The Effects of Perfectionism in Elite Sport: Experiences of Unhealthy Perfectionists
Abstract

This study examined the perfectionism experiences of 10 elite perfectionist athletes (5 male and 5 female). Following completion of the Sport Multidimensional Perfectionism Scale-2 (Gotwals & Dunn, 2009), a purposeful sample of unhealthy perfectionists were interviewed in relation to the study aims. Several themes emerged from the data that related to: effects of perfectionism and its antecedents on sporting experiences, specificity and level of perfectionism, and the coping skills and techniques used to counter the potentially detrimental effects of perfectionism. The findings highlighted the multi-dimensional nature of perfectionism and the need for future research to further explore the efficacy of techniques athletes use to promote healthy and reduce unhealthy facets of perfectionism.

Keywords: perfectionism, unhealthy perfectionists, organization, control
The Effects of Perfectionism in Elite Sport: Experiences of Unhealthy Perfectionists

Perfectionism is an important individual difference variable that has been shown to predict a variety of negative psychological disorders including depression (Blatt, 1995), obsessive-compulsive disorder (Davey, 2008), and anorexia nervosa (Bastiani, Rao, Weltzin, & Kaye, 1995). In extreme cases it has even been linked to suicide (Blatt). However, despite this, certain facets of perfectionism have also been associated with positive attributes such as heightened self-confidence (Stoeber, Otto, Pescheck, Becker, & Stoll, 2007), task goal orientations (Dunn, Dunn, & Syrotuik, 2002; Stoeber, Stoll, Pescheck, & Otto, 2008), high personal standards (Anshel, Kim, & Henry, 2009), enhanced task performance (Stoll, Lau, & Stoeber, 2007) and success (Gould, Dieffenbach, & Moffett, 2002). Conceptually, a number of developments have helped clarify our understanding of the aforementioned findings. For example, more recent multi-dimensional conceptualizations of perfectionism (Flett, Sawatzky, & Hewitt, 2005) have replaced the uni-dimensional view of the construct which was more commonly associated with the negative connotations outlined above (e.g., psychological distress and negative evaluations; Burns, 1980).

The most influential multi-dimensional models of perfectionism were proposed by Frost, Marten, Laharat, and Rosenblate (1990) and Hewitt and Flett (1991). Although both conceptualized perfectionism as being multi-dimensional, the models differed in the number of dimensions that comprised it. However, subsequent examination of the models suggested a relationship between the underlying dimensions, giving rise to two distinct perfectionism factors (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). One factor, termed ‘positive achievement striving’, was linked to positive facets of perfectionism including personal standards and preparation. The second factor, termed ‘maladaptive evaluation concern’ reflected the negative effects of perfectionism and comprised the dimensions of concern over mistakes, doubts about actions, socially prescribed perfectionism, parental expectations, and
EFFECTS OF PERFECTIONISM IN ELITE SPORT

Recent conceptualizations have suggested a preference for the factors to be termed ‘perfectionistic concerns’ (PC) and ‘perfectionistic striving’ (PS; e.g., Gaudreau & Antl, 2008; Stoeber & Becker, 2008; Stoeber & Otto, 2006). Research in sport that has examined PC and PS has generally associated PC with the maladaptive facets of perfectionism; factors such as concerns over mistakes, perceived parental pressure, and perceived coach pressure (e.g., Gucciardi, Mahoney, Jalleh, Donovan, & Parkes, 2012; Stoeber & Otto). Conversely, PS has been suggested to comprise the adaptive facets of perfectionism, namely high personal standards and organization.

When examining PS and PC in sport, researchers have taken two different approaches; namely, a dimensional or group-based approach. The dimensional approach adopts a position whereby facets of perfectionism are combined to form two independent dimensions of perfectionism (i.e., PS and PC). The group-based approach aligns with the dimensions of PS and PC but proposes individuals display differing levels of facets relating to PS and PC, leading to them being classified as either a healthy or unhealthy perfectionist. Because it enables both PS and PC facets to be distinguished and made explicit, recent perfectionism research has viewed the group-based approach more favorably than the dimensional one. It also avoids some of the potential issues of using an approach where negative facets of PC can conceal the positive associations of PS (Stoeber & Otto, 2006).

Group-based perfectionism research was originally proposed by Hamachek (1978) who described two different types of perfectionist orientations; healthy and unhealthy. Healthy perfectionism reflected an individual’s tendency to possess PS facets combined with low levels of PC facets (Stoeber & Otto, 2006). In contrast, unhealthy perfectionism reflected an individual’s tendency to possess both PS and PC facets (Stoeber & Otto). Group-based perfectionism research led to the creation of Stoeber and Otto’s tripartite model of perfectionism. This model proposed two groups of perfectionists (healthy and unhealthy)
with non-perfectionists forming a third group. Recent research has continued to use the
group-based approach (e.g., Gucciardi et al., 2012; Sapieja, Dunn, & Holt, 2011; Stoeber &
Otto) with additional group-based models also being proposed (e.g., 2 x 2 model of
perfectionism; Gaudrea & Thompson, 2010).

When adopting a group-based approach to research, healthy perfectionists have been
found to have higher levels of mastery approach goals, and lower levels of performance
avoidance and mastery avoidance goals compared to their unhealthy counterparts (Gucciardi
et al., 2012). Healthy perfectionism has been associated with task goal orientations in
Canadian Football players (Dunn et al., 2002), and heightened self-confidence in high school
athletes (Stoeber et al., 2007). Unhealthy perfectionists have been found to have a desire to
avoid incompetence relative to external and internal standards, as well as the attainment of
externally derived standards of competence (Gucciardi et al.), reduced self-confidence
(Stoeber et al.), and unhealthy achievement goal orientations (Dunn et al.).

Previous multi-dimensional research involving PC and the facets that comprise it has
shown that high levels of PC are associated with athletes reinforcing failures and
demonstrating perceptions of low competence (Stoeber & Becker, 2008). Similarly, PC has
been suggested to lead to negative self-evaluations, the under-rating of performance (Stoeber
& Becker), and a perception of anything short of perfect as being a failure (Anshel &
Mansouri, 2005). Athletes high in PC have been suggested to have a tendency to internalize
failures and externalize success, resulting in a diminished enjoyment of sport (Anshel &
Mansouri). Furthermore, PC has been associated with attempting to maintain a public image
that is bereft of flaws or weaknesses and reacting negatively to imperfections (Blatt, 1995).
PC has also been linked to avoidance goal orientations (Stoeber et al., 2008) and fear of
failure syndrome (Sagar & Stoeber, 2009; Stoeber & Becker). These characteristics can lead
to excessively high levels of competitive trait and state anxiety, which can harm performance
EFFECTS OF PERFECTIONISM IN ELITE SPORT

PC has also been associated with a higher risk of exercise dependence (Hall, Hill, Appleton, & Kozub, 2009), burnout (Appleton, Hall, & Hill, 2009), competitive trait anger (Vallance, Dunn, & Dunn, 2006), fear of embarrassment and shame (Sagar & Stoeber), reduced self-esteem (Gotwals, Dunn, & Wayment, 2009), and depression (Rice & Mirzadeh, 2000). Externally, athletes high in PC have been found to feel pressurized by concerns about their parents’ and coaches’ standards and evaluation, and criticism of their performance (Anshel & Eom, 2002; Dunn et al., 2002). Indeed, PC has been correlated with a variety of maladaptive characteristics, all of which have been suggested to have a negative effect upon sporting performance.

In contrast, PS has been associated with a commitment to exceptionally high standards and facets that are typically deemed to be adaptive (Gucciardi et al., 2012). Individuals high in PS have been found to use maximal effort in the pursuit of their high standards (Blatt, 1995) and often view their performance environments as relatively supportive and non-threatening from a social evaluation perspective (Dunn et al., 2002). When experiencing failures athletes high in PS view them as outcomes that facilitate future performance improvements, rather than a representation of low ability (Anshel, 2003). PS has also been related to a variety of positive outcomes in the absence of PC. For example, in the learning, acquisition and improvement of skills and performance, Stoll et al. (2007) found that striving for perfection during training predicted performance increments over repeated trials as well as higher task performance. Other researchers have also reported a positive relationship between PS and self-serving attributions (Koivula, Hassmén, & Fallby, 2002), enhanced approach goal orientations, hope of success and approach motivation (Stoeber et al., 2008), and perceived ability to achieve within an academic setting (Bieling, Israeli, Smith, & Antony, 2003). Negative correlations have been found between PS and both fear of
failure, and self-deprecating attributions (Stoeber & Becker, 2008). In a performance context, PS has been linked to positive attributes that enhance or associate with elite training and sporting performance (Gould, et al., 2002; Stoll et al.). Although some of these characteristics have been associated with other psychological constructs (e.g., task goal orientation) it is the PS facets of perfectionism that relate to having high personal standards or striving for excellence which reflects their distinctiveness. It appears therefore that athletes with higher levels of PS may be less susceptible to certain negative correlates associated with PC and have a greater opportunity for enhanced performance, than those with lower levels of PS.

Collectively, research that has explored perfectionism within a sporting context provides support for both its beneficial and detrimental effects. However, a reliance on quantitative research designs has resulted in a limited insight into athletes’ perceptions of the effects of perfectionism within sport. Indeed, the importance of such insights, alongside the need to move beyond models of perfectionism developed outside of the sport context has been the stimuli for a number of recent qualitative studies on perfectionism (e.g., Gotwals & Spencer-Cavaliere, 2014; Hill, Witcher, Gotwals, & Leyland, 2015). Building on research from other domains, such as education (e.g., Speirs Neumeister, Williams, & Cross, 2007), Hill et al. explored the opinions and perceptions of self-identified high-level perfectionist performers in sport, dance, and music. Participants’ characterised being a perfectionist as a source of inner drive, providing greater capacity for accomplishment but also, albeit to varying degrees, contributing to an increased sense of strain in their lives. Although the content of current models and measures largely captured the perfectionist features participants identified, Hill et al. suggested greater focus on obsessiveness, dissatisfaction, and the intra- versus inter-personal dimensions of perfectionism would further enhance our understanding of the lives of perfectionists in these domains. Hill et al.’s findings more closely resembled the accounts of academically gifted self-oriented perfectionists reported by
Speirs Neumeister et al. than those of the perfectionist athletes in Gotwals and Spencer-Cavaliere’s study. In the former study, participants described the same commitment to high standards, an all-or-none thinking and distain for settling for anything short of perfection (Speirs Neumeister et al.). In the latter study, the healthy and unhealthy intercollegiate perfectionist athletes reported a variety of characteristics (e.g., a sense of confidence but rigid, all-or-nothing thinking and difficulty dealing with mistakes), reflecting similarities and idiosyncrasies. Notably, all of the studies reinforced the merits of qualitative research in providing a more holistic and in-depth insight into perfectionism across different domains and called for further qualitative research to build on the existing findings. The present study responds to these calls by qualitatively exploring elite perfectionist athletes’ experiences of perfectionism in sport and its effects on their sporting experience.

**Method**

**Participant Selection**

Purposeful sampling was employed to select elite perfectionist athletes for in-depth semi-structured interviews. The sampling process began with a participant pool of 67 elite level athletes from the United Kingdom who completed the Sport Multidimensional Perfectionism Scale-2 (Sport-MPS-2; Gotwals & Dunn, 2009) to evaluate their multi-dimensional levels of perfectionist tendencies. For the purpose of the study, elite level was defined as current or recent participation in international competition. Following completion of the Sport-MPS-2 a three-step procedure was employed to derive a purposeful sample of participants reflective of a multidimensional conceptualization of perfectionism. First, participants’ subscale scores were computed for the Sport-MPS-2. Second, in line with Stoeber and Otto’s (2006) tripartite model of perfectionism participants who did not score highly on personal standards were classified as non-perfectionists. A personal standards score was deemed high if it was equal to or above Sapieja et al.’s (2011)
unhealthy personal standards mean score (3.96). This step reduced the sample from 67 to 30 athletes. Third, participants were removed if the majority of their subscale scores did not resemble the pattern of a healthy or unhealthy perfectionist proposed by Stoeber and Otto. Specifically, Stoeber and Otto’s tripartite model proposed that an individual is viewed as a healthy perfectionist if they score high on PS facets (i.e., personal standards and organization) and low on PC facets (i.e., concern over mistakes, perceived parental pressures, perceived coach pressure, and doubts about actions). An individual is viewed as an unhealthy perfectionist if they score highly on both PS and PC facets. To guide this, scores were compared to those of Sapieja et al.’s investigation into perfectionism in soccer (see Table 1). Sapieja et al.’s scores were used to guide this stage as they used the Sport-MPS-2 and provided specific grouping scores for healthy, unhealthy, and non-perfectionists. This process resulted in a final sample of 12 individuals; however, two were unavailable for follow up interviews resulting in a final sample of 10 athletes, all of whom were classified as unhealthy perfectionists. Potential participants were advised of the purpose of the study and provided written informed consent in accordance with the University’s ethical committee requirements.

**Participants**

From the original participant pool of 67 athletes, the purposeful sample of 10 perfectionist elite athletes participated in semi-structured interviews; based on the selection process outlined in the participant selection criteria section (see Table 1) all participants were classified as unhealthy perfectionists. Participants comprised five females and five males with ages ranging from 18 to 21 (M = 19 yrs, SD = 1.2). Participants competed in track and field athletics (n = 2), canoe slalom (n = 1), sailing (n = 1), dressage (n = 1), rugby league (n = 1), rugby union (n = 2), flat water kayaking (n = 1), and taekwondo (n = 1).
Sport Multidimensional Perfectionism Scale 2 (Sport-MPS-2; Gotwals & Dunn, 2009). Consistent with previous research and the domain (sport) specific sensitivity of perfectionism, the Sport-MPS-2 was used to assess participants’ perfectionist tendencies (Gotwals & Dunn). The Sport-MPS-2 comprises six dimensions (personal standards, concern over mistakes, perceived parental pressure, perceived coach pressure, doubts about actions, and organization) of perfectionism and contains 42 items that are responded to on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Cronbach alpha’s of greater than .74 have previously been reported for all dimensions of the Sport-MPS-2 (Gotwals & Dunn).

Cronbach alpha’s for the full sample (N = 67) in the current study were as follows: overall .91; personal standards .80; concern over mistakes .91; perceived parental pressure .96; perceived coach pressure .75; doubts about actions .83; and organization .91.

Semi-structured Interviews

Semi-structured interviews were used to examine participants’ experiences of perfectionism in sport. Semi-structured interviews elicit rich, in-depth information about perceptions of a given phenomenon (Gratton & Jones, 2004; Lincoln & Guba, 1985). Interviews were conducted using an interview guide that was based on an extensive review of the relevant research and methodological literature, and developed specifically for the purpose of the study (e.g., Gotwals & Dunn, 2009; Stoeber & Otto, 2006). Elaboration and clarification probes (e.g., can you give me any specific example; can you expand upon that?) were used to enhance the depth and meaningfulness of the information elicited (Gratton & Jones).

The interview guide contained three sections. The first examined the participants’ perceptions of perfectionism, the second explored the effects of perfectionism on participants’ performance in sport, and the third how the participants coped with perfectionist tendencies. Questions within the guide included: Could you share with me how you view
perfectionism – what do you think it is? What aspects of perfectionism would you say you possess? When perfectionism has those negative effects how have you combated it to reduce them? How do you facilitate those positive perfectionist tendencies?

**Procedure**

Interviews were conducted at a time and location of the participants’ choice to facilitate open and in-depth responses (Gratton & Jones, 2004). All interviews were conducted in a quiet, private room on a university campus and lasted between 40 and 60 minutes ($M = 50$). Interviews were recorded in their entirety, transcribed verbatim and subsequently sent to participants for member checking (Lincoln & Guba, 1985). Three pilot interviews were conducted to assess the effectiveness of the interview guide to address the purpose of the study and refine the researcher’s interview technique (Lincoln & Guba). As a result of the pilot interviews a number of changes were made to the wording and sequencing of questions, for example following the athletes’ personal view of perfectionism a definition of perfectionism was included.

**Data Analysis**

Data were content analyzed using within and cross case analysis (Miles, Huberman, & Saldaña, 2013). Within case analysis allowed in-depth exploration of single case phenomenon, whilst cross case analysis enabled generalizations, deepened understanding, and enhanced interpretability of participants’ experiences (Miles et al.). The analysis involved a number of analytical stages. First, individual transcripts were read and re-read to gain content familiarity. Second, meaning units were identified through quotations; these meaning units formed the basis of themes. Third, the within case themes were subjected to cross case analysis. Next, two experienced sport psychology researchers conducted confirmation checks. This led to the relabeling and removal of certain sub-themes (e.g., perceived parental pressure, perceived coach pressure, and teammate and competitor pressure).
pressure were combined to form external pressure). Finally, an overall summary table was created to represent the data (Table 2).

**Trustworthiness.** A number of strategies were employed to enhance the trustworthiness of the data. An audit trail was produced to enable external scrutiny of the data collection procedures and establish authenticity (Miles et al., 2013). Pilot interviews safeguarded the effectiveness of the interview guide and interview technique (Lincoln & Guba, 1985). Member checking was employed to confirm the accuracy and completeness of the information derived from the interviews (Miles et al.). Peer debriefing with an experienced independent researcher during study design, data collection, analysis and report writing provided an opportunity to test and refine working hypotheses, clear the mind of feelings and emotions that clouded good judgment, and protected against researcher bias (Lincoln & Guba).

**Results and Discussion**

The data coalesced into three themes reflecting unhealthy perfectionism: effects of perfectionism and its antecedents on sporting experience, specificity and level of perfectionism, and coping skills and techniques used to counter the potentially detrimental effects of perfectionism. The following narrative explores these themes.

**Effects of perfectionism and its antecedents on sporting experience**

Consistent with the facets of perfectionism and what is conceived as PS and PC, participants’ perceived perfectionism affected them in both an adaptive and maladaptive manner. The following section considers the antecedents and consequences of perfectionism in relation to elite athletes’ sporting experiences and where appropriate highlights differences between participants. A results table summarizes the findings (Table 2).
Perfectionist Striving. Participants identified a number of characteristics associated with PS, with all participants highlighting the adaptive attributes of personal standards and organization.

Personal standards. Consistent with previous research that views high personal standards as a core facet of perfectionism (Stoeber & Becker, 2008), all participants highlighted benefits of high personal standards. High personal standards were suggested to motivate all participants to try to attain perfection in their performances; for example, “I think it [perfectionism] makes you better because you want to keep going and try and perfect everything”. Another participant suggested, “I set myself high goals in training so that it translates into performances…By having pre-set standards you have got something to adhere to but if you haven’t got anything in advance then you haven’t got anything to achieve”. The adaptive consequences of high personal standards, which were experienced by all participants, highlight the beneficial effect of perfectionism in sport. However, personal standards also had potentially debilitative effects. Consistent with previous research, (e.g., Hill, et al., 2015; Stoeber & Becker) high personal standards were linked to athletes being overly critical and never satisfied with performance. This finding aligns with Hill and colleagues’ theme of ‘Drive’, which represents an individual’s unwavering commitment to, and focus upon, constantly improving their performance/work.

Organization. Organization was highlighted by all participants and included effective preparation of performances and routines for different aspects of sport. All participants suggested that as a consequence of organization performance was enhanced. For example “Without perfectionism I wouldn't have planned as well and that would have led to not being as successful”. When discussing perfectionism within competition, one participant reinforced the importance of performance preparation, which they attributed to perfectionism:
When I am trying to be at the highest level in competition I would always try to have an exact routine for my setup so I would know I’d be trying to create a perfect situation. Prior to a performance I have my eating plan and the warm up plan and everything like that and I tried to stick to it, sort of a regimented survey so you don’t slip out of your view of what perfectionism is.

Participants also indicated performance preparation provided reassurance and enhanced confidence. For example, one participant suggested,

The positive aspect is, for me, I feel prepared, I know that when I go in that arena, I know that I have done everything that I could possibly do beforehand for it to be perfect. For me it’s almost like a security blanket.

Another commented, “[Perfectionism] gives me confidence knowing there are certain things I’ve done right”. The current findings align with Gotwals and Dunn’s (2009) research that identified organization as an athlete’s tendencies to establish and implement plans or routines that dictated their behavior prior to and during competition. The beneficial effects of organization and routines on performance suggested in our study are consistent with the enhanced focus that resulted from the healthy perfectionists use of organized routines in Gotwals and Spencer-Cavaliere’s (2014) work. Collectively, these findings suggest that both healthy and unhealthy perfectionists may benefit from organization and routines, a finding that is consistent with previous quantitative research that showed both healthy and unhealthy perfectionists score highly on this facet (Stoeber & Otto, 2006).

**Perfectionist Concerns.** Characteristics associated with PC clearly emerged from the group of unhealthy perfectionists sampled within the study. These characteristics were consistent with the maladaptive aspects of perfectionism with participants suggesting a potential negative impact on their sporting experiences.
**Self-critical tendencies.** The data suggested self-critical tendencies were perceived to have maladaptive influences upon the participants’ sporting experiences. Potential maladaptive effects were identified by all of the participants as a consequence of self-critical tendencies, tendencies were also influenced by other sport performers. The majority of unhealthy perfectionists perceived that a focus upon high personal standards helped foster characteristics of being overly self-critical. One participant explained, “I have a tendency to look at the negatives before the positives” and “afterwards I always think it didn’t quite go right in my race even if it was a good one”. Another suggested, “I will actually say sometimes ‘That judge hasn’t been harsh enough’...And ‘I don’t understand why they have given me that mark’”. The present findings highlighted the potentially debilitative effects of perfectionism and provided support for research that has indicated that being highly self-critical is a core facet of PC (Anshel & Mansouri, 2005; Sagar & Stoerber, 2009; Stoerber & Becker, 2008).

**Dissatisfaction with goal progress.** Unhealthy perfectionists also highlighted the potentially detrimental effects that resulted from being dissatisfied with their current performance levels and being unable to disengage from performance or training goals. For example, in a training context one participant stated “if I do the first set of the session badly I feel that is the whole session ruined straight away. I haven’t even started the session and it is ruined.” The individual went on to state “if things go badly I just say [to myself] ‘forget about it, let’s try and move on’, but no matter how much I try to forget it, it will still keep cropping up”. A taekwondo athlete also described how high standards in training hindered goal progress:

For example a simple jab like a little lunge, once I was there for ages just practicing then I was like you don’t need to be doing this but I stood there doing it, I didn’t know the exact way to do it but I stood there wasting time doing it which is quite
annoying… [You can spend] too much time on something which doesn’t need that
amount of time. Like you’re not distributing your time wisely between different
moves, you’re focusing too much on one and neglecting others for that time.

The current findings add to recent research that has proposed that perfectionists may
become fixated with flaws in performance and need to overcome these and improve,
regardless of the consequences (Hill et al., 2015). Outside of the domain of sport, DiBartolo,
Frost, Chang, LaSota, & Grills (2004) found high personal standards to be associated with
psychopathology when standards were used to define self-worth. This finding has important
implications for unhealthy perfectionists whose self-worth is contingent on their personal
standards being achieved.

Being part of a team was suggested to exacerbate concerns about the need to attain
high personal standards. For example:

You can focus on what they’re [teammate] doing and not what you’re doing and then
you have a bit of a conundrum. And actually because you’re concentrating on
someone else’s job you’re not making the boat go fast. But it’s all because you want
to make that perfect.

Indeed, the findings suggested that unhealthy perfectionists can become distracted by the
actions of their teammates, particularly when it affects their ability to achieve their own (or
collective) goals and personal standards. In relation to the potential influence of self- and
other-oriented perfectionist standards upon performance, Hill, Stoeber, Brown, and Appleton
(2014) suggested that the main driving force behind enhanced team performance was the
tendency to impose exacting standards and stringent evaluation on others, as opposed to on
oneself. The present findings illuminate the potentially debilitative effect of other oriented
perfectionism, albeit through what would appear to be a different mechanism. These
potentially debilitative effects have however been observed in previous research with other
oriented perfectionism leading to other-directed blame, lack of trust, and feelings of hostility towards others (Hewitt & Flett, 1991). Taken together, the findings highlight the need to further explore the effects of other- and team-oriented perfectionism, particularly in sports where performance necessitates high levels of co-dependency (cf. Hill et al.).

**Concerns over mistakes.** Concerns over mistakes, characterized by fear of failure and fear of making future mistakes, influenced the thoughts and behaviors of all participants before, during, and after performance. For example, one participant suggested:

I get really nervous before games, actually most games I get pretty nervous about even if there is nothing really riding on it. Even if it is just a game of rugby, a club game mid-season nothing really riding on it I will still be nervous about it. I think that’s a fear of failure, I think a fear of it going wrong rather than a fear of ‘God that's going to hurt’.

During a performance and in response to a mistake, one rugby player’s sentiments echoed those of many of the participants:

My performance will go down and everyone will say ‘you were having a good game then you missed that tackle and you completely disappeared, you weren’t even on the pitch’, I would still be playing but I would just be going through the motions. I would be scared to make another mistake rather than wanting another chance to prove that I am better…I would be like ‘oh no I can’t get into that situation again I will miss the tackle again’…So I would be overly wary of what I would be doing and my self-confidence would take a knock and my performance level would drop.

As a consequence of concerns over mistakes post-performance, one participant noted:

In a game I can block out anything bad I do, but after the game it will eat me up inside until I have literally gone through it bit by bit... I think I am probably my own worst enemy when it comes to my performance because I will rip it to pieces... Other
people will go ‘but you did this and this which was really good’, and ‘yes you did that which wasn’t so great’. But I would just be like ‘argh!’ I guess it’s because I would expect to be able to do those things, but I wouldn’t expect myself to do those one or two bad things.

The suggestion that unhealthy perfectionists are susceptible to being overly critical of mistakes is consistent with previous research. Specifically, the effects of PC include negative self-evaluations (Stoeber & Becker, 2008) and the view that anything short of a perfect performance is a failure (Anshel & Mansouri, 2005; Vallance et al., 2006). Indeed, participants in this study suggested that concerns over mistakes detracted from learning, reduced motivation and confidence, and increased stress and anxiety. Participants described being put off from future learning in training due to the potential effects of mistakes; “I’m sometimes a little bit apprehensive to make mistakes in training, which then leads to not learning as much as I could”. These findings are consistent with the association of PC with a fear of failure syndrome (Hamachek, 1978; Sagar & Stoeber, 2009; Stoeber & Becker) and the need to be flawless (Blatt, 1995), as well as research that has reported the detrimental effects of fear of failure on performance (Blatt; Gucciardi et al., 2012; Stoeber & Becker).

The ramifications of such concerns extended to their negative affect on the behaviors of the unhealthy perfectionists. Behavioral aggression emerged as a response to a mistake by over half of the participants. For example, one unhealthy perfectionist stated, “If I do bad in training all I want to do is go and punch a wall or take that anger out on something to help me relieve a bit of stress really”. Further, a taekwondo participant commented:

When I have done a stupid shot and the other person has scored I will get a bit annoyed and my standard will drop and I will start going to fight. Like I will hit him too hard or go for illegal shots and that kind of thing.
Previous research has suggested perfectionists are prone to experiencing anger in situations that involve negative evaluation and frustration and that this anger can interfere with task-relevant cognitions required for skilled performance (Vallance et al., 2006). Dunn, Gotwals, Causgrove Dunn, and Syrotuik (2006) suggested a predisposition to experience anger when playing poorly in competition was associated with a maladaptive perfectionist orientation.

**Doubts about actions.** Doubts about actions were viewed as a debilitative facet of PC by almost all participants. The unhealthy perfectionists in this study suggested doubts about action resulted in ‘over-thinking’ both prior to and during performance, particularly when attempting to prevent and overcome mistakes. The tendency to have doubts about actions was in-turn thought to have a detrimental effect on performance. For example, one participant commented, “I have been in situations where I have over thought something so much, trying to get it right, that when I have gotten in the arena I have just had a complete mental blank and just literally sat there”. Another explained, “I think how people in my race are going to beat me, if they’re faster or if they’ve done more. If my training hasn’t gone well how their training has gone perfectly, which probably isn’t the case”. These findings reflect research that has suggested doubts about actions result from performers appraising they lack the ability to accomplish achievement related activities (Hall, Kerr, Kozub, & Finnie, 2007).

**External pressure.** External pressures were experienced by eight of the ten unhealthy perfectionists. These pressures aligned with the previously reported facets of perceived parental pressure and perceived coach pressure. However, participants in this study also identified teammates and other competitors as external sources of pressure.

**Perceived parental and coach pressure.** The perception of parental and coach pressure was identified as salient by half of the participants. For example, one unhealthy perfectionist suggested:
My parents don’t come very often to watch me play but if they come and watch me play I want them to see me playing my best. If I’m not playing to what I could be I get negative thoughts like ‘that was bad your whole performance was shocking’. One little thing [can go wrong] and I will think that the whole performance was bad. Instead of going ‘I didn’t make that tackle’ I’m quite hard on myself really like ‘that was bad I have let them down’.

Similarly, participants highlighted a sense of pressure when performing as a result of not wanting to let their coach down; “Because if I don’t put the pass in or don’t make the tackle, I feel like I let my coaches down as they have put in the time coaching me”. The participants perceived pressure due to the desire to not let significant others down (e.g., coaches and parents), rather than the perception that significant others held unrealistic standards of them (e.g., socially prescribed perfectionism; Hewitt & Flett, 1991).

For some participants, coaches and/or parents helped to reduce the influences of PC attributes. For example a canoe slalom athlete suggested:

I do have a tendency to look at the negatives before the positives and my coach sometimes has to go ‘yes, that wasn’t quite as good - but look at these things that you did really well and those were quickest or as quick as the winner’.

This finding reinforces those of Appleton, Hall and Hill (2011) surrounding the role coaches and parents play in helping create a positive motivational climate for perfectionist athletes. Although there were some nuances in the findings relative to parent-athlete gender, overall Appleton et al.’s study highlighted the need for parents and coaches to mitigate against creating motivational climates that fostered a worry-conducive environment that heightens maladaptive perfectionist cognitions. Our findings, together with those of Appleton et al. add weight to the domain specific research that highlights both the potentially facilitative and
debilitative effects of coaches and parents on perfectionist athletes and their athletic performance (e.g., Appleton et al.; Hewitt & Flett, 1991).

Perceived teammate and competitor pressure. Over half of the participants highlighted the debilitative effect of perceived pressure of teammates or other competitors \( n = 6 \) on their sport experience, with the pressure from teammates being attributed to social comparison and a sense of letting teammates down. In relation to social comparison, one participant recollected:

I would always mark myself off against other people so I would be like ‘their pass is better than mine’ or ‘my pass needs to better than that’. I would look at higher individuals and think ‘I need to be where they are at’.

Another talked about social comparisons prior to a race; “…there’s a lot of focus on what other people are doing in their warm up, like ‘are they warming up now?’ and ‘do I follow their routine or do I stick to mine?’”.

In a team environment, pressure and concerns about letting teammates down were identified by three participants:

You feel like you have let your teammates down like ‘oh no I haven’t done that’.

Especially with my position as a fullback, if you miss a tackle it generally leads to a try. [If you miss a tackle and they score then] they are five maybe seven points ahead and then you know that it was your fault for missing that tackle even though sometimes the situation wasn’t like that and people are saying to you ‘don’t worry you will get the next one’. But you ask yourself ‘but what if I don’t?’ Then you feel bad and you feel like a lot of pressure is on you.

The same participant went on to suggest that such added pressures affected other areas of their game; “It affects all of your skills because you are concentrating so much on the tackle that your passes and kicks aren’t going to where you want”.
Consistent with Gotwals and Spencer-Cavaliere (2014) the findings highlight the significant role teammates can play in an unhealthy perfectionist’s sporting experience. To elaborate, Gotwals and Spencer-Cavaliere found that unhealthy perfectionists had the potential to experience concerns about their teammates’ thoughts and felt pressured to not let teammates down. Collectively, these findings reinforce the role that ‘others’ can play in helping unhealthy perfectionists define personal standards of achievement.

**Specificity and level of perfectionism**

Consistent with Dunn, Gotwals, and Causgrove Dunn’s (2005) suggestion that perfectionism should be viewed as a domain-specific construct, some of the unhealthy perfectionists in our study distinguished between sport perfectionism and more global perfectionism (see Table 3). For example, one participant indicated: “In general life, I’m just a bit like ‘ah it’s alright’, but for a competition I want to know everything to the minute”. Similarly, another highlighted this distinction when suggesting:

> It’s [perfectionism] completely separate. In my everyday life I would quite happily be ‘I'm not too great at this’ or ‘I'm not too great at that’ and it doesn’t bother me at all. I will be just like ‘whatever’ but as soon as it comes to rugby I would be like ‘no that's not ok’. It’s just completely split. In life I wouldn’t say I was near being a perfectionist at all but in rugby I would say that I strive to be the best.

With regard to the levels of perfectionism displayed in different contexts, three participants suggested their perfectionist tendencies were stronger during competition than training. For example: “I think I’m more of a perfectionist during competition”. Two participants stated that the level of perfectionism was affected by the importance placed upon the competition. For example, when competing in a lower level competition one participant stated:

> It doesn’t matter if it’s perfect, doesn’t matter if I take a couple of attempts as long as
I win I think it doesn’t matter. So my performance is generally quite poor in a league competition. But I think because it’s a league competition and it’s just for the points it doesn’t matter.

Taken together the findings suggested that events viewed as less important may be associated with a decrease in PS attributes such as high personal standards. These findings have potentially important implications for the conceptualization of perfectionism; specifically, that perfectionism may be best viewed as context-specific due to the variability in perfectionism within and across individuals and contexts. The findings in our study provide explicit evidence to previous suggestions that perfectionism should be conceptualized as being context specific (e.g., Dunn et al., 2005; Stoeber & Madigan, in press).

**Coping skills and techniques used to counter the potentially detrimental effects of perfectionism**

The final theme related to the skills and techniques unhealthy perfectionists used to counter the detrimental effects of perfectionism (see Table 4). The most frequently cited was the use of a pre-performance routine. These routines, which helped participants’ cope with heightened pre-performance anxiety, included attending to physical, technical, and psychological aspects of performance preparation:

Before a regatta I have to check all my kit, I have to clean my boat, if I don’t do that then there will a bit of dirt on it or something which is going to slow me down and it’s going to make me not get selected or not win a medal or something.

Participants also cited isolation as enabling them to use distraction techniques. For example one participant stated:

I used to always have to be on my own during training time. I used to take myself to the other side of the river so I could do my own thing and not be interfered with. So if it went wrong it was all my fault.
Similarly, one participant suggested that prior to competition “I try to shut myself off, I chuck
the music on to get away from everybody, I like to keep myself to myself.”

Distraction techniques were also used in situations when athletes could not isolate
themselves. These techniques included talking to others (e.g., “general chatting, you’re just
relaxed if you think about something completely different then the time goes a lot quicker”),
listening to music (e.g., “I feel that music can keep me at a controlled level”), and not acting
too seriously (e.g., “not being all serious takes my mind off things up until a minute before
the race which is when I need to focus”). Participants suggested that these techniques reduced
the possibility of over-thinking and becoming anxious prior to and during performance.

Three participants, who had previously received psychological support, cited the use
of imagery as a coping skill to help reduce perfectionism induced anxiety. An individual who
competed in dressage used a ‘circle of excellence’ technique: “A circle of excellence is what
I have used with imagery to get to somewhere that I feel relaxed...When I am riding it is
somewhere I feel relaxed and I'm not stressed”. The coping skills and techniques identified
by the unhealthy perfectionists in this study are not exclusive to perfectionists; they can be,
and have been documented as being employed by any athlete (e.g., Nicholls, Polman, &
Levy, 2010). As such, it could be suggested that the participants in this study did not have
any specific strategies that assisted them to cope with the potential debilitating facets of PC.

Rather, it appears that unhealthy perfectionist athletes might benefit from education and
training in specific skills or techniques that could be used to promote PS and reduce PC facets
of perfectionism. Hall, Hill, and Appleton (2012) proposed basic cognitive restructuring
should focus on teaching perfectionist athletes about the difference between perfectionism
and more adaptive achievement striving to promote psychological performance. Further, goal
setting training, if focused upon goal flexibility and evaluation has the potential to decrease
maladaptive characteristics of perfectionism (e.g., concerns over mistakes; Hall et al.).
Summary and Conclusion

This study examined elite, unhealthy perfectionist athletes’ experiences of perfectionism in sport. Participants highlighted the effects of perfectionism and its antecedents on sporting experiences, the specificity and level of perfectionism, and the coping skills and techniques used to counter the potentially detrimental effects of perfectionism. The findings supported research that has encouraged a multi-dimensional conceptualization of perfectionism emphasizing PS and PC facets (Gaudreau & Antl, 2008; Stoebert & Becker, 2008). PS was expressed through personal standards and organization whereas PC related to self-critical tendencies, dissatisfaction with goal progress, concerns over mistakes, doubts about actions, and external pressure. Our findings provided some support for Stoeber and Otto’s (2006) tripartite model of perfectionism with the majority of participants reflecting the pattern of PS and PC facets outlined within that model. However, our findings also provided some support for aspects of the 2 x 2 tripartite model of perfectionism (Gaudreau & Thompson, 2010). Specifically, the participants in this study were reflective of mixed perfectionists who have a combination of high PS and high PC. In relation to the conceptualization of perfectionism, some athletes in our study suggested perfectionism was context-specific; a finding that supports the view that perfectionism is domain specific (e.g., Dunn et al., 2005; Gotwals & Spencer Cavaliere, 2014).

It is important to acknowledge that there were both strengths and limitations to our research. The strengths of the study included stringent sampling procedures, the elite level of the sample, and the exploratory nature of the study; allowing adaptive and maladaptive considerations of perfectionism to emerge. Arguably, and perhaps inevitably given the stringent sampling procedures employed to create a purposeful sample of elite perfectionist performers, the findings were based upon a relatively small number of participants (n = 10). Future research would benefit from larger sample sizes that may allow findings to be
EFFECTS OF PERFECTIONISM IN ELITE SPORT

generalized to a wider population. Further, inclusion of healthy, alongside unhealthy perfectionists would enable a between group comparison of the effects of perfectionism. In the absence of any established norm values, the sampling criteria were based upon the findings of one paper (e.g., Sapeija et al., 2011). Future perfectionism research using quantitative methods should provide participant subscale scores to provide the basis for multidimensional norms to be established and built upon. Future research could also look to provide a more fine-grained understanding of the findings that have emerged from this study, particularly in relation to identifying the efficacy of strategies that aim to enhance athlete performance via the promotion of PS and the reduction of PC. In addition, future research should seek to further explore whether perfectionism would be best conceptualized as a trait, in a dispositional framework, or as something that is more context (or domain) specific.

A number of practical implications emerged from this study. The findings indicated unhealthy perfectionism can have both adaptive and maladaptive consequences for elite athletes. Therefore, when working with unhealthy perfectionist athletes, an environment in which PS is emphasized and PC is reduced needs to be fostered and the use of appropriate coping strategies encouraged. For example, Hill, Hall and Appleton (2010) emphasized that problem-focused coping (as opposed to avoidant coping) had the potential to reduce burnout in certain perfectionist athletes. In addition to the use of coping strategies, coaches in our study were highlighted as having a potentially beneficial influence on the unhealthy perfectionists. As such, a task-involved motivational climate should be promoted by coaches working with unhealthy perfectionists, in an effort to reduce the debilitating influences of PC.

Additionally, our study supports Sagar and Stoeber’s (2009) suggestion for educational interventions that train coaches to provide less critical evaluations and more supportive athletic environments, where mistakes and failures are accepted in order to reduce athletes’ concerns over mistakes. Educational interventions could also be extended to parents and
teammates of unhealthy perfectionists. Furthermore, and consistent with previous research, the current findings demonstrated the potentially detrimental effects of other-oriented perfectionism (e.g., Appleton et al., 2009; Hill et al., 2014). Therefore, goal setting interventions which focus upon flexibility and evaluation may have particular merit (cf. Hall et al., 2012). Finally, psychological skills such as relaxation and mental rehearsal may help to moderate the perfectionism-distress relationship (Hill et al). Overall, coaches have a potentially important role in creating an environment which promotes PS reduces PC. To achieve such a supportive environment it is suggested that coaches should emphasize goal flexibility, be accepting of mistakes, provide less critical evaluations, and wherever possible, educate unhealthy perfectionist athletes’ significant others.
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EFFECTS OF PERFECTIONISM IN ELITE SPORT


EFFECTS OF PERFECTIONISM IN ELITE SPORT


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### Table 1: Sport-MPS-2 subscale mean scores and comparisons with Sapieja et al. (2011)

<table>
<thead>
<tr>
<th>Participant Number</th>
<th>Personal Standards</th>
<th>Concerns Over Mistakes</th>
<th>Perceived Parental Pressure</th>
<th>Perceived Coach Pressure</th>
<th>Doubts About Actions</th>
<th>Organization</th>
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<tbody>
<tr>
<td>1</td>
<td>4.71</td>
<td>4</td>
<td>2.11</td>
<td>2.83</td>
<td>2.67</td>
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<tr>
<td>2</td>
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<td>4.5</td>
<td>4.22</td>
<td>3.33</td>
<td>4.83</td>
<td>3</td>
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<td>3</td>
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<td>2.5</td>
<td>1.44</td>
<td>3.83</td>
<td>1.67</td>
<td>3.83</td>
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<tr>
<td>4</td>
<td>4.14</td>
<td>4.5</td>
<td>4.89</td>
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<td>4.17</td>
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<tr>
<td>5</td>
<td>4.43</td>
<td>4.63</td>
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<td>3.67</td>
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<td>6</td>
<td>4.43</td>
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<td>2.5</td>
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<td>4.5</td>
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<td>7</td>
<td>4.29</td>
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<td>2.11</td>
<td>2.17</td>
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<td>8</td>
<td>4.86</td>
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<tr>
<td>10</td>
<td>4.29</td>
<td>4.13</td>
<td>2.78</td>
<td>3.5</td>
<td>2.33</td>
<td>4</td>
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Overall mean scores and (SD)

<table>
<thead>
<tr>
<th>Personal Standards</th>
<th>Concerns Over Mistakes</th>
<th>Perceived Parental Pressure</th>
<th>Perceived Coach Pressure</th>
<th>Doubts About Actions</th>
<th>Organization</th>
</tr>
</thead>
</table>

Sapieja et al.’s unhealthy perfectionists’ scores

<table>
<thead>
<tr>
<th>Personal Standards</th>
<th>Concerns Over Mistakes</th>
<th>Perceived Parental Pressure</th>
<th>Perceived Coach Pressure</th>
<th>Doubts About Actions</th>
<th>Organization</th>
</tr>
</thead>
</table>

4.42(.22) 4.13(.63) 2.93(1.1) 3.2(.66) 3.07(1.2) 4.05(.71)

3.96(.58) 3.72(.63) 3.08(.66) 3.9(.6) 3.22(.66) 3.46(.78)
Table 2: Effects of perfectionism on sporting experiences

<table>
<thead>
<tr>
<th>Facets of perfectionism</th>
<th>Effects and antecedents of perfectionism</th>
<th>Overall ((n = 10))</th>
<th>Participant number - Yes</th>
<th>Participant number - No</th>
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</thead>
<tbody>
<tr>
<td>Perfectionist striving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Standards</td>
<td>High personal standards</td>
<td>10</td>
<td>1-10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhanced motivation</td>
<td>10</td>
<td>1-10</td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>Preparation and organization</td>
<td>10</td>
<td>1-10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increased confidence</td>
<td>6</td>
<td>1,2,3,4,5,10</td>
<td>6,7,8,9</td>
</tr>
<tr>
<td>Perfectionist concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-critical Tendencies</td>
<td>Overly critical and/or a need to attain high standards</td>
<td>8</td>
<td>1,2,3,4,5,7,8,9</td>
<td>6,10</td>
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<tr>
<td>Dissatisfaction With Goal Progress</td>
<td>Dissatisfied with current performance levels</td>
<td>5</td>
<td>1,2,4,5,9</td>
<td>3,6,7,8,10</td>
</tr>
<tr>
<td></td>
<td>Need to attain high standards in a team</td>
<td>2</td>
<td>5,10</td>
<td>1,2,3,4,6,7,8,9</td>
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<tr>
<td>Concerns Over Mistakes</td>
<td>Overly critical following mistakes</td>
<td>8</td>
<td>1,2,4,5,6,7,8,9</td>
<td>3,10</td>
</tr>
<tr>
<td></td>
<td>Negative response to mistakes</td>
<td>10</td>
<td>1-10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aggression following mistakes</td>
<td>7</td>
<td>2,4,5,7,8,9,10</td>
<td>1,3,6</td>
</tr>
<tr>
<td></td>
<td>Fear of failure and future mistakes</td>
<td>4</td>
<td>1,2,4,7</td>
<td>3,5,6,8,9,10</td>
</tr>
<tr>
<td>Doubts About Actions</td>
<td>Over-thinking</td>
<td>8</td>
<td>1,2,3,4,5,7,9,10</td>
<td>6,8</td>
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<tr>
<td>External Pressure</td>
<td>Perceived coach pressure</td>
<td>5</td>
<td>1,2,5,6,9</td>
<td>3,4,7,8,10</td>
</tr>
<tr>
<td></td>
<td>Perceived parent pressure</td>
<td>5</td>
<td>2,4,6,7,9</td>
<td>1,3,5,8,10</td>
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<tr>
<td></td>
<td>Perceived teammate and competitor pressure</td>
<td>6</td>
<td>1,2,4,6,7,10</td>
<td>3,5,8,9</td>
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</table>
Table 3:

Specificity and level of perfectionism

<table>
<thead>
<tr>
<th>Themes</th>
<th>Overall ((n = 10))</th>
<th>Participant number – Yes</th>
<th>Participant number - No</th>
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</thead>
<tbody>
<tr>
<td>Covered all aspects of life</td>
<td>2</td>
<td>2,9</td>
<td>1,3,4,5,6,7,8,10</td>
</tr>
<tr>
<td>Perfectionism higher in competition than training</td>
<td>3</td>
<td>3,4,7</td>
<td>1,2,5,6,8,9,10</td>
</tr>
<tr>
<td>Perfectionism higher in more important competitions</td>
<td>2</td>
<td>4,7</td>
<td>1,2,3,5,6,8,9,10</td>
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<tr>
<td>Perfectionism grown over time</td>
<td>2</td>
<td>2,3</td>
<td>1,4,5,6,7,8,9,10</td>
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Table 4: *Coping skills and techniques used to counter the potentially detrimental effects of perfectionism*

<table>
<thead>
<tr>
<th>Coping skills</th>
<th>Overall (n = 10)</th>
<th>Participant number - Yes</th>
<th>Participant number - No</th>
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<tbody>
<tr>
<td>Isolate self</td>
<td>3</td>
<td>1,2,7</td>
<td>3,4,5,6,8,9,10</td>
</tr>
<tr>
<td>Talking</td>
<td>2</td>
<td>6,7</td>
<td>1,2,3,4,5,8,9,10</td>
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<tr>
<td>Perspective / Realistic</td>
<td>2</td>
<td>6,8</td>
<td>1,2,3,4,5,7,9,10</td>
</tr>
<tr>
<td>Routine</td>
<td>7</td>
<td>1,2,3,4,5,9,10</td>
<td>6,7,8</td>
</tr>
<tr>
<td>Music</td>
<td>3</td>
<td>2,3,6</td>
<td>1,4,5,7,8,9,10</td>
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<tr>
<td>Not act too serious</td>
<td>1</td>
<td>2</td>
<td>1,3,4,5,6,7,8,9,10</td>
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<tr>
<td>Imagery</td>
<td>3</td>
<td>4,8,10</td>
<td>1,2,3,5,6,7,9</td>
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