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## THE INFLUENCE OF ATHLETIC IDENTITY ON COGNITIVE APPRAISALS AND COPING FOLLOWING UNDERPERFORMING AMONG INTERNATIONAL TRACK ATHLETES

### VPLIV ŠPORTNE IDENTITETE VRHUNSKIH ATLETOV NA KOGNITIVNO OCENJEVANJE IN SOOČANJE Z NEUSPEŠNOSTJO V ŠPORTU

#### Abstract

Previous studies have demonstrated that strong and exclusive athletic identity is a risk factor for adjustment difficulties following major sport career transitions (e.g., Ceci Erpič, Wylleman, & Zupančič, 2004; Grove, Lavallee, & Gordon, 1997). However, research investigating the influence of athletic identity on adjustment to negative events that athletes encounter more routinely is scant. This study adopted a stress perspective (Lazarus & Folkman, 1984) and qualitative method to examine the influence of athletic identity on athletes' appraisal and coping responses to underperforming. Three male and three female UK international track athletes provided accounts of their experiences of underperforming in semi-structured interviews. Athletic identity was established with the Athletic Identity Measurement Scale (AIMS; Brewer, Van Raalte, & Linder, 1993), in addition to qualitative data. Case studies were constructed and cross-case comparisons revealed that athletes with strong and exclusive athletic identity appraised underperforming as a threat to their self-identities, experienced intense emotional disturbance and implemented emotion-focused and avoidance coping. These findings suggest that the risks of over-identification with the athlete role are more widespread than is currently recognized and highlight the need for intervention programs that encourage athletes to invest in non-sport sources of identification.

*Key words:* athletic identity, elite sport, underperforming, cognitive appraisals, coping, case study

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#### Izvleček

Dosedanje raziskave kažejo, da močna in ekskluzivna športna identiteta predstavlja rizični faktor pri prilagajanju na težave, ki sledijo velikim spremembam v športni karieri (npr. Ceci Erpič, Wylleman, & Zupančič, 2004; Grove, Lavallee, & Gordon, 1997). Študije redko preučujejo, kako se športniki prilagajajo na vsakodnevne oz. pogoste negativne dogodke ter kakšen vpliv na to ima športna identiteta. Pričujoča študija je z vidika stresa (Lazarus & Folkman, 1984) in z uporabo kvalitativne metodologije preučevala vpliv športne identitete na športnikovo ocenjevanje in soočanje z neuspešnostjo. Trije atleti in tri atletinje iz Velike Britanije so v polstrukturiranem intervjuju podali razlage svojih izkušenj pri neuspešnosti. Izraženost športne identitete smo ugotavljali z lestvico Athletic Identity Measurement Scale (AIMS; Brewer, Van Raalte, & Linder, 1993) in kvalitativnimi podatki. Študije primerov so pokazale, da športniki z močno in ekskluzivno športno identiteto ocenjujejo neuspešnost kot grožnjo svoji lastni identiteti, ob tem pa doživljajo intenziven čustven nemir. Z neuspešnostjo se soočajo čustveno, pogosto pa uporabljajo strategije izogibanja. Te ugotovitve kažejo, da so nevarnosti prekomerne identifikacije z vlogo športnika precej bolj intenzivne kot navajajo dosedanja spoznanja. Potrebno je oblikovati interventne programe, ki bi vzpodbudili športnike k osredotočanju na vire identificiranja, ki niso vezani na šport.

*Gljučne besede:* športna identiteta, soočanje, kognitivno ocenjevanje, neuspešnost v športu, študija primerov

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## INTRODUCTION

The way in which individuals interpret and adapt to environmental stressors is influenced by multiple personal and situational variables (Lazarus & Folkman, 1984). Among athletes, one variable which may strongly influence responses to sport related stressors is athletic identity (AI), the degree to which one identifies with the athlete role (Brewer, Van Raalte, & Linder, 1993). AI can be considered both a cognitive structure that guides how athletes interpret events associated with the athlete role (e.g., career enhancing and threatening situations), and a social role in that it can be heavily influenced by others' perception of and attitudes towards the self as an athlete.

AI has received recent attention within the sport psychology literature, particularly in relation to sport career transitions (Shachar, Brewer, Cornelius, & Petitpas, 2004). Supporting the notion that AI influences stress responses among athletes, it has been consistently reported that individuals who identify themselves strongly and exclusively by the athlete role are at risk of adjustment difficulties following major transitions such as career ending injury and retirement (Brewer, 1993; Brock & Kleiber, 1994; Cecić Erpič, Wylleman, & Zupančič, 2004; Grove, Lavallee, & Gordon, 1997; Lavallee, Gordon, & Grove, 1997; Sparkes, 1998). Explanations for these findings revolve around the assumption that when athletes base their self-worth solely on their sport performance, events that disrupt one's sporting aspirations can give rise to identity loss and emotional difficulties (Brewer, Van Raalte, & Petitpas, 2000). A small cluster of qualitative studies have also found support for this assumption, reporting that a key element in athletes' adjustment difficulties is perceived threat to one's self-esteem and identity (Brock & Kleiber, 1994; Sparkes, 1998; Werthner & Orlick, 1986).

Whilst broad agreement exists within the literature about the risks associated with strong and exclusive identification with the athlete role, the extent of these risks may not be fully appreciated. Research to date has tended to be limited to investigation of athletes' responses to seriously disruptive events such as career-ending injury and retirement (e.g. Grove et al., 1997; Sparkes, 1998). However, it is possible that strong and exclusive AI is a risk factor for psychological difficulties following the less critically disruptive events that athletes routinely experience. For instance, one might speculate that athletes who derive their self-worth exclusively from their sport performance may be vulnerable to emotional difficulties following events such as deselection, underperforming, minor injuries and everyday illnesses, which undermine or threaten their success as athletes. No research to date, to the authors' knowledge, has addressed this issue. However, one recent study has considered the relationship between AI and athletes' perceptions of growing old, reporting that athletes who over-identify with their athlete roles possess negative attitudes towards self-aging (Phoenix, Faulkner, & Sparkes, 2005). This finding suggests that the risks of strong and exclusive AI extend beyond the major career transitions that have typically been investigated. A broader understanding of the risks associated with over-identification with the athlete role is necessary so that sport psychologists can understand possible reasons behind athletes' adaptive struggles and develop appropriate intervention strategies.

A second issue that has received limited research attention concerns the processes by which strong and exclusive AI precipitate psychological difficulties following events that disrupt the athlete role. Examination of the processes by which personal variables influence psychological states is important in enhancing understanding of emotional reactions to disruptive sporting events (Green & Weinberg, 2001). Lazarus and Folkman's (1984) cognitive transactional model of stress and coping might provide a useful framework for understanding these processes. Central

to this model is cognitive appraisal, the process by which an individual evaluates the stakes of an encounter with regard to its implications for his or her well-being. Lazarus and Folkman proposed that when an environmental demand is appraised as stressful, it is viewed through a so-called primary appraisal as a harm/loss (where damage has already been done), a threat (where harm or loss is anticipated) or a challenge (where there is something to be gained). Simultaneously, through secondary appraisal, the individual evaluates what coping options are available. The overall meaning ensuing from these appraisals mediates emotional and behavioral responses.

Coping is also an integral part of Lazarus and Folkman's (1984) model and is viewed as a dynamic process in which coping efforts shift as stressful encounters unfold. Several classifications exist for categorizing coping responses. Lazarus and Folkman distinguished between emotion-focused coping, where attempts are made to regulate emotional responses to stressors, and problem-focused coping, where attempts are made to change the cause of stress. Other researchers have proposed additional categories of coping including avoidance coping, where efforts are made to mentally or physically disengage from stressful situations (Endler & Parker, 1990) and reappraisal, where efforts are made to reappraise stressful situations (Cox & Ferguson, 1991). Links between appraisal types and the use of specific coping strategies have been reported. Emotion-focused coping is associated with appraisals that nothing can be done to change a stressful situation, while problem-focused coping is associated with appraisals that the situation is amenable to change (Carver & Scheier, 1994; Folkman & Lazarus, 1980; 1985; Stanton & Snider, 1993). In addition, avoidance coping is associated with threat and loss appraisals (Anshel, Jamieson, & Raviv, 2001; Anshel & Delaney, 2001).

A further defining feature of Lazarus and Folkman's (1984) model is that multiple person and situation variables impact on the cognitive appraisal process. The most important person variable influencing appraisal is one's commitments, an expression of what is important to the individual. Stress is proposed to ensue when a situation endangers or defeats an important commitment and the stronger the commitment, the greater the potential for stress in the area of that commitment (Lazarus & Folkman, 1984; Lazarus, 1999). Drawing from this proposal, Brewer (1993) suggested that the strength of one's commitments (i.e., commitment to being an athlete) influences cognitive appraisals of events that disrupt the athlete role which, in turn, mediates emotional and behavioral responses. Despite the potential utility of this suggestion for optimizing the efficacy of interventions designed to help athletes cope with disruptive sporting events (Green & Weinberg, 2001), it has yet to be examined.

The purpose of this study was to extend the AI literature by addressing the limitations discussed above. Accordingly, the aims of the study were two-fold. Firstly, the study aimed to qualitatively investigate whether the previously identified risks of strong and exclusive AI extend to track athletes' experiences of underperforming. Underperforming has been identified as a common source of stress among track athletes (McKay, 2005) and was therefore considered appropriate for examination in this study. Second, the study aimed to investigate the processes underlying potential relationships between AI and responses to underperforming by examining cognitive appraisal and coping. It was anticipated that a strong and exclusive commitment to the athlete role would be associated with interpretations of underperforming in terms of its implications for one's sense of identity, and threat and/or loss appraisals.

## METHOD

### Participants

Three female and three male United Kingdom (UK) senior international track athletes (mean age = 24.83 years, SD = 2.99) who had between 9 and 16 years competitive experience (M = 12.17, SD = 2.40) participated in the study. Track events represented by the sample included short sprints (n = 2), long sprints (n = 1), and middle distance (n = 3).

### Instruments

AI was measured retrospectively with the Athletic Identity Measurement Scale (AIMS; Brewer & Cornelius, 2001). The scale comprises 7 items scored on a 7-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7) and summed to yield an overall AI score. Overall scores range from 7 to 49 with higher scores indicating stronger and more exclusive AI. Brewer & Cornelius reported high internal consistency of the AIMS ( $\alpha = .81$ ). In order to specifically assess identification with their roles as track athletes, rather than with their more general involvements in sport, the items on the AIMS were modified slightly. Based on participants' scores, the internal consistency for the modified scale was strong ( $\alpha = .96$ ).

In qualitative research, details of the researchers' backgrounds and connections that they have with the people to be studied should be provided to help the reader interpret findings and consider alternatives (Elliot, Fischer, & Rennie, 1999; Patton, 2002). All researchers had experience of undertaking qualitative research and the first author had over ten year's experience of competing in track athletics.

### *Interview guide*

A semi-structured interview format was utilized that would ease comparison across interviews whilst still offering the interviewer flexibility in reacting to and exploring relevant issues (Patton, 2002). The interview guide was developed following the guidelines of Breakwell (1995) and Smith (1997) and included questions that were open, non-leading, and avoided jargon and complex words. The interview was designed to explore how the participants' identification with the athlete role influenced their responses to an incident when they underperformed using Lazarus and Folkman's (1984) model as a framework. Two pilot interviews were conducted with athletes who were representative of the target population and minor amendments were subsequently made to the interview questions. Athletes who participated in pilot interviews did not become part of the final sample of participants.

### Procedure

Institutional ethical approval for the study was granted and all participants completed informed consent forms. Participants were approached at the end of the outdoor athletics season (September), and invited to participate in the study. All prospective interviewees agreed to take part. Interviews were conducted by the first author, took place at locations that were convenient to participants and lasted for approximately one hour. Interviews were tape recorded with participants' permission and subsequently transcribed verbatim.

### *Data analysis*

A case study approach was employed to analyze the data. Specifically, what Stake (2000) terms 'collective' case studies were undertaken, where the ultimate aim is to jointly understand a

number of so-called ‘instrumental’ case studies in order to gain a general understanding of a phenomenon. Thus, the aim was to foster a broad understanding of the influence of AI on stress and coping outcomes by examining this issue within individual cases.

After fully familiarizing themselves with interview transcripts, each researcher worked on transcripts independently, noting points of significance and interest, and consensus was reached on the information that should be included in case studies. The first author wrote the case studies and included information on the participants’ identification with the athlete role; stress and coping processes; emotional responses; and coping strategies implemented. Shortened versions of case studies were forwarded to participants for member checking purposes (Lincoln & Guba, 1985).

In the second phase of the data analysis, conclusions were made following the identification of cross-case comparisons. Following Eisenhardt’s (2002) recommendations, categories were selected based on the theoretical underpinning of the study (i.e., appraisal types, emotional responses, coping strategies used, and perceived effectiveness of coping) and similarities and differences across cases relative to AI level were systematically listed. In this way, relationships between AI and stress and coping outcomes were compared with the evidence from each case (Yin, 1991).

Following recognized guidelines (Elliot et al., 1999; Lincoln & Guba, 1985), several efforts were undertaken to enhance the trustworthiness of the research, including undertaking independent verifications of the content of and conclusions drawn from case studies, and member checking. In addition to this, the interviewer’s in-depth appreciation of the social setting being studied was deemed important in aiding the development of rapport and trust, and ensuring that participants gave full and honest responses (Eklund, 1994; Lincoln & Guba, 1985; Rubin & Rubin, 1995).

## RESULTS

At the time of their underperformances five of the six participants possessed strong and exclusive AI, as indicated in their mean retrospective AIMS score of 46.67 (SD = 2.52), while one participant identified relatively weakly with the athlete role (AIMS score = 18). Retrospective AIMS scores for each participant are presented in Table 1. It should be noted that whilst most participants detailed their experiences of recent underperformances, some participants recalled underperformances that had occurred several years prior to the interview. Nevertheless,

Table 1: Retrospective modified AIMS scores showing AI at the time of underperformance for each participant

Participant	Retrospective Modified AIMS Score
Scott	44
Amy	47
Tom	49
Anna	42
Hazel	47
Jamie	18

given that underperforming represents a significant source of stress for athletes, performance decrements and their psychological effects are likely to be easily recalled (Grove & Stoll, 1999). Due to space restrictions, shortened versions of case studies are presented, detailing each athlete's underperformance, appraisal process, emotional response and coping. Cross-case comparisons are considered in the discussion and compared with the extant literature. All participants have been renamed for confidentiality purposes.

### **Scott**

At the time of interview Scott was a 25-year-old student-athlete, studying for a Ph.D. in computing science. He had been involved in athletics for ten years and specialized in the 400 meters event. Scott viewed his athletic participation as the most important area of his life. He reported having made “absolutely no plans for future employment” and that his reasons for undertaking his degree centre on the fact that it allows him to manage his working hours so that they fit around training. Scott identified with his athlete role strongly and with a sense of exclusivity, stating that he defined himself as “an athlete then as a student with the gap signifying quite a lot.”

Scott recalled a recent performance slump during which he failed to fulfill his goal of gaining selection for the Commonwealth Games Team. Attaining this goal was of extreme importance to him because he had planned to change events to the 800 metres at the end of the season and so viewed the season to be his “last chance to succeed” as a 400 metres runner. Leading up to the start of the season, Scott's training had been going well and he “truly believed” that he was capable of achieving his goal. However, his performance started to deteriorate and he failed to gain selection for the Team. Scott's level of AI at the time of his performance slump was very high, as indicated by his score of 44 on the retrospective AIMS.

Through primary appraisal, Scott viewed his performance slump as a threat. He spoke explicitly about the meaning behind this appraisal, relating it to his belief that his sense of identity as an accomplished athlete had been “dispelled.” Similarly, when it was confirmed that he had failed to make the Commonwealth Games Team, Scott appraised the situation in terms of its disruptive effect on his AI., stating: “I felt that this picture I'd had of myself as an athlete who was capable of making the Commonwealth Games obviously wasn't true.”

In terms of secondary appraisal, Scott felt that he could not cope with the situation and experienced feelings of anger, frustration and loss. He initially adopted a problem-focused style of coping in which he “tried hard to work out something to do.” However, this failed and Scott resorted to an avoidance coping strategy in which he “disconnected” from athletics so that he could “forget about it all and relax.” Specifically, Scott diverted his interests to his social life and after approximately two weeks, was able to reappraise the situation to be more controllable. This was accompanied by his return to a problem-focused coping style in which he constructed a new set of goals for his career as an 800 meters runner. According to Scott, this strategy was effective in providing a new focus and a new identity as an 800 meters runner.

### **Amy**

Amy was 29 years old and was working on a full-time basis as a personnel officer. She had been involved in athletics for 13 years and had gained much success in middle distance events, but in recent years had been plagued by a series of lower leg injuries which had hampered her

progression. Despite this, athletics remained the “most important single factor” in Amy’s life and her AI was very strong.

Amy recalled an international match that had taken place eight years prior to the time of interview that she could recall particularly well. The event was held over three days such that it comprised a heat, semi-final and final and Amy’s goal was to make the final. However, due to a tactical mistake she underperformed in the heat and was subsequently eliminated from the competition. At the time of the event her AI level was strong and exclusive, as indicated by her score of 47 on the retrospective AIMS.

Amy appraised her underperformance to be threatening and highly stressful. This primary appraisal appeared to be rooted in her belief that she had failed to justify her place in the team, which in turn threatened her sense of social identity and gave rise to self-presentational concerns. She stated: “What was at stake was me being seen as that international athlete or that successful athlete...but to me it was absolutely everything.”

Through secondary appraisal, Amy viewed the situation to be uncontrollable as she perceived that she did not have the necessary coping skills and resources to deal with the situation. Consequently, she felt “totally gutted, angry and frustrated and really, really disappointed.” On explaining her feelings of disappointment, Amy referred again to her sense of shattered identity: “...the reason it’s disappointing is because suddenly that belief that you are this wonderful successful athlete is gone and that has a knock on effect on absolutely everything.”

Initially Amy failed to employ an adaptive coping strategy as she “still felt as bad” on day three of the competition as she had done on day one. Despite encouragement from her coach, she was unable to extract “something positive” from her experience. However, Amy was eventually able to adopt an adaptive problem-focused style of coping in which she increased her determination and focus for success to an even higher level in an attempt to ensure that she did not encounter a similar situation in the future. In retrospect, Amy felt that she did not cope well with her performance slump.

### **Tom**

At the time of interview Tom was a 22-year-old full-time athlete, specializing in middle distance track events. He had been involved in athletics for 11 years and viewed athletics to be the most important area of his life. Tom defined himself by his athlete role describing it as his “master status” and claiming that he struggled to identify with alternative roles because they were “not as huge a part of [his] life.”

Tom recalled a performance slump that he had experienced during the season prior to the interview. The slump occurred during a period of five to six weeks and involved two competitions, an international match and the Commonwealth Games Trials. Tom’s main goal for the season was to gain selection for the Commonwealth Games Team and attaining this goal was of central importance to him. Indeed, he placed greater value on competing in the Games and being successful than on his own life: “...if I’d been told that I could go to the Games and be successful but I’d be dead when I came back then I think I would’ve taken the Games.” Tom’s AI level at the time of his performance slump was extremely high, as indicated in his maximum score of 49 on the retrospective AIMS.

Tom appraised his underperformances to be highly stressful, stating that they had threatened his sense of self- and social- identity: "...it was threatening to how I viewed myself and my success and the way I thought other people perceived me. It was threatening just to me and my identity really..." In addition to feelings of threat, Tom's appraisals reflected a sense of loss as he recalled feeling, "Maybe I'm not the athlete anymore." Due to his inexperience of underperforming, Tom appraised his personal coping resources to be inadequate and he experienced feelings of shock, disbelief, "absolute distraught" and depression.

Tom's initial coping strategies were directed at alleviating his emotional distress. However, these efforts failed and he resorted to an avoidance coping strategy. These avoidance strategies involved a temporary disconnection from his AI as he felt the need to "move away from that identity and not think about it" and invest more time in "living up to [his] label as a friend." Tom viewed his diversion of attention to an alternative identity to be successful in "diluting" the emotional distress he encountered and in facilitating a positive reappraisal of his performance slump and return to his former performance level.

### *Anna*

At the time of interview Anna was a 25-year-old professional athlete participating in middle distance track events and had been involved in athletics since the age of nine. Anna reported viewing athletics as the most important aspect of her life and demonstrated a strong commitment, claiming that she is generally unwilling to give other activities priority over athletic commitments. Anna identified with her athlete role strongly, claiming that it "makes up a huge part of [her]."

Anna spoke of her experiences of motivation difficulties and underperforming, which she experienced in her late teens and described as "the lowest point in [her] athletics career." Specifically, Anna lost the drive to train and consequently suffered a loss of fitness and slump in performance. Despite this, her AI level remained fairly strong and exclusive, as indicated by her score of 42 on the retrospective AIMS.

Anna appraised her underperformances to be threatening. Superficially, this appeared to be due to her perception that she was being outperformed by less talented athletes who were progressing and gaining recognition. On deeper examination, however, Anna alluded to a sense of social identity loss as she was no longer considered "special" or "the best." Anna appraised her situation to be beyond her control, and experienced a variety of negative emotions including guilt, anger, frustration and diminished self-worth. Her coping style involved an avoidance strategy which involved a degree of detachment from her role as an athlete. In order to facilitate this detachment Anna diverted attention to her social life and spent time with non-athlete friends. As a consequence, her identification with her athlete role diminished and she "didn't really think of [herself] as an athlete."

Approximately a year after the onset of her motivation difficulties, Anna began to reappraise her situation, viewing it to be more controllable and as more of a challenge. This reappraisal appeared to be stimulated by an increased awareness of the success of her competitors. Consequently, Anna implemented problem-focused coping in which she began to devise strategies to assist her in returning to a high level of performance. Whilst these strategies facilitated a return to her previous performance level and restoration of her identity as a successful athlete, Anna felt, in retrospect, that she had not coped effectively with her performance slump.



## *Hazel*

At the time of interview Hazel was 21 years old. She had been involved in athletics for nine years and specialized in sprint events. Although she worked on a full-time basis in a bank, she viewed her athletic participation as her career and the most important area of her life. Hazel identified with her athlete role not only strongly but with a sense of exclusivity, where she had difficulties identifying with other roles. She explained: “I’m trying to think if I wasn’t an athlete what I’d see myself as and I can’t really.”

Hazel described a performance slump, and a particular competition within it, that she had experienced in the season preceding the interview. This involved a series of four competitions, which took place over a period of two to three weeks. Hazel recalled her response to the final competition within her performance slump, which represented her last chance to perform well before the national championships, her most important event of the season. However, she underperformed again, describing her performance as an “absolute disaster.” Hazel’s AI level at the time of her underperformance was strong and exclusive, as indicated in her score of 47 on the retrospective AIMS.

Hazel appraised her underperformance to be threatening. Her primary appraisals appeared to be influenced by her strong identification with her athlete role, as she indicated: “I think at the time I saw myself as being capable of more than what I was achieving so when I was performing badly it threatened kind of how I saw myself.” Additionally, she believed that her underperformance threatened her sense of social identity and this manifested itself in self-presentational concerns. Hazel felt that the social support network offered by her family and coaches was strong. However, she appraised that she did not have the personal skills to deal with the situation and “couldn’t cope.” Accompanying these appraisals were feelings of frustration, anger and disappointment.

Hazel initially adopted an emotion-focused style of coping involving venting of emotions where she “cried and cried.” Additionally, she used social support, discussing the situation with her father to “get it off her chest” and confiding in her coach. Hazel implemented these emotion-focused coping strategies for less than twenty-four hours before she adopted a more problem-focused form of coping. This shift in her coping style appeared to reflect, at least in part, her awareness of the imminence of the national championships and her perceived need to recapture her mental focus. Subsequently, Hazel “challenged [herself] out of the slump” and was able to perform well in her national championships. On reflection, she viewed her use of coping strategies to be highly effective.

## *Jamie*

At the time of interview Jamie was 27 years old and was employed on a full-time basis by a railway company. He had been involved in competitive athletics for 13 years and specialized in sprint events. Despite gaining considerable success, Jamie was not heavily absorbed in his athlete role and claimed that his level of involvement in athletics fluctuated depending on other activities that grasped his attention. He claimed that the interview had caught him at a time when he was “investing a little bit more of [himself] into athletics”, however, his identification with his athlete role was relatively low and he placed greater value on work commitments and relationships. In that connection, Jamie believed in the importance of maintaining a balanced lifestyle, stating that it was “unhealthy” to “throw all [his] eggs in one basket.” As a senior

athlete, Jamie's level of AI had not always been low. In previous years he had become heavily invested in gaining selection for the Commonwealth Games Team. However, after qualifying for the Games, he sustained a severe knee injury and was unable to compete. Jamie frequently referred to this event during the interview, describing the emotional and motivational difficulties that he subsequently encountered.

Jamie spoke of his performance in the national championships, which had taken place five months prior to the time of interview. His competitive goal was to reach the final and he viewed this goal to be attainable in light of previous successful performances at the same competition. However, he underperformed in the preliminary rounds and was eliminated from the final. At the time of his underperformance, Jamie's AI level was relatively low, as indicated by his score of 18 on the retrospective AIMS.

Jamie appraised his underperformance both positively and negatively. The negative aspect of his appraisal centred on his defeat and perception that he had been outperformed by lesser athletes. Whilst it is possible that this appraisal is indicative of an underlying identity issue, Jamie indicated that this was not the case because his investment in athletics was relatively low and so for him "there wasn't a lot at stake in the race." In terms of secondary appraisal Jamie recalled feeling that he was in control of the situation and "confident in [his] ability and talent to come through it." He reported feeling temporarily frustrated but was able to positively reappraise his situation as an incentive to become more committed to his athlete role. Consequently, he appraised the situation as a challenge as the event "rekindled the fires in [his] belly" and gave rise to feelings of excitement.

In addition to positively reappraising his situation, Jamie implemented a problem-focused approach to coping in which he devised personal goals and structured training programs which enabled him to focus on future plans and positive outcomes. In retrospect he felt that he "couldn't have done anything better to cope with his underperformance" and praised himself for using the situation to his advantage. In contrast, following his previously described experience of injury prior to the Commonwealth Games, Jamie experienced severe adjustment difficulties and coped by seeking social support and psychologically detaching himself from athletics. These difficulties, according to Jamie, were a consequence of the greater psychological significance that he placed on his athlete role at the time.

## DISCUSSION

The aim of this study was to investigate how a sample of international track athletes' identification with the athlete role influenced how they appraised and coped with underperforming. The following discussion examines cross-case patterns among participants' appraisal processes, emotional responses and coping and then considers practical implications and future research directions.

At the time of underperforming all participants except Jamie, who maintained a balanced sense of identity, possessed strong and exclusive AI. On recalling underperformances that they had found stressful, some participants spoke of their experiences of single underperformances, while others described their experiences of more prolonged slumps in performance. Following the theoretical propositions of Lazarus and Folkman (1984) that the stronger one's commitment, the greater the potential for stress in the area of that commitment, it was expected that athletes who

were more committed to their AIs would interpret underperforming in terms of its implications for their sense of identity, and would make threat and/or loss appraisals. This expectation was confirmed, with all participants who identified strongly and exclusively with their athlete roles making threat and/or loss appraisals.

Supporting findings from qualitative studies (Brock & Kleiber, 1994; Sparkes, 1998; Werthner & Orlick, 1986), the meanings behind these appraisals were consistently linked to the perception that underperforming had endangered one's identity as an accomplished athlete. Many participants articulated this explicitly, providing bold and specific elaborations. A further pattern arising from participants' accounts was that not only did athletes appraise their performance decrements to threaten their self-identities as accomplished athletes; they also developed concerns about how their performance decrements influenced their social identities. These concerns typically manifested themselves in self-presentational worries about "looking bad" following underperformances, supporting the conceptualization of AI as a social role (Brewer et al., 1993). In contrast, because Jamie's level of AI was relatively weak, performance in the athlete role had little significance for the maintenance of his sense of self-identity and consequently he was able to appraise his underperformance predominantly as a challenge.

Whilst this study focused on the influence of AI in shaping participants' primary appraisals of underperforming, it is important to acknowledge the potential influence of other factors. One such factor is the unexpected element of underperforming, which has previously been linked with feelings of threat among athletes (Dugdale, Eklund, & Gordon, 2002) and the difficult timing of underperformances. These findings highlight the complex interactional nature of the stress process (Lazarus & Folkman, 1984).

Through secondary appraisal, those athletes with strong and exclusive AI felt that they could not cope with the consequences of underperforming. They experienced intense emotional disturbance, which typically manifested itself in feelings of anger, depressed mood, and diminished self-worth. Conversely, Jamie felt confident in his ability to cope with the demands of his situation and his affective response was largely positively toned and characterized by feelings of excitement and enhanced motivation. These findings highlight the different psychological demands faced by participants following their underperformances. Whilst those athletes with strong and exclusive AI encountered a sense of loss of identity, Jamie's underperformance had no deeper implications for his self-identity and consequently he felt a greater sense of control over his situation than the other participants.

In addition to perceiving a sense of threat and loss of control following their underperformances, participants with strong and exclusive AI experienced difficulties coping. This was evident in their intense and typically prolonged negative affective states, as well as a general sense that their initial coping efforts had been maladaptive. Again, Jamie's account provided an exception to the coping patterns observed, as he positively reappraised his situation rapidly and implemented problem-focused strategies. However, intra-individual comparisons across Jamie's case revealed that he too had experienced intense emotional difficulties following negative sport outcomes at times when he had identified more deeply with his athlete role. These intra-individual comparisons provide further support for the stress-generating effects of over-identification with the athlete role.

Having appraised their underperformances to be threatening and out-with their capacities to cope, all participants with strong and exclusive AI implemented emotion-focused and avoidance

coping strategies. This finding supports research reporting that events appraised to be uncontrollable are associated with emotion-focused coping (Carver & Scheier, 1994; Folkman & Lazarus, 1980; 1985; Stanton & Snider, 1993) and that threat and loss appraisals are associated with avoidance coping (Anshel et al., 2001; Anshel & Delaney, 2001). Moreover, the finding that athletes with strong and exclusive AI implemented emotion-focused and avoidance coping supports research linking over-identification with the athlete role with coping strategies such as venting of emotions and behavioral and mental disengagement following retirement (Grove et al., 1997). There was an exception to this in the present study, however, where Hazel, despite experiencing intense emotional difficulties following her underperformance, was able to positively reappraise her situation relatively quickly. This finding demonstrates how highly developed coping skills may serve as a buffer for the stress-generating effects of strong and exclusive AI.

In sum, this study found that athletes with strong and exclusive AI appraised underperforming as a threat to their sense of identity, experienced intense emotional disturbance and implemented emotion-focused and avoidance coping styles. These findings are consistent with the proposal that the stronger one's commitment, the greater the potential for stress appraisals in the area of that commitment (Lazarus & Folkman, 1984; Lazarus, 1999), and suggest that the cognitive-transactional theory of stress is an appropriate framework on which to understand athletes' responses to events that disrupt the athlete role. Moreover, the findings of this study support previous research documenting that individuals who over-identify with their athlete roles are at risk of psychological difficulties following identity-threatening events (Brewer, 1993; Brock & Kleiber, 1994; Cecić Erpič et al., 2004; Grove et al., 1997; Lavallee et al., 1997; Sparkes, 1998). As such, the findings stress the need for the development of intervention programs aimed at encouraging athletes to invest in non-sport sources of identification.

In addition to supporting the relationship between AI and adjustment to identity-threatening events typically evidenced in quantitative studies (e.g., Brewer, 1993; Grove et al., 1997), the findings of this study build on previous research in several important ways, and have implications from a practical perspective. First of all, the findings provide support for a relationship between AI level and adjustment difficulties following underperforming. This important finding suggests that levels of identification with the athlete role might influence how athletes respond to an array of stressors, extending beyond the more serious career-threatening events that have typically been investigated. Sport psychology practitioners may therefore need to become more sensitive to the scope of the risks associated with over-identification with the athlete role to enhance understanding of athletes' adaptive struggles and develop appropriate interventions.

According to the results of this study, one coping strategy that might have adaptive value is temporary disconnection from one's athlete role by diverting attention to alternative life domains. Interestingly, all participants who had experienced performance slumps eventually implemented this strategy. Such divestment of AI (Brewer, Linder, & Petitpas, 1999) may have allowed participants to devalue the self-threatening implications of their underperformances by retrieving positive experiences in other life domains and subsequently initiating positive reappraisals (Rothermund & Meiniger, 2004). This finding adds support to reports that athletes who are deeply invested in their sport roles may cope with identity-threatening events by reducing their identifications with that role (Brewer et al., 1999; Grove, Fish, & Eklund, 2004; Lavallee et al., 1997). Lavallee et al. (1997) found that divestment of AI was an adaptive coping strategy for retiring athletes. The results of the present study suggest that divestment of AI may

also be an adaptive way of coping with performance stressors. Coping related decreases in AI have been reported over one week (Grove et al., 2004), 12 week (Brewer et al., 1999) and three year (Lavallee et al., 1997) time frames, but it is unknown whether athletes can implement this coping strategy efficiently in the immediate stages of the coping process. As addressing this question could advance understanding of how athletes might adaptively cope with events that threaten their self-identities, this is an important avenue for future research.

A further valuable contribution of this study includes the qualitative method employed. The in-depth interviews employed furnished rich descriptions of the nature of the emotional difficulties encountered and enabled a consideration of the complex and dynamic processes involved in defining participants' experiences. Related to this, by framing results in Lazarus and Folkman's (1984) theoretical perspective of stress and coping, the study promotes understanding of how athletes appraise underperforming, an approach that has not been adopted elsewhere. This theoretical approach facilitated an insight into the meanings participants ascribed to their performance decrements and enhances understanding of the cognitive processes that link AI with adjustment outcomes.

Finally, this study included certain shortcomings that might provide avenues for future research. Firstly, because the present study was limited to a small sample of athletes competing in a specific sport, generalizations to broader populations of athletes may not be warranted. Criticism may also be leveled at the retrospective research design employed, which involved retrospective verbal reports of the underperformance experience and the retrospective AIMS measure. In some cases participants recalled stressful events that had occurred at earlier stages in their careers and therefore the possibility of recall error and the influence of event outcome on their appraisals of their experiences cannot be ruled out. This potential problem could be addressed by using diaries in which athletes record their thoughts, feelings and actions relative to identity-threatening events as and when they occur.

To conclude, this study addresses a gap in the literature by examining the influence of AI on athletes' stress and coping responses to underperforming and utilizing a cognitive appraisal framework to understand these responses. Findings suggest that AI may not just be a risk factor for psychological difficulties following the major career transitions faced by athletes, but also the less critically disruptive events that they routinely experience. These findings illuminate the magnitude of risks associated with strong and exclusive identification with the athlete role and the need for preventative programs. Sport psychology practitioners must be aware of these risks in order to fully understand athletes' adjustment difficulties and recommend appropriate intervention strategies.

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### Author Note

The interview guide is available from the authors upon request.