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1 Abstract

The purpose of the current paper is to explore the importance of culture in the development of Mental Toughness (MT). This is done by means of a critical review of the current literature that exists in relation to the conceptualisation, definition and development of the concept. We argue that despite recent advances in our understanding, most research into MT has focused on the characteristics of mentally tough individuals. Although important and useful, the role of the environment (e.g., Bull et al. 2005; Hardy et al. 2015), culture (e.g., Tibbert et al. 2015), and context (e.g., Fawcett 2011), and how these impact MT and its development has been given somewhat less attention and is perhaps not well integrated into practice. This relative oversight has occurred because of three specific issues; an exclusive focus on the individual; a top down approach to research and the conceptualisation of MT; a lack of awareness that the athlete is always located in a specific organisation and sport culture with its own processes, systems, values and beliefs. In order to more fully capture how MT is constituted and developed, we suggest that future research needs to adopt a wider perspective by drawing on work around the importance of culture in sport, and make greater use of qualitative methodologies, such as grounded theory, narrative, ethnography and phenomenology to capture the culturally rich accounts of participants. Such a shift, as advocated in this paper, provides a primary point of reference to offer fresh insight in our research efforts, and will also have a major influence on practitioner development and training to assist applied sport psychologists and coaches in the practical task of building and supporting MT development in athletes.

Keywords: Mental Toughness; development; sport culture.

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A Culturally Informed Approach to Mental Toughness Development in High Performance

2 Sport

Introduction

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interventions for MT development.

The notion of Mental Toughness (MT) being broadly represented by "the ability to achieve personal goals in the face of pressure from a wide range of different stressors" (Hardy et al., 2014; pp. 70) gives the concept relevance and importance to a wide range of high achievement performance contexts, including business, military action, and high performance sport. Whether sports protagonists are having to deal with stressors associated with, for example, transition, selection, training, competition, injury or other 'critical moments' (Nesti et al., 2012), the ability of high achievers to perform under intense pressure has been associated with the possession of MT characteristics. As a consequence of research conducted with elite level athletes (e.g. Jones et al., 2002, 2007), coaches (e.g., Gucciardi, 2008) and officials (e.g., Slack et al., 2014) in high performance sport, salient MT definitions, attributes and frameworks have been identified to facilitate a better understanding of the concept. While MT, is, for some, a natural 'psychological edge', the established position that it can also be nurtured has led subsequent research to investigate how MT can be developed amongst these high performance sport populations (e.g., Connaughton et al., 2008, 2010; Gucciardi et al., 2009a, 2009b; Slack et al., 2015; Thelwell et al., 2010). This work has also illustrated the value in generating both a general (viewing the key components of MT as broadly applicable in all sports and contexts) and specific (viewing particular components of MT as more or less appropriate in a given sport or context) knowledge base, where understanding both the generalisability of MT attributes and the sport specificity of MT experiences is helpful to create appropriate

The work of Connaughton et al (2008, 2010) has been instrumental in illustrating how

MT, as identified in Jones et al's (2007) attribute based framework can be developed. In relation to the development of attributes deemed important for mindset/attitude (e.g., belief, focus), training (e.g., pushing yourself to the limit), competition (e.g., dealing with pressure) and post competition (e.g., handling failure) situations, findings have identified a number of key themes used to develop and maintain MT in elite performers across the phases of their career. These themes included a striving for skill mastery and competitiveness, the desire to achieve training and competition based goals, and the commitment to use psychological skills and reflective practice to rationalize and manage competitive expectations, successes and failures. Research in other high performance sport populations, including Australian Footballers (Gucciardi et al., 2009a, b) and English Premier League referees (Slack et al., 2015) have adopted MT education and training programmes based, in part, on advanced psychological skills intervention e.g. stress inoculation training; self-regulation. Such programmes were found to be effective in enhancing individual performer's MT attributes, characteristics and behaviours conducive to enhanced performance.

While the findings of this work are encouraging in their ability to demonstrate MT development, and implicate the notion that MT can be both 'caught and taught' (Gordon, 2007) through environmental influences or training based means, the training programmes used are largely predicated on a performance enhancement approach, which aims to positively influence MT attributes, characteristics and behaviours through tailored Psychological Skills Training (PST) interventions. PST is, of course, only one potential development strategy within MT training, and while evidently related to MT, is unlikely to be the key or only driver in MT development. Given this, it is perhaps somewhat surprising that MT education and training programmes based on 'narrow' psychological skills based intervention have been used as a means to develop what most researchers agree is much more complex and long-term process (see Hardy et al., 2014). Moreover, the identification of the salient MT attributes,

- 1 characteristics and behaviors has emerged from consultation with elite performers, asking
- 2 them to identify the components that define and characterize what MT is. Hence, resultant
- 3 frameworks and models are informed and dominated by 'the what', which are then used to
- 4 inform what may be characterised as 'top down approaches' to MT development.

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Arguably, this approach neglects other factors that are deemed important to the characterization and development of MT. Gucciardi (2009) highlights the need for research to consider other influential factors, beyond psychological skills training, which will inform the MT development process. Previous work by Bull et al. (2005) emphasized, in an English cricket context, the role of tough character, attitude and thinking of the person, and their interaction with the *environment* in which they operate, as being representative of means by which MT can be developed. Indeed, Connaughton et al's (2008, 2010) work, while dominated by individual person-focused strategies for MT development, does identify environment-laden themes including, for example, the motivational climate (including training regimes and structures), sporting and non-sporting support networks, and interaction with coaches. In a study that explored Australian football coach's role in the development of MT, Gucciardi et al (2009) identified themes that embraced the importance of the coachathlete relationship, coaching philosophy and training environment to be central to the coach's work. More recently, Cook et al (2014) have identified English Premier League football academy coach's perspectives regarding the importance of developing a challenging but supportive learning environment that encourages independence and personal responsibility in the players to be important conditions that foster the development of MT. Further research has demonstrated how the environment can be altered to enhance MT. Hardy et al (2014) illustrate that 'tough environments' and expectations are an important part of the process of developing MT. Mentally tough behaviour would appear to be associated with increased sensitivity to aversive, 'punishment' related stimuli and decreased sensitivity to reward based

- stimuli in the sport environment, where a predisposition to identify threat early in high
- 2 pressure encounters facilitates effective planning of a mentally tough response. Equally,
- 3 Driska et al. (2012) have identified coach related approaches that develop a 'tough
- 4 environment'. To compliment the notion that mentally tough athletes are active agents in their
- 5 own mental toughness development by actively accepting challenge, coaches can shape the
- 6 motivational climate of the training environment to foster mental toughness development.

Given the recent findings, understanding the high performance environment is seen as being just as important to MT development as understanding the high performer, and arguably the two should not be considered in isolation. However, it is proposed that research also needs to go beyond environment to understand the conditions of MT development. MT can have various idiosyncratic meanings to different athletes in different sports, and this forms, in part, an argument to support the exploration and understanding of *sport culture*. Crust (2008) argues that understanding the sport culture is important to developing MT effectively, yet very few studies that have sought to document MT development themes and strategies have referred to sport culture. What is being advocated here, in the remainder of this paper, is an

argument for a culturally informed approach to MT development.

Culture

One of the criticisms frequently levelled at psychology as an academic discipline is that it often focuses on the individual, and forgets, or ignores the environment within which the individual exists. There are likely many reasons behind this situation. However, the most frequently mentioned relates to the desire of psychology to be seen as a branch of the natural sciences. This was viewed as a way to gain scientific respect for what was a relatively new academic discipline in the early part of the last century (Nesti, 2004). As a result of this development, experimental psychology, with its strict control of variables and attempt to isolate cause and effect relationships, became the gold standard, and other perspectives with

a very different approach to psychological research were relegated to the side lines (Giorgi, 1970). One of the unfortunate side effects of this development was that studies concentrated on examining subjects apart from their environment. As a consequence, precision and neatness seemed to have become more valued than ecological validity and meaning. In relation to MT development, "one size" does not fit all. Sport psychology, despite the warnings of one of its most influential advocates and leaders (Martens, 1987) has tended, until quite recently, to follow the same path of the parent discipline. Arguably, this has resulted in research that has enabled us to study the individual athlete, but has been less helpful in allowing us to understand the person situated in their social context. In his article, Martens referred to 'persons', rather than individuals. A close reading of his arguments suggests that this was a deliberate act. This is because most definitions claim that the concept of person describes an individual based in a community. In other words, persons are made up of individuals with human traits, who possess agency, and always exist in relation to others. We would argue that it is this final component, 'existence with others', which must be considered if we are going to achieve a better understanding of those we study or hope to support.

The broader systems of relations, obligations and duties that surround each and every person are sometimes referred to as society. However, societies are made up of individuals, and the relationship between these is not merely covered by formal ties and systems. Something else is in operation that guides and influences individuals. This other element is culture. Culture may be best seen as the hidden yet influential force, involving core values, beliefs, and traditions that operates as a type of soft power, which shape the working practices, ideas, strategies and philosophies of groups and individuals (Wilson, 2001). In sport psychology research, culture has been defined as "the shared values, beliefs, expectations, and practices across the members and generations of a defined group" (Cruickshank & Collins, 2012, p.340). Given that culture carries the values of a group or society, we should

expect that its impact on people will be profound and important, and therefore be something that researchers need to consider in their work more often. We believe that when studying MT in sport, and its development, there is an urgent need to understand this concept in context. This context includes what others have called organizational processes or dynamics (Hatch, 1993), but for a more truly empirical account of reality (Ronkainen & Nesti, 2015) it should include much more than this. There are obvious practical difficulties to overcome, which cultural theorists and researchers have acknowledged. These include the ephemeral and elusive quality of culture (Schein, 2004), and the ambiguity of the term itself (Martin, 2002). Despite this, there is a long tradition of investigating the importance of culture in business environments and high performing corporate organizations (e.g., Alvesson 2002; Deal & Kennedy, 1982) demonstrating that, in spite of the obstacles, rigorous and sound research can

Mentally Tough Sport Cultures

What then are the considerations and types of questions researchers need to ask if they are to understand MT in its cultural sport context? It seems to us that the first thing that must be addressed is to select a methodology that will allow the researcher to gather data 'from the ground up'. The expansion that has taken place during the past 20 years in the use of qualitative research methods in sport psychology means that there are many options to choose from. Some methods, such as ethnography (Smith & Sparkes, 2008) or phenomenology (e.g., Fawcett, 2011; Nesti, 2011; O'Halloran et al., 2016) are especially suited to this task because of their epistemological positioning. For example, ethnography requires the researcher to immerse themselves in the culture to allow an understanding of the concept from the perspective of the research participants. In contrast, the aim of psychological phenomenology is to access rich descriptive accounts; this is achieved by the researcher attempting to distance themselves from the data by using the technique of bracketing. However, in both methods the

be carried out in this area. There is no reason to doubt that the same cannot be done in sport.

- 1 focus is on gathering data expressed in everyday language. As a result, research might reveal
- 2 that despite not using the academic terms surrounding MT in sport, coaches, sports performers
- 3 and others draw on a wide range of culturally specific terms to describe MT and its
- 4 characteristics.

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Others, such as grounded theory or narrative (Schinke & McGannon, 2014), could also be useful, particularly where time constraints or access are major challenges facing researchers. The advantage of these qualitative methods is that it would ensure researchers considered seriously the descriptions provided by the athletes and coaches, even, and especially when, their accounts of MT emphasised the importance of culture. In relation to this, work we carried out at a top English Premier League football club (Cook, et al., 2014) revealed that Academy coaches saw their role as 'cultural architects' in relation to the development of MT. The term 'cultural architect' has been used by Eubank et al. (2014) in relation to supervision and training of sport psychologists to describe the role such practitioners might adopt in clubs and organisations. In this function, they would use their skills, knowledge and personal qualities (Chandler et al., 2014) to help create a culture of excellence. Likewise, the professional football coaches in the Cook et al. study talked about how they tried to influence the culture at the club to ensure young players were exposed to a number of demanding situations and challenges aimed at developing MT. These included many examples of the type of activities involving abrasive masculine practices found in traditional working class culture (e.g., Potrac, 2002). In addition, coaches mentioned that these practices were seen as a means to, and not an end in themselves, and that they would only create the intended outcomes (i.e. MT), if they were experienced by the youth players in a highly supportive, morally sound and ethical culture. In other related work, Driska et al (2012) reported how swimming coaches acted to develop MT through having a mind-set of constant challenge, demand of excellence and high expectation, an approach to training and

workout planning designed to simulate pain, test limits and induce failure, and a mastery motivational climate to reward those that pushed their limits. Weinberg et al. (2011) focused on the views of ten National Collegiate Athletic Association head coaches, who reported that a tough physical practice environment (e.g. through tough physical conditioning), a positive mental environment (e.g. through creating a confident and positive atmosphere) and an environment that provided mental toughness awareness and learning opportunities (e.g. through teaching and highlighting mental toughness qualities) were fundamental to MT development.

This kind of thinking has much in common with the much earlier literature in sport pedagogy on character formation (e.g., Bredemeir & Shields, 1986). In their investigation of the relationship between moral development and character in collegiate level sports, amongst several interesting findings one stands out as being of especial importance to researchers studying MT. It was reported that culture had a greater impact than specific interventions on character formation. Although much harder to measure and assess than interventions, culture was identified as the most powerful and influential agent in developing particular character types in the athletes. In some ways, the lesson to emerge for MT research relates to the work of Corlett (1996) and Nesti (2010), who have both argued that sport psychology has for far too long been over reliant on interventions aimed at dealing with quick fixes, when often the more efficacious approach is to adopt a longer term perspective, such as shaping the culture (Gilmore, 2013; Schroeder, 2013). Developing MT is a long-term process, where cultivating the challenging yet supportive conditions through sport culture is key. This includes allowing for and promoting rivalry and a high performance culture where athletes are expected to repeatedly perform to a consistently high level and get used to being evaluated and critiqued.

It has been noted that far from being a unified and homogeneous concept, culture can in fact be seen as being made up of many sub-cultures. This has been observed by cultural

1 theorists studying culture in a variety of different domains, for example, in business (e.g., Sadri & Lees, 2001) and the military (e.g., Dunivin, 1994). In sport psychology research, there 2 have been few examples of this type of focus. In their work examining how elite female 3 4 gymnasts developed their mental toughness, Thelwell et al (2010) described their findings relating to cultural differences experienced by the athletes throughout their development e.g., 5 country or origin as "unique and unexpected" (pp. 170). The recent work of Coulter et al 6 (2016) exploring the subculture of MT at an Australian Rules football club represents a 7 promising development. Utilising a qualitative methodology that allowed the coaches to 8 describe, using their own words, the culture they have tried to create within their club, the 9 findings illustrated how sport culture is unique, given it is based on the organisation's identity, 10 its history and traditions. In this way the sub-culture operates to develop a specific type of 11 mentally tough player, one who tries to play, perform and live in a way that reflects the club's 12 MT genotype. By looking at the topic in this way, it becomes easier to understand how elite 13 level coaches talk about 'putting their own stamp' on how an athlete develops in general, and 14 how they demonstrate MT in particular. In a longitudinal case study of an Australian 15 Footballer, Tibbert et al (2015) provide a powerful illustration of how sport culture, and the 16 sub-cultural norms, traditions and beliefs of specific sport organisations impacts on the 17 individual and their perceptions and understanding of MT. In moving from cultural resistance 18 to acculturation, it was the athlete who, in this case, was required to compromise his own 19 20 beliefs and embrace the ingrained and challenging football sub-culture to become accepted, and recognize that in order to succeed he would have to endure sub-cultural norms that were 21 seen as part of the toughening process. The authors make the point that "adopting subcultural 22 ideals may be detrimental to mental and physical wellbeing" (pp.77). This illustrates the 23 important, yet personally difficult individual adjustment that is required, when change in the 24 sub-culture itself is likely to be very difficult if norms and traditions are ingrained, especially 25

- where staff and their beliefs have been resident for a long time. Here, developing MT is useful
- 2 if conforming to the subcultural norms of a sporting environment is necessary to succeed, but
- 3 also to survive.

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A further aspect of sport culture that has been somewhat overlooked is the impact that others who do not have a coaching position might make on the development of MT. At youth sport level for example, the role of parents has not been fully considered in relation to developing MT in their children. Previous work (e.g., Bull et al., 2005; Connaughton et al., 2008; Gucciardi et al., 2009b) has cited themes relating to the maintenance of an appropriate level of involvement, encouragement of ownership and responsibility and being part of a supportive social support network as being important. To facilitate this, and enable parents to reinforce key messages outside of the programme, parental education that targets increased cognizance of their role and MT development programme content would appear to be of value. As parents are often the first and most important significant other in a young person's life, we should expect that the influence they have on MT in their children will be considerable. Understanding more about the parent's role in developing MT would therefore not appear to be that controversial. Important questions relating to what parents do in family life to build MT in their children, and how they support the sub cultures of sports teams, clubs or organisations to develop MT would be of research interest, and would help to inform MT development in sport from a broader 'significant other' perspective.

There are clear implications for sport psychologists who aspire to consider culture and sub cultures more fully in their applied work in relation to the development of MT. One of the most important tasks facing the sport psychologist entering into a sports team or organisation is to understand its culture (McDougall et al., 2015) and its capacity for change. While sub-cultural resistance places the emphasis on the individual developing MT strategies, which arguably is more problematic for the highly talented but mentally vulnerable athlete,

the potential for sport psychologists to have a major role as a 'cultural architect' (Eubank et 1 al., 2014); that is, to help grow a specific performance culture aimed at achieving excellence 2 should be a key consideration, irrespective of how ingrained the sub-culture would appear to 3 4 be. Given the likely influence of culture on MT, the sport psychologist should work towards identifying which parts of the culture support the development of MT, and remove or reduce 5 the effects of cultural factors that undermine MT. For example, in describing the role of the 6 sport psychologist in Premier league first team football, Nesti et al (2012) suggested that given 7 the abrasive, volatile and highly stressful culture, there is often a need to carry out work aimed 8 at creating a more supportive and professional environment. It is clear that the optimum 9 environments to build MT are those that are imbued with a challenging and stimulating culture 10 (e.g. Cook et al., 2014; Tibbert et al., 2015), where personal responsibility is emphasised in 11 12 all things. The sport psychologist, with the support of other staff, should help ensure that athletes understand why they are being challenged in this way, and how engaging in this will 13 help them succeed in their future goals and aspirations. The broader psychological literature 14 15 indicates that this is what many elite organisations, including those in sport (e.g., Maitland, Hills & Rhind, 2015) and business aspire to achieve. Possibly one of the clearest examples of 16 this is found within the cultures of military Special Forces (e.g., Dunivin 1994), where despite 17 having to confront extreme challenges, great efforts over a prolonged period of time have 18 been directed at building up an 'Esprit de Corps'. Helping the club or organisation to maintain 19 the balance of being supportive whilst placing individuals under extreme stress could be one 20 of the key aspects of the sport psychologist's job. 21

A Culturally Informed Approach to Mental Toughness Development

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In order to achieve a culture that can support the development of MT, we contend that the underpinning philosophy and approach of the sport psychologist should be founded on first understanding the core identity and values of the organisation, such that they can then

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have an active role in helping to embed these values into the working practices of the organisation. We would suggest that the sports psychologist can best achieve this task through their work with coaches, facilitated through well-established interpersonal trust and a healthy working alliance. A shared and collaborative approach to athlete learning and development is likely to be more effective, and the coaches are typically the first point of contact for athletes and other stakeholders. Tibbert et al (2015) reinforce the proposal that rather than doing more and more research to try to consensually define MT, we would be better served by just asking coaches and players what it means for them in their own sport reality. The subcultural climate is what truly defines the concept.

In light of this, the sports psychologists' role could be to devise and implement a tailored programme to create a MT culture. From our applied experiences, we argue that it is essential that practitioners are embedded in the context of the environment on a longitudinal basis to fully understand the authentic needs of the athletes, coaches and support staff with respect to MT, and its subsequent meaning, formation and development. In adopting a value-based approach to support the coach in the psychological development of athletes, the sport psychologist would work closely on an individual basis with the coach to determine their understanding of the qualities and characteristics associated with MT, and how these can be practically developed in athletes and evident in their MT behaviours both inside and outside sport. A further important feature is to assist the coach in aligning their instruction and feedback to the values that connect to the growth of MT in the athletes. Parents should also be involved in this process. The sport psychologist, with support of the whole coaching and management team should ensure parents understand, appreciate and re-enforce the work that the organisation is doing in relation to MT. Over time, this may further develop into identifying more precise ways that parents can support the philosophy, values and practice of the organisation's staff in their child's holistic development.

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Ethically, this is not without its challenges in situations where the values of the team and culture of the organization are potentially harmful. Tibbert et al. (2015) provide a good example where 'buying in' to the culture means doing things that seem in the best interests of the team, but are not necessarily 'ethically healthy' e.g., playing through injuries and risking long-term damage. Also while 'working closely with the coach' is a good idea, it has the potential to be problematic if the values of the coaching team are somewhat different to those of the sport psychologist. Tailored interventions that also align with the philosophy of coaches are an important specific consideration. Philosophically, we would argue that MT and its development should not be seen as something separate from values and morality. In echoing the ideas of Corlett (1996) in relation to the quality of courage in sport, MT should be understood as being connected to ethics, and something that can be developed in a morally sound culture, or within an amoral environment where bullying and coercion and other immoral acts are used to achieve the desired goal. Unfortunately, with the exception of existential psychology (Ronkainen & Nesti, 2015), few approaches in psychology are prepared to acknowledge that their theories are grounded in philosophy and ideas associated with ethics and morality. The practical implications of this are numerous, and include questions about what is acceptable morally and ethically to build MT in athletes, who should be involved in its development, and at what age is it appropriate to carry this out.

In relation to new approaches for researching MT, we believe that there is a greater need for practitioner-researcher roles in sport, given that sport cultures are heavily context dependent and directly influence the approach and type of work that can be carried out. An advantage of the practitioner-researcher investigating MT is that data is context specific and the conceptualisation of MT must, by necessity, emerge after the practitioner has been accepted into their role. For example, within a high performance sport environment, a practitioner-researcher sport psychologist must prove their worth, build relationships and

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establish trust with key stakeholders before any meaningful work can commence. In relation to research data, we would argue that this also applies; ecologically valid data can only be collected at the point at which the sport psychologist has developed meaningful relationships and mutual respect. While such a position may have prevented some of the lines of enquiry we have seen in previous MT research from taking place i.e., the desire to conceptualise MT and subsequently rank various attributes in an effort to provide a comprehensive definition from the outside-in, we are of the view that this research has been guilty of one frequently mentioned failing in much of sport psychology research; namely, that 'measurement has preceded meaning' (Nesti, 2004). This has resulted in a seemingly never-ending search to classify and describe the various component parts of MT, with definitions of MT appearing to expand, rather than (as one would expect after so much research) becoming more consensually concise. Andersen (2011) critiques the status of the MT literature on the basis that it makes it seem as if MT could be "just about anything in sport". We agree. A seemingly endless stream of abstract definitions a swelling tide of attributes and characteristics, and 'meaning-less' measurement is in danger of blurring rather the clarifying the construct. A further unfortunate by-product of this is the assumption that because coaches and other practitioners do not describe MT in the same terminology as researchers, this is forwarded as evidence that they do not understand MT. To us, this is a confused position of our own field's making, partly brought about by methodological 'failures' and a determination to quantify and list, when efforts could have been more productively directed at understanding the culture through which such coach perspectives have been meaningfully formed. In this context, it is interesting that Mahoney et al (2016) attributed the failure of a coach directed autonomysupportive intervention designed to increase mental toughness to coaches resistance to adopt autonomy-supportive behaviours. The coaches cited contextual pressures, including time pressures and internal pressures to adopt the controlling coach behaviours that are more

representative of their cultural norms as an explanation for why the autonomy-supportive style was not used. The practitioner-researcher role we've advocated is one way in which some of these difficulties can be overcome. In this role, the sports psychologist is able to resist the temptation to search for a lexicon of terms that will have the effect of artificially restricting the subject matter. Rather than do this, the practitioner-researcher will immerse themselves deeply into the culture as the first and most important task as both researcher and applied sport psychologist. The descriptions of MT that will emerge from this approach will be authentic and more recognisable to the athletes and coaches.

We return to an example of this from our own work at one of the world's most successful professional football clubs to highlights this point. In our research (Cook et al., 2014), coaches were adamant that humility, possessing some level of dark humour and being courageous were ways they described aspects of MT. Their account of these terms closely connected to the culture of elite professional football and the specific sub-culture of the youth Academy and the city in which it was located. We feel that to ignore this 'ground-up' data as researchers would leave the practitioner ill-equipped to have the findings inform their practice and deliver their applied work in relation to MT development effectively. In support of this argument, Tibbert et al (2015) portray the Sport Psychologist who seeks to understand the subcultural contexts of being mentally tough as being better equipped to moderate some of the sacrifices that athletes make to become successful and support the negative impact on athlete well-being that may result.

In terms of training researchers to carry out this type of role, the following points are important. Individuals need to have a high level of knowledge of qualitative research methods, especially ethnography and its associated principles i.e., entering the setting, gatekeepers, overt-covert role, ethics and confidentiality (Krane & Baird, 2005). We also advocate the importance of postgraduate training opportunities based on the principles of work-related

learning under supervised practice, where understanding the cultural features of the environment is just as important as the actual applied work undertaken (Eubank et al., 2014; Cruickshank et al., 2015). This will allow individuals to develop the necessary applied skills and qualities that are required in providing sport psychology support in a practitionerresearcher role (e.g., Chandler et al., 2016). Finally, academics and supervisors play a critical role in supporting individuals throughout these processes. In that regard, it is essential that supervisors have the necessary applied experiences to offer guidance, support and contextually informed professional feedback. Being able, as a supervisor, to empathise with the situations that the trainee is likely to face and understand the importance of the social context will assist the professional development of the trainee's underpinning philosophical assumptions about applied practice in this regard (Hutter et al., 2015; . In the context of this paper, placing value on understanding sport culture as a systemic issue of relevance that will inform practice represents a prized outcome of professional training. Having the skills and 'know how' to then be able to contribute to an organisation's 'cultural architecture' represents an important element of practitioner competence, and will be well-received by the stakeholders alongside whom the sport psychologist will need to work.

Conclusion

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This paper argues for the adoption of a culturally informed approach to MT development. Previous research in the area has predominantly taken a traditional 'top down' approach, following the scientific and experimental conventions of the discipline, to conceptualize MT and offer suggestions as to how MT may be developed in individuals. The resultant side effect of examining 'subjects' in isolation from the organizational and cultural context in which they operate has been to 'miss out' on understanding the person situated in their social context. Attempting to conceptualize MT in sport in isolation from its cultural sport context has the potential to overlook the important meaning that emerges from a

- 1 contextualised approach. We advocate that when studying MT and its development in sport,
- 2 researchers should avoid a 'context evacuated' methodology, and instead utilize a culturally
- 3 informed 'ground up' approach to better understand MT, and the personal meaning this has
- 4 for the individual in context. In this regard, this paper acts as a primary point of reference for
- 5 those wishing to undertake culturally informed MT development research in the field.

To facilitate culturally informed MT development, the paper advocates the value of longitudinal cultural immersion by the practitioner as a means to identify more authentic and meaningful MT conceptualisation. Importantly, this involves working with, and alongside, key stakeholders such as coaches and other support staff (and parents in the case of youth sport) to understand the core identity and values of the organisation. Then then permits the sport psychologist to be a 'cultural architect' (Eubank et al., 2014), with an active role in helping to grow a specific performance culture and devise and implement a culturally informed programme to develop MT. In that sense, we call for existing practitioners, and those involved in professional training and supervision, to be fully cognisant of the systemic issues of relevance, as depicted in the acquisition of a detailed cultural picture of organisations. Such awareness will enable applied work to be truly authentic and organic, and ultimately meet the MT needs of individuals who have to operate and function in the demanding and often unique social context of sport. To this end, this paper offers implications for the applied sport psychologist that have a major influence on the ongoing work of the qualified practitioner in the field, as well the practitioner development agenda of existing

Sport Psychology professional training provision.

1	References
2	Alvesson, M. (2002). Understanding organizational culture. London: Sage.
3	Andersen, M. (2011). Who's mental, who's tough, and who's both? Mutton constructs
4	dressed up as lamb. In D. Gucciardi, & S. Gordon (Eds.), Mental toughness in sport:
5	Developments in theory and research (pp. 69-88). Abingdon, Oxon: Routledge.
6	Anthony, D., Gucciardi. D., & Gordon, S. (2016). A meta-study of qualitative research on
7	mental toughness development. International Review of Sport and Exercise
8	Psychology, DOI: 10.1080/1750984X.2016.1146787
9	Bredemeier, B.J. & Shields D.L. (1986). Moral growth among athletes and non-athletes: A
10	comparative analysis. The Journal of Genetic Psychology: Research and Theory on
11	Human Development, 147, 7-18.
12	Bull, S.J., Shambrook, C.J., James, W. & Brooks, J.E. (2005). Towards an understanding of
13	MT in elite English cricketers. Journal of Applied Sport Psychology, 17, 209-227.
14	Chandler, C., Eubank, M., Nesti, M., & Cable, T. (2014). Personal qualities of effective sport
15	psychologists: A sports physician perspective. Physical Culture and Sport. Studies and
16	Research, 61, 28-38.
17	Chandler, C., Eubank, M., Nesti, M., Tod, D., & Cable, T. (2016). Personal qualities of
18	effective sport psychologists: Coping with organisational demands in high
19	performance sport. International Journal of Sport Psychology, 47, 297-317.
20	Cook, C., Crust, L., Littlewood, M., Nesti, M. & Allen-Collinson, J. (2014). 'What it takes':
21	Perceptions of MT and its development in an English Premier League Soccer Academy
22	Qualitative Research in Sport, Exercise and Health, 6, 329-347.
23	Corlett, J. (1996). Sophistry, Socrates, and sport psychology. The Sport Psychologist. 10, 84-
24	94.

- 1 Coulter, T.J., Mallett, C.J. & Singer, J.A. (2016). A subculture of MT in an Australian
- 2 Football League Club. *Psychology of Sport & Exercise*, 22, 98-113.
- 3 Connaughton, D., Wadey, R., Hanton, S. & Jones, G. (2008). The development and
- 4 maintenance of mental toughness: Perceptions of elite performers. *Journal of Sports*
- 5 *Sciences*, 26, 83-95.
- 6 Connaughton, D., Hanton, S. & Jones, G. (2010). The development and maintenance of MT
- 7 in the world's best performers. *The Sport Psychologist*, 24, 168-193.
- 8 Corlett, J. (1996). Virtue lost: Courage in sport. Journal of the Philosophy of Sport, 23, 45-
- 9 57.
- 10 Cruickshank, A., & Collins, D. (2012). Culture change in elite sport performance teams:
- Examining and advancing effectiveness in the new era. Journal of Applied Sport
- 12 *Psychology*, 24, 338-355.
- 13 Cruickshank, A., Collins, D., & Minten, S. (2015). Driving and sustaining culture change in
- professional sport performance teams: A grounded theory. Psychology of Sport and
- 15 *Exercise*, 20, 40-50.
- 16 Crust, L. (2008). A review and conceptual re-examination of mental toughness: Implications
- for future researchers. *Personality and Individual Differences*, 45, 576-583.
- 18 Crust, L., & Clough, P. (2011). Developing mental toughness: From research to practice.
- 19 *Journal of Sport Psychology in Action*, 2, 21-32.
- Deal, T., & Kennedy, A. (1982). Corporate cultures: The rites and rituals of corporate life.
- 21 Reading, MA: Addison-Wesley.
- 22 Driska, A., Kamphoff, C., & Armentrout, S. (2012). Elite swimming coaches' perceptions of
- 23 mental toughness. *The Sport Psychologist*, 26, 186-206.
- Dunivin, K.O. (1994). Military culture: Change and continuity. Armed Forces & Society, 20,
- 25 531-547.

- 1 Eubank, M., Nesti, M., & Cruickshank, A. (2014). Understanding high performance
- 2 sport environments: Impact for the professional training and supervision of sport
- 3 psychologists. Sport and Exercise Psychology Review, 10, 30-37.
- 4 Fawcett, T. (2011). Mental toughness: A phenomenological perspective. In D. Gucciardi, &
- 5 S. Gordon (Eds.), Mental toughness in sport: Developments in theory and research (pp.
- 6 9-29). Abingdon, Oxon: Routledge.
- 7 Gilmore, S. (2013). Culture change in a professional sports team: Shaping environmental
- 8 contexts and regulating power: A commentary. *International Journal of Sports Science*
- 9 & Coaching, 8, 305–308.
- 10 Giorgi, A. (1970). Psychology as a Human Science: A Phenomenologically Based Approach.
- Oxford, England: Harper & Row.
- Gordon, S., Gucciardi, D., & Chambers, T. (2007). A personal construct theory perspective
- on sport and exercise psychology research: The example of mental toughness. In T.
- Morris, P. Terry, & S. Gordon (Eds.), Sport psychology and exercise psychology:
- 15 International perspectives (pp.43-55). Morgantown, WV: Fitness Information
- Technology.
- Gucciardi, D.F. (2008). Towards and understanding of MT in Australian football. *Journal of*
- 18 Applied Sport Psychology, 20, 261-281.
- 19 Gucciardi, D. F., Gordon, S., & Dimmock, J.A. (2009a). Evaluation of a MT training
- program for youth aged Australian footballers: I. A quantitative analysis. *Journal of*
- 21 Applied Sport Psychology, 21, 307–323.
- 22 Gucciardi, D. F., Gordon, S., & Dimmock, J. A. (2009b). Evaluation of a MT training
- program for youth aged Australian footballers: II. A qualitative analysis. *Journal of*
- 24 Applied Sport Psychology, 21, 324–339.

- 1 Gucciardi, D. F., Gordon, S., Dimmock, J.A. & Mallett, C.J. (2009). Understanding the
- 2 coach's role in the development of mental toughness: Perspectives of elite Australian
- football coaches. *Journal of Sports Sciences*, 27, 1483-1496.
- 4 Hardy, L., Bell, J., & Beattie, S. (2014). A neuropsychological model of mentally tough
- behaviour. *Journal of Personality*, DOI: 10.1111/jopy.12034
- 6 Hatch, M. (1993). The dynamics of organization culture. Academy of Management Review,
- *18*, 657-693.
- 8 Hutter, R. I., Oldenhof-Veldman, T., & Oudejans, R. R. D. (2015). What trainee sport
- 9 psychologists want to learn in supervision. Psychology of Sport and Exercise, 16, 101-
- 10 109.
- Jones, G., Hanton, S., & Connaughton, D. (2002). What is this thing called mental
- toughness? An investigation of elite sport performers. *Journal of Applied Sport*
- 13 *Psychology*, 14, 205-218.
- Jones, G., Hanton, S., & Connaughton, D. (2007). A framework of MT in the world's best
- performers. *The Sport Psychologist*, 21, 243-264.
- Krane, V., & Baird, S. M. (2005). Using ethnography in applied sport psychology. *Journal of*
- 17 Applied Sport Psychology, 17, 87–107.
- Mahoney, J.W., Ntoumanis, N., Gucciardi, D.F., Mallett, C.J., & Stebbings, J. (2016).
- 19 Implementing an autonomy-supportive intervention to develop mental toughness in
- adolescent rowers. *Journal of Applied Sport Psychology*, 28, 199-215.
- 21 Maitland, A., Hills, L. A., & Rhind, D. J. (2015). Organisational culture in sport–A
- 22 systematic review. *Sport Management Review*, 18(4), 501-516.
- 23 Martens, R. (1987). Coaches Guide to Sport Psychology. Champaign, IL: Human Kinetics.
- Martin, J. (2002). Organizational culture: Mapping the terrain. Thousand Oaks, CA: Sage.

- 1 McDougall, M., Nesti, M., & Richardson, D. (2015). The challenges of sport psychology
- delivery in elite and professional sport: reflections from experienced sport
- 3 psychologists. *The Sport Psychologist*, 29, 265-277.
- 4 McEwan, H. E., & Tod, D. (2015). Learning experiences contributing to service-delivery
- 5 competence in applied psychologists: Lessons for sport psychologists. *Journal of*
- 6 *Applied Sport Psychology*, 27, 79-93.
- 7 Nesti, M. (2004). Existential psychology and sport: Theory and application. New York:
- 8 Taylor & Francis.
- 9 Nesti, M. (2010). Psychology in football. Working with elite and professional players. Oxon:
- 10 Routledge.
- 11 Nesti, M. (2011). Phenomenology and sport psychology: Back to the things themselves!
- 12 Sport, Ethics and Philosophy, 5(3), 285-296.
- Nesti, M., Littlewood, M., O'Halloran, L., Eubank, M., & Richardson, D. (2012).
- 14 Critical moments in elite Premiership football: Who do you think you are? *Physical*
- 15 *Culture and Sport. Studies and Research*, *56*, 23-32.
- O'Halloran, L., Littlewood, M., Richardson, D., Tod, D., & Nesti, M. (2016). Doing
- descriptive phenomenological data collection in sport psychology research. *Sport in*
- 18 *Society*, 1-12.
- 19 Potrac, P., Jones, R., & Armour, K. (2002). "It's all about respect": The coaching behaviours
- of an expert English soccer coach. Sport Education and Society, 7, 183–202.
- 21 Ronkainen, N. J., & Nesti, M. S. (2015). An existential approach to sport psychology: Theory
- and applied practice. *International Journal of Sport and Exercise Psychology*, 1-13.
- Sadri, G. & Lees, B. (2001). Developing corporate culture as a competitive
- advantage. *Journal of Management Development*, 20, 853 859.

- 1 Schein, E.H. (2004). Organizational culture and leadership (3rd ed.). San Francisco: Jossey-
- 2 Bass.
- 3 Schinke, R. J., & McGannon, K. R. (2014). The psychology of sub-culture in sport and
- 4 *physical activity: Critical perspectives.* Routledge.
- 5 Schroeder, P.J. (2013). Culture change in a professional sports team: Shaping environmental
- 6 contexts and regulating power: A commentary. International Journal of Sports Science
- 7 & Coaching, 8, 315–317.
- 8 Slack, L.A., Butt, J., Maynard, I.W & Olusoga, P. (2014). Understanding MT in elite football
- 9 officiating: Perceptions of English Premier League referees. Sport and Exercise
- 10 Psychology Review, 10, 4-24.
- 11 Slack, L.A., Maynard, I.W., Butt, J., & Olusoga, P. (2015). An evaluation of a MT education
- and training program for early-career English Football League Referees. *The Sport*
- 13 *Psychologist*, 29, 237 -257.
- Smith, B., & Sparkes, A. C. (2008). Narrative and its potential contribution to disability
- studies. Disability & Society, 23, 17-28.
- 16 Thelwell, R., Such, B., Weston, N., Such, J., & Greenlees, I. (2010). Developing mental
- toughness: Perceptions of elite female gymnasts. International Journal of Sport and
- 18 *Exercise Psychology*, 8, 170–188.
- 19 Tibbert, S., Andersen, M., & Morris, T. (2015). What a difference a "Mentally Toughening"
- year makes: The acculturation of a rookie. *Psychology of Sport and Exercise*, 17, 68-78.
- Weinberg, R. Butt, J., & Culp, B. (2011). Coaches' views on mental toughness and how it is
- built. *International Journal of Sport and Exercise Psychology*, 9, 156-172.
- Wilson, A.M. (2001). Understanding organisational culture and the implications for corporate
- marketing. European Journal of Marketing, 35, 353–367.