high percentage of eating disorders (Leydon & Wall, 2002) in weight restricted sports. Although it is beyond the scope and remit of the current study to suggest the presence of disordered eating, diary entries often focused on the need to hide eating behaviours and the knowledge that while making weight was necessary, weight restrictive behaviours were also, at times, unhealthy. Busanich, McGannon, and Schink (2012) suggested marked differences in the narratives used by physically active males and females to describe their relationship between eating and exercise. Indeed, in the present study, although both males and females hid their weight loss behaviours from others, the intention of this avoidance often differed. For female participants, the perceived stigma of being labelled with an eating disorder often led them to hide or disguise their eating habits. On the other hand, male participants engaged in similar behaviours but their aim was to uphold a masculine image. In particular, male narratives suggested that while it was acceptable for women to diet,
men should care less about eating and diet. This has similar connotations to Smith (2013), who described the health stories of disabled men, suggesting a notable theme that “real men” do not care about health, but women do. Such health stories were seen to uphold hegemonic masculinities, similar to the male response to dieting in this study. Further, research such as Papathomas and Lavallee (2006) has highlighted the self-presentation concerns associated with disordered eating, illustrating the fear of stigmatization and consequent engagement in secretive behaviours. Disordered eating behaviours may be perceived as a stigma from mental illness, contradicting athletic identity (Papathomas & Lavallee, 2010). Yet, in particular, for this population of judo athletes, weight loss was important and necessary for their sport, thus providing a contrasting ideal to the image that was portrayed to others outside the sport.

Following the need to disguise unhealthy eating, participants’ narratives often focused on the paradox of hiding behaviours while describing the desire to be supported by others. Dovey (2010) suggested that eating disorders will often be characterised by such contradictions regarding social interactions. He emphasised that although relationships with others are craved, individuals will often withdraw when this is offered, placing a negative interpretation on what others say. Such examples of interactions with others were frequently described in participant diaries, highlighting the isolation associated with making weight and the perception that others would not understand. Papathomas and Lavallee (2010) also highlighted this withdrawal from relationships, suggesting that withdrawal may be perceived as easier than concealing the disordered self from others. Further, their research suggests that lack of understanding may be a strong barrier to receiving social support, particularly as psychological issues are often covert and taboo. Yet given this lack of understanding it is surprising that participants rarely
described seeking support from others involved in the sport. Instead, they tended to withdraw from weight related discussion, focusing on support opportunities that were not available rather than seeking those who might understand. The receipt of social support has been theorised to enhance coping performance, and buffer against threatening stress appraisal (Lakey & Cohen, 2000). Participants described that when there was a match between what was perceived as required and received the support of others was positive, yet when there was a mismatch social support was viewed negatively. This view of social support resonates with the stress-support matching hypothesis (Cutrona & Russell, 1990) which proposes that the effectiveness of social support in promoting coping and reducing stress appraisal is based upon how well the support provided matches the demands of the stressor. The view of social support here emphasises the value of the receipt of support and the requirement that the support provider should be empathetic to the demands of making weight.

Interestingly, while participants often concealed their weight loss behaviours from others, the disclosure of emotions was perceived as more acceptable. Further, when participants did engage in emotional disclosure, this was suggested to be an effective strategy. The use of emotional disclosure has been well supported in the research literature as a method for improving health (Lepore & Greenberg, 2002) and psychological well-being (Sloan & Marx, 2004). Thus results here are consistent with previous research that advocates the use of such a strategy. Schüler, Job, Frohlich, and Brandstätter (2009) suggested that disclosure changes the emotional and cognitive processing of stressful experiences. Disclosing emotions to others may foster the integration of our experiences into a coherent narrative that may render the stressful experience more meaningful (Pennebaker & Seagal, 1999). For participants, becoming
aware of their emotions and discussing these with others may have acted as a stress buffer for their behavioural weight loss strategies. As suggested by McLeod (1997) the stories we tell allow us to contextualise or locate our feelings and emotions within a broader framework of meaning. Thus, while participants may tell stories of sadness or envy, the context provided by the experience of making weight provides justification and a sense of meaning. Yet for these participants the stories told to others remained highly censored, focusing on a plot that would be acceptable to the listener and avoiding the fear associated with telling a story that may be challenged or not accepted. As Smith and Sparkes (2008) suggested in their discussion of tellability, the listener may legitimise the types of stories that are deemed acceptable. Here, participants sought to tell the part of their story that could be affirmed and accepted by others, but silenced those aspects that which might not be honoured and truly listened to. While emotional disclosure provided participants with some affirmation, it may be beneficial for practitioners to consider the conditions that can be created to allow the telling of less acceptable and fear provoking stories.

In addition to the understanding the process of making weight, this study also provides insight into the use of the diary-interview method. Previous research such as Leydon and Wall (2002) had noted some under-reporting of the methods to make weight, suggesting that of those participants who reported using no weight restriction methods, most had energy fluctuations consistent with food restriction. The present study used a more participant centred, unstructured approach, which aimed to allow the participant to write freely about the process of making weight. All participants completed the study, although despite utilising the suggestions of Day and Thatcher (2009) to maintain commitment, those that took longer to make weight did experience a declining
compliance. This is perhaps unsurprising given that the longest time to make weight was 42 days.

The strength of the diary-interview approach was in the depth of data collected and the ability to collect data in the here and now. Diary entries often contained emotive content that may have been missed using retrospective interviews. Further, for many participants, the diary also allowed for increased reflection on the process of making weight and was perceived as a useful addition to training. This is an interesting point to consider, and the relative merits may differ for the researcher and applied practitioner. From a research perspective, the increased awareness afforded by the daily diary may have prompted participants to make changes during the data collection phase of the study. Indeed, a number of participants reported realisations of ineffective coping while writing the diary. Although this may be problematic for any researcher who aims to capture a static picture of reality, it serves as a poignant reminder that human stories will be in a constant state of change. Consequentially, it may be suggested that methods capturing data over time need to be flexible and adaptable to account for (and embrace) such changes. For the applied practitioner, such changes may be more readily welcomed, supporting previous research (e.g., Hudson & Day, 2012) that has indicated the therapeutic possibilities of writing.

In conclusion, it is hoped that this study provides some insight into the experiences of the individuals presented, highlighting the difficulties that may be associated with making weight in sport. Although all six participants had vast previous experiences of making weight, their stories describe the complex struggle with the impacts of hunger, tiredness, and negative emotions. Yet for these participants, the stressors experienced are set within a narrative that encourages secrecy and avoidance in order to present a
“normal” relationship with food. The stories told by participants also allow us to suggest a number of considerations for those providing psychological services to athletes making weight and to their coaches. First, although preparation and planning may be key components of a weight loss strategy, goals should be flexible and plan for deviations from expected progress. Further, it must be acknowledged that strategies may be impacted by the difficulties associated with balancing dual roles and consequently this balance may need to be considered when setting goals. Second, it should be recognised that the achievement of weight loss goals may be threatened by temptation, particularly temptation initiated by friends and family. Assisting athletes in gaining awareness of their coping options and the range of cognitive and behavioural options that are available may help to prevent avoidance and withdrawal. Third, participant stories highlight the importance of social support. In particular, although this support is often desired the stigma associated with weight loss, impact on athletic identity, and perceived lack of understanding from others may all act as barriers to receiving support. Overcoming these barriers may present difficulties, but the value (and possible increased acceptability) of disclosing emotions over behavioural strategies may be emphasised to athletes.

References


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