

## **Coping with Sport Injury and Rehabilitation**

ARVINEN-BARROW, Monna <<http://orcid.org/0000-0002-8391-1269>> and  
OLUSOGA, Peter <<http://orcid.org/0000-0001-8431-3853>>

Available from Sheffield Hallam University Research Archive (SHURA) at:

<https://shura.shu.ac.uk/33206/>

---

This document is the Accepted Version [AM]

### **Citation:**

ARVINEN-BARROW, Monna and OLUSOGA, Peter (2024). Coping with Sport Injury and Rehabilitation. In: ARVINEN-BARROW, Monna and CLEMENT, Damian, (eds.) The Psychology of Sport Injury and Rehabilitation. Second edition. London, Routledge, 177-188. [Book Section]

---

### **Copyright and re-use policy**

See <http://shura.shu.ac.uk/information.html>

## Chapter 12

### Coping with Sport Injury and Rehabilitation

Dr. Monna Arvinen-Barrow, University of Wisconsin-Milwaukee, USA

<https://orcid.org/0000-0002-8391-1269>

Dr. Peter Olusoga, Sheffield Hallam University, UK & Inland Norway University of Applied Sciences,

Norway

<https://orcid.org/0000-0001-8431-3853>

#### Chapter Objectives

- To outline the transactional theory of stress and coping
- To apply various coping strategies to sport injury and rehabilitation
- To examine the potential role of religion and spirituality in sport injury rehabilitation

## Introduction

Physiologically, the human body is designed to treat any stressor – including sport injury – as a threat. Instigated by the hypothalamus and known as the “fight-or-flight response”, the human body responds to threat(s) by releasing hormones such as adrenaline and cortisol, resulting in a stress response aimed to protect the body from possible harm. The surge of adrenaline will prepare the body for a fight, characterized by increased heart rate, replenished energy supplies, and elevated blood pressure. Cortisol will prepare the body to focus on what is to come by suppressing non-essential bodily systems (e.g., digestive, and reproductive systems), increasing glucose in the bloodstream, and activating the brain to use more glucose. Cortisol also activates the body’s “natural emergency room” by ensuring it has enough substances available for tissue repair if/when necessary. The fight-or-flight response also communicates with the brain – affecting the individual’s thoughts and emotions – particularly fear and numerous other mood states (Walinga, 2014).

When faced with a stressor (a threat), we as humans are also likely to initiate cognitive and behavioral efforts with a goal to *cope* with the stressor and its effects (Brewer & Redmond, 2017; Walinga, 2014). *Coping* is a process where an individual's attempts to change and/or avoid the situation they encounter or their emotional responses (or both). It is defined as “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984, p. 141). This process-orientated definition of coping also reflects the fact that coping strategies often change during the stressful episode, and several coping strategies might be employed either individually or all at once, based on an individual’s dynamic perception of their likely success. The definition also distinguishes coping as separate from psychosocial strategies – which are typically implemented and used by professionals working *with* the athlete, rather than instigated by the athlete. Cox (2012) states that psychosocial strategies can

become coping skills if the athlete is able to “personalize and claim ownership” (p. 214) of the taught intervention and to “integrate them into their own repertoire of psychological skills” (p. 214).

Existing research with sports medicine professionals (SMPs) has identified key factors that distinguish athletes who cope successfully with their injuries from those who do not. In general, these include (a) ability to maintain positive attitude, (a) ability to manage maladaptive emotional responses, and (c) ability to comply/adhere with the rehabilitation protocol (Arvinen-Barrow et al., 2007; Clement et al., 2013; Heaney, 2006; Larson et al., 1996). With a goal to facilitate successful coping, many athletes are using personal coping skills that may have a deep personal and/or sociocultural history or meaning for them (for multicultural understanding, see Chapter 11 for more details). For example, previously injured athletes have used profanity when expressing their emotions while transitioning out of sport due to injury (Arvinen-Barrow et al., 2017) and reported turning to religious practices when injured (Arvinen-Barrow et al., 2015; Gould et al., 1997). The purpose of this chapter is to present selected coping strategies athletes are likely to use in their efforts to manage stressors related to sport injury. More specifically, this chapter will (a) outline the transactional theory of stress and coping (Lazarus & Folkman, 1984), (b) introduce selected coping strategies (i.e., humor, profanity, metaphor, and storytelling) that can have a stress-moderating effects during sport injury, (c) discuss the potential role of religion and spirituality in sport injury rehabilitation, and (d) highlight critical factors for successful coping with sport injury.

### **Transactional Theory of Stress and Coping**

Early research exploring stress and coping in sport was clouded by inconsistent definitions of the key concepts involved. Previously, stress has been conceptualized as an environmental demand or stimulus, a response to an environmental demand, and as an interaction between the person and the environment (Olusoga & Thelwell, 2016). To address this apparent lack of conceptual precision, a framework of stress based on Lazarus' transactional theory of stress and coping (Lazarus & Folkman, 1984) proposes that individuals experience stress as a consequence of an evaluation of the situation the

person is in. The *transaction* refers to the dynamic relationship between environmental demands (*i.e.*, *stressors*) and an individual's psychological resources for dealing with them (*i.e.*, *coping ability*). Stress responses (*i.e.*, *strain*) result from a perceived imbalance between these demands and resources. Rather than conceptualizing stress as being a specific property of either the individual or the environment, it is the *meaning* constructed by an individual about their relationship with the stressor/environment (*i.e.*, 'relational meaning') that is pivotal in their experience of stress. Put simply, stress is a process of weighing up our demands against our perceptions of how well we think we can cope.

According to the transactional theory of stress and coping, this evaluative process of ascribing meaning to the person-environment relationship is known as appraising, and there are two main types. *Primary appraising* represents evaluation of whether a particular encounter represents a threat (*i.e.*, potentially damaging to goal commitments, values, or beliefs), challenge (*i.e.*, a potential obstacle towards goal commitments, values, or beliefs), or harm/loss (*i.e.*, a perception that damage to goal commitments, values, or beliefs has already occurred).<sup>1</sup> If primary appraisal is concerned with evaluating what *is* happening, *secondary appraising* involves an evaluation of what can be done. Secondary appraisal involves an evaluation of coping resources, how likely coping strategies are to be effective, and whether they can be applied in a given situation.<sup>2</sup>

Although appraising is often the cognitive underpinning for coping, Lazarus (2006) suggested that "it is not inappropriate to refer to it as coping as well" (p.76). Cognitive appraisals result in emotional and behavioral responses, along with the selection of appropriate (or perhaps inappropriate) coping responses. If the appraisal of the transaction results in a strain – that is, an imbalance between stressors

---

<sup>1</sup> Lazarus & Folkman (1984) point out that these stress appraisals are not mutually exclusive and can occur simultaneously. For example, harm is fused with threat because with every loss/harm comes possible negative implications for the future. Threat and challenge appraisals are not opposite ends of the same continuum and often occur simultaneously. Challenge and threat emotions can occur at the same time in stressful encounters.

<sup>2</sup> Primary and secondary appraising are somewhat misleading terms, as primary appraisal is neither more important than, nor does it precede, temporally, secondary appraising.

and coping resources is perceived – the resultant outcome of the strain is dependent on how successful or effective the selected coping strategies are. It is vital, therefore, to understand the importance of coping as an integral part of how an individual navigates the stress process.

### **Coping Strategies**

Many athletes enter the rehabilitation environment with myriad of personal, psychological, and sociocultural factors that can either facilitate or impede successful coping with sport injury. It is also common for athletes to rely on various internalized coping strategies that bear strong personal and cultural significance. What follows, is an introduction of selected coping strategies (i.e., humor, profanity, metaphors, and storytelling) that can have stress-moderating effects during sport injury and rehabilitation. Please note this list is not exhaustive, but rather a reflection of strategies that have a centuries long history in healing and healthcare.

#### **Humor**

Defined as “the capacity to perceive or express the amusing aspects of a situation” (American Psychological Association, 2022), theoretical understanding of how humor works dates back to Ancient Greece to Plato’s superiority theory (i.e., putting oneself above others with humiliating putdowns) and Aristotle’s play theory (i.e., playing with words or objects; Kerulis, 2020, March 23). In the 18<sup>th</sup> century, humor has been conceptualized through Freud’s relief theory (i.e., humor is a mechanism to release pressures that build up in the mind) and the incongruity theory (i.e., humor comes from two things that do not fit together, making it humorous; Kerulis, 2020, March 23).

It is “likely that humor is as old as healing. Hippocrates, for instance, advised his patients to ‘contemplate on comic things’ to facilitate recovery” (Francia et al., 2015, cited in Piemonte & Abreu, 2020, p. 608). According to Kuiper and Martin (1998), “the stress-moderating effects of humor appear to operate, at least in part, through more positive appraisals and more realistic cognitive processing of environmental information” (p. 162). This supports the conceptualizations proposed in the transactional

theory of stress and coping (Lazarus & Folkman, 1984). Thus far, published research into the role of humor in sport injury contexts is non-existent. Research findings from non-sport injury settings seem to suggest that humor (and laughter) can have therapeutic effects on anxiety, reduce stress and muscle tension, help control pain and discomfort, and facilitate positive mood states and overall psychological health (Abel, 2002). Humor has also been a welcome addition to the patient-healthcare provider relationship (McCabe, 2004; Scholl & Ragan, 2003) as it can release interpersonal tensions, facilitate relationships, alleviate power imbalances, and help athletes articulate their true feelings and thoughts when discussing difficult topics (Beach & Prickett, 2017; McCabe, 2004; Scholl & Ragan, 2003). While humor is not something that is prescribed as treatment, healthcare professionals (Scholl & Ragan, 2003), and sport psychology professionals (SPPs) have reported using humor in their practice for varied reasons such as facilitating the therapeutic alliance (Pack et al., 2020; Pack et al., 2019).

### **Profanity**

A unique feature of humans is the ability to use language to convey messages and meanings to others. Dating back to ancient Sanskrit, humans have assigned meaning to different patterns of sound. According to Bergen (2016), “over the last twenty-six centuries, language scholars have focused on the sanitized and saccharine type of language” (p. 3), and willfully ignored the bad types – namely profanity. Profanity (i.e., vulgar, blasphemous, or obscene language or behavior), is generally inspired by taboo-ridden domains such as bodily functions, sex, religion, and derogatory terms used to describe other groups of people (Steinmetz, 2016, December 15). Use of profanity violates moral foundations of purity (Sylwester & Purver, 2015) and the use of profanity is also likely to elicit unconscious biases about individuals who use it (DeFrank & Kahlbaugh, 2019). Using profanity can also be interpreted as inappropriate, antisocial, or abusive, particularly when used with an intent to belittle, hurt, or harm another person (Ashwindren et al., 2018).

Profanity, much like language in general, is an integral part of human communication. Consistent with the transactional theory of stress and coping (Lazarus & Folkman, 1984), profanity can serve as a powerful way to ascribe meaning to the person-environment relationship. Using profanity affords the expression of our experiences, intentions, and desires to be conveyed to those around us (Bergen, 2012) in an authentic and instantaneous manner (McGreal, 2017, March 24). A single curse word can convey powerful messages on how an individual appraises and emotionally responds to their stressful situation, including the strongest human emotions of anger, fear, sadness, and passion (Bergen, 2016; Jay & Janschewitz, 2008). Using profanity can also increase heart and respiratory rate, elevate body temperature, and change attentional focus. To put it simply, “bad words are powerful – emotionally, physiologically, psychologically, and socially” (Bergen, 2016, p. 1).

In a sport injury research with Irish Rugby Football Union players who had experienced a career-ending injury found the use of profanity to be common when speaking about “emotions related to the injury, rehabilitation and recovery, and the factors hindering the process.” (Arvinen-Barrow et al., 2017, p. 67). Using profanity can also have a cathartic effect on stress and pain (Vingerhoets et al., 2013). Research with university students has found that swearing can increase cold-pressor pain tolerance, heart rate, and decrease perceived pain when compared to not swearing (Stephens et al., 2009). However, benefits of swearing on pain tolerance will be lower among individuals who swear frequently in daily life when compared to non-habitual swearing (Stephens & Umland, 2011), providing further evidence for the relationship between profanity use and emotional responses to stressors such as pain.

## **Metaphor**

Defined as a “figure of speech in which a word or phrase is applied to an object, person, or action that it does not literally denote for the purpose of creating a forceful analogy” (American Psychological Association, 2022), metaphor(s) have potential to offer a way to express abstract experiences in concrete terms (Lakoff & Johnson, 1980). Consistent with the transactional theory of stress and coping (Lazarus &

Folkman, 1984), metaphor(s) can help assign meaning to a stressful situation, particularly when an individual is struggling to find words to describe difficult sensations, thoughts, and feelings. Metaphors can also be more than figurative expression – a plethora of research has demonstrated the value of metaphors as a tool for facilitating deeper understanding of concepts and new perspectives, as well as a vehicle for changing attitudes. In healthcare, metaphors are used as an educational tool to (a) explain medical terminology, (b) simplify mechanisms of pathogenesis, or (c) to promote behavioral change (Steen, 2008).

Using metaphor(s) in injury rehabilitation is not novel. According to Stewart (2015), “communication about a patient’s pain experience is a fundamental component of rehabilitation, but often requires the use of metaphoric expressions” (p. 10). Both common and self-generated metaphors of pain can be helpful in describing the sensory experience of pain (e.g., stabbing pain), the affective experience of pain (e.g., I feel like a truck ran over me), and the impact of pain on daily life (e.g., pain is like a strict parent with unreasonable curfew; Munday et al., 2020; Stewart, 2015). In sport injury rehabilitation specifically, using metaphors is also not a new concept (Smith & Sparkes, 2004). A quarter century ago Heil et al. (1998) proposed using a ‘patient-athlete metaphor’ as a way to identifying psychological roles for all members of the injury rehabilitation team. Using a case study with a recreational athlete with chronic pain, Heil et al. demonstrated how a ‘patient-athlete metaphor’ would highlight the central role of the athlete as the key player in the “game of rehabilitation” (p. 25), and subsequently fosters a sense of independence and control.

### **Storytelling**

Defined as “an interactive act of using written, oral, electronic, or visual means of communication to tell a story in an effort to enable understanding of self or a situation” (Arvinen-Barrow et al., 2020, p. 209), telling stories has been, and continues to be an integral part of human history. Stories are authentic experiences (Rutledge, 2011, January 16), and can take different forms – written, oral, and visual – and

serve to provide a medium for organizing thoughts in a meaningful way, making sense of an experience, and expressing ourselves to the world (Scaletti & Hocking, 2010; Ward, 2007). Storytelling is also deeply rooted in our neural pathways – stories are stored and regulated by the amygdala – “the part of the brain that plays a central role in social interaction, communication, and emotion recognition” (Arvinen-Barrow et al., 2020, p. 211). A well-constructed story, and process of storytelling also affords the emergence of myriad of emotions “ranging from anger, sadness, and anxiety to feelings of joy, excitement, and relief” (Arvinen-Barrow et al., 2020, p. 211). Thus, it is no surprise that the human brain prefers a story to scientific facts (McCann et al., 2019).

Consistent with the transactional theory of stress and coping (Lazarus & Folkman, 1984), storytelling can also be a creative way to for an athlete to cognitively appraise and make sense of their sport injury experience. While empirical investigations into role of storytelling in sport injury are few, using narratives and storytelling in sport injury and illness contexts is not new (Brock & Kleiber, 1994; Hyysalo, 2016; Newman et al., 2016; Roy et al., 2015; Smith & Sparkes, 2002, 2005). Indeed, sport as a cultural domain has a long history of incorporating stories into their communities (Davis, 2012), with a goal to convey motivational messages of “triumph over obstacles” and demonstrate the value of perseverance and hard work, to name a few. For more details on storytelling in sport injury, see Arvinen-Barrow et al. (2020).

### **Religion and Spirituality**

Given that approximately three-quarters of the world’s population regard religion<sup>3</sup> as an important aspect of life (Maoz, 2013), along with spirituality<sup>4</sup>, it can be important coping strategy when

---

<sup>3</sup> Defined as a “system of beliefs in divine or superhuman power, and practices of worship or other rituals directed toward such power” Argyle, M., & Beit-Hallahmi, B. (1975). *The social psychology of religion*. Routledge & Kegan Paul.

<sup>4</sup>Defined as an “existential aspect of their religious lives, for example, the practice of prayer throughout the day (outside a Church environment) and witness through the actions of every dimension of their lives, including sport

faced with stressors (Peres et al., 2007). While researchers and applied practitioners have called for culturally sensitive (see Chapter 11) and holistic approaches (see Chapter 7) to injury management (Brewer & Redmond, 2017; Roy et al., 2015), much of healthcare has failed to consider the role of religion and spirituality in the process (Ledger, 2005). Considering existing sport injury risk (see Chapter 2) and psychosocial response models (see Chapters 3-6), the role of religion and spirituality in sport injury rehabilitation is multifaceted (for integrated model of religiosity and psychological response to the sport injury and rehabilitation process, see Wiese-Bjornstal, 2019, November). First, religion and spirituality can form part of an individual's psychological core, associated with stable personality variables such as attitudes, beliefs, and values (Clement et al., 2019). Second, it is also feasible to assume that religion and spirituality will also function as a coping strategy (Wiese-Bjornstal, 2019, 2019, November; Wiese-Bjornstal et al., 1998), thus consistent with the transactional theory of stress and coping (Lazarus & Folkman, 1984):

Religion as a system of beliefs in divine or superhuman power, and practices of prayer during injury occurrence, rehabilitation, and return to sport can provide an injured athlete a way of emotional coping including, but not limited to: reduction in the fear of unknown, tension, anger, depression, grief, and enable feelings of hopefulness and positivity during the process (Clement et al., 2019, p. 73).

While sport sociology has long highlighted the significant role of religion and spirituality in athletes' lives (Coakley, 2009), sport psychology has only recently gained interest in understanding its relevance to athlete performance and well-being (Hemmings et al., 2019; Roychowdhury, 2019). Existing (albeit limited) research on religion, spirituality, and coping during sport injury has found that some

---

(e.g., Romans 12: 1)" Watson, N., & Czech, D. R. (2005). *The use of prayer in sport: Implications for sport psychology consulting*. Retrieved 4 from

athletes use religion and spirituality as an injury prevention strategy (Dodo et al., 2015) as well as coping strategy with injury-related stressors (Arvinen-Barrow et al., 2015; Najah et al., 2017). Recent research with adult athletes affiliated with diverse Christian denominations found that “religious ways of coping” were predominantly positive, and that religious coping sources were used concurrently with non-religious coping strategies (Wiese-Bjornstal et al., 2022; see also Chapter 11).

### **Critical Success Factors**

While the above strategies can be beneficial for coping with injury, pain, and rehabilitation, it is important to recognize that each can also negatively affect the coping process. In short, not everyone is comfortable with or finds value in using humor, profanity, metaphor(s), or storytelling in rehabilitation. Equally, for some, integrating religion or spirituality into rehabilitation can feel inappropriate or uncomfortable, depending on their personal beliefs and views. Before advocating for any of the above strategies to athletes with injuries, it is imperative for the SPP, SMP, or SP to engage in reflective practice to ensure appropriateness of the approach. In no particular order, these are: (a) athlete-centered approach, (b) cultural considerations, (c) professional relationship, (d) ethical considerations, (e) practitioner self-assessment, and (f) purposeful implementation.

### **Athlete-Centered Approach**

Existing theoretical and empirical evidence suggests that adopting an athlete-centered approach to sport injury rehabilitation is likely to result in the best physical and psychosocial recovery outcomes (see Chapter 7). Consistent with this approach, it is imperative for SPPs, SMPs, and SPs to guide and encourage the athlete toward coping strategies that create the right conditions for a facilitative rehabilitation environment that fosters athlete’s physical, psychological, spiritual, and social well-being.

### **Cultural Considerations**

All athletes with injuries enter the rehabilitation process with multiple intersecting cultural identities (see Chapter 11) that will influence and are influence by interpersonal interactions with various

stakeholders. To ensure culturally competent care, SPPs, SMPs, and SPs should look inwards and engage self-reflective practices to develop their own cultural reflectivity and sensitivity, and cultural humility.

### **Ethical Considerations**

While nuanced variation in Codes of Ethics exists between different professions, the principle of non-maleficence – i.e., do no harm – is a priority for all (see Chapter 8). It is imperative for SPPs, SMPs, and SPs to practice ethically competent care, and reflect on the appropriateness of using and advocating various coping strategies to the athletes they work with.

### **Practitioner Self-Assessment**

Reflective practice includes continued self-assessment of one's own strengths and areas in need of improvement as a healthcare professional. Assessing one's own attitudes, biases, and skills should be an on-going process for SPPs, SMPs, and SPs.

### **Professional Relationship**

At the core of successful rehabilitation is a trusting and supportive working relationship between the injured athlete and the professional(s) working with them. Depending on the athlete, some of the coping strategies discussed in this chapter may have a negative impact on the professional relationship – especially when the strategies used create an incongruence with personal attitudes, beliefs, and values, for the athlete or the professional working with the athlete. For example, use of callous humor with athletes can undermine their trust in medicine (Piemonte & Abreu, 2020) and use of profanity has been found to decrease perceptions of trustworthiness, intelligence, and likability (DeFrank & Kahlbaugh, 2019), all of which are key ingredients for good professional relationship. Linguistic differences can also create incongruence in using metaphors (Stewart, 2015), particularly when using war metaphors (e.g., painkiller, battle with injury, defense force) to describe the injury, consequences, or rehabilitation treatments. Depending on one's cultural background, references to war can be triggering, particularly for those who have been affected by war. Storytelling can also be personally, generationally, and/or

socioculturally dependent. Incongruent use of stories can result in misalignment with the intended meaning and interpretation of the meaning, subsequently affecting the professional relationship between the athlete and the professional. In a similar way, reference to religious scriptures with athletes who do not share the professional's faith can also be detrimental to the professional relationship – thus has the potential to have a negative impact on the professional relationship.

### **Purposeful Implementation**

Just like psychosocial strategies, encouraging use of coping strategies should be purposeful and appropriately timed. Professionals such as SPPs, SMPs, and SPs should be aware of the appropriateness of selected coping strategies at different stages of rehabilitation (Kamphoff et al., 2013), taking into account numerous personal, situational, and cultural factors (Clement et al., 2019).

### **Conclusion**

Limited research has examined the use and benefits of using humor, profanity, metaphor(s), storytelling, religion, and spirituality as coping strategy during sport injury. Consistent with the transactional theory of stress and coping (Lazarus & Folkman, 1984), all of the coping strategies discussed in this chapter have the potential to facilitate positive cognitive, emotional, and behavioral coping. All of the strategies have the potential to help injured athletes by (a) alleviating pain, (b) moderating the stress response, and (c) providing additional ways to construct meaning to their injury experience. The chapter also emphasizes the importance of recognizing potential negative effects of the presented strategies by highlighting critical success factors for SPPs, SMPs, and SPs to consider.

### **Acknowledgement**

The authors would like to thank 2022 AASP CE workshop facilitators (Dr. Erin Haugen, Dr. Angel Brutus, and Kathryn Lang) and the workshop participants for their role in inspiring and conceptualizing the fictional case study used in this chapter.

## Case Study

Uloko is a 38-year-old Cirque du Soleil trapeze artist. Originally from Benin, Uloko has been touring with the Cirque for almost 20 years. Nine months ago, Uloko requested a transfer to Las Vegas, with a plan to perform for two more years as part of the Michael Jackson ONE show before officially retiring. While Uloko has settled well into his new life in Las Vegas, over the past six months, he has become increasingly uneasy with the religious community he has been associating himself with: "I think I am in a middle of a personal quest to re-identify myself. It is like I am revisiting and questioning my own personal values. For so many years, I have been 'on the go', and never really stopping to think and reflect."

Two months ago, Uloko fell from the trapeze during rehearsal. What looked like a harmless fall ended up having devastating consequences. A visit to the orthopedic hospital revealed a stress fracture in his right tibia, and several smaller stress fractures in his fibula and femur. Routine blood work also revealed that Uloko had an untreated diabetes, which, after the fall had exacerbated poor circulation and neuropathy – both of which Uloko had been ignoring for years – resulting in an emergency amputation of his right leg below the knee. "I have no idea how I could be so stupid. Ignoring all signs... I mean, I have had a blurry vision from time to time, heart rate that never seems to go down, and let's face it, I have felt the spikes in my blood sugar. But how can I be so stupid not to get myself checked?" Uloko tells his brother who lives in Montreal, Canada over a videocall from the hospital after the surgery.

Last night, after speaking to his sister who lives in London, United Kingdom the reality of his situation hit home, hard. "I am feeling increasingly lost. I am not sure where I belong, and what am I going to do? It's not like I can just go and live with my siblings. I cannot perform anymore either, this is not a Cirque that wants freaks like me', Uloko explains to his roommate while making dance moves with his arms and starts singing: "don't' you wish your girlfriend was freak like me..."

After a moment of silence, Uloko continues: "Honestly, I am not even sure if I can stay in Las Vegas either... my visa is based on employment. But... Where would I go? Where is home? I honestly don't know" Uloko says while tears fall down. "Being a one-legged nomad sucks" Uloko says with a sigh.

## Questions

1. Consistent with the process-oriented definition of coping, how would you summarize Uloko's cognitive and behavioral efforts to manage the demands of the situation?
2. What personal and sociocultural factors are likely to influence the dynamic relationship between environmental demands (*i.e., stressors*) and an individual's psychological resources for dealing with them (*i.e., coping ability*)?
3. What coping strategies outlined in this chapter may/may not be appropriate for Uloko and why?
4. In Uloko's case, what critical success factors are important to consider in order to facilitate successful coping?

## References

- Abel, M. H. (2002). Humor, stress, and coping strategies. *HUMOR International Journal of Humor Research, 15*(4), 365-381. <https://doi.org/10.1515/humr.15.4.365>
- American Psychological Association. (2022). APA dictionary of psychology. In <https://dictionary.apa.org/>
- Argyle, M., & Beit-Hallahmi, B. (1975). *The social psychology of religion*. Routledge & Kegan Paul.
- Arvinen-Barrow, M., Clement, D., Hamson-Utley, J. J., Zakrajsek, R. A., Lee, S. M., Kamphoff, C., . . . Martin, S. B. (2015). Athletes' use of mental skills during sport injury rehabilitation. *Journal of Sport Rehabilitation, 24*(2), 189-197. <https://doi.org/10.1123/jsr.2013-0148>
- Arvinen-Barrow, M., Clement, D., & Hemmings, B. (2020). "This is the final jump," I respond. Why, why do I utter those words? Using storytelling in sport injury rehabilitation. In W. Ross (Ed.), *Sport injury psychology: Cultural, relational, methodological, and applied considerations* (pp. 207-216). Routledge. <https://doi.org/10.4324/9780367854997>
- Arvinen-Barrow, M., Hemmings, B., Weigand, D. A., Becker, C. A., & Booth, L. (2007). Views of chartered physiotherapists on the psychological content of their practice: A national follow-up survey in the United Kingdom. *Journal of Sport Rehabilitation, 16*(2), 111-121. <https://doi.org/10.1123/jsr.16.2.111>

- Arvinen-Barrow, M., Hurley, D., & Ruiz, M. C. (2017). Transitioning out of professional sport: The psychosocial impact of career-ending injuries among elite Irish rugby football union players. *Journal of Clinical Sport Psychology, 10*(1). <https://doi.org/10.1123/jcsp.2016-0012>
- Ashwindren, S., Shankar, V., & Zarei, N. (2018). Selected theories on the use of profanity. *International Journal of Academic Research in Business and Social Sciences, 8*(9), 1975-1982. <https://doi.org/10.6007/IJARBS/v8-i9/4876>
- Beach, W. A., & Prickett, E. (2017). Laughter, humor, and cancer: Delicate moments and poignant interactional circumstances. *Health Communication, 32*(7), 791-802. <https://doi.org/10.1080/10410236.2016.1172291>
- Bergen, B. K. (2012). *Louder than words: The new science of how the mind makes meaning*.
- Bergen, B. K. (2016). *What the F: What swearing reveals about our language, our brains, and ourselves*. Basic Books.
- Brewer, B. W., & Redmond, C. J. (2017). *Psychology of sport injury*. Human Kinetics.
- Brock, S. C., & Kleiber, D. A. (1994). Narrative in medicine: The stories of elite college athletes' career-ending injuries. *Qualitative Health Research, 4*, 411-430.
- Clement, D., Arvinen-Barrow, M., & LaGuerre, D. (2019). Role of religion and spirituality in sport injury rehabilitation. In B. Hemmings, N. J. Watson, & A. Parker (Eds.), *Sport, psychology and Christianity: Welfare, performance and consultancy*. Routledge.
- Clement, D., Granquist, M., & Arvinen-Barrow, M. (2013). Psychosocial aspects of athletic injuries as perceived by athletic trainers. *Journal of Athletic Training, 48*(4), 512-521. <https://doi.org/10.4085/1062-6050-48.3.21>
- Coakley, J. J. (2009). *Sport in society* (10th ed.). Irwin McGraw-Hill.
- Cox, R. H. (2012). *Sport psychology: Concepts and applications* (6th ed.). McGraw-Hill.

- Davis, J. A. (2012). *The Olympic Games effect: How sports marketing builds strong brands*. John Wiley & Sons.
- DeFrank, M., & Kahlbaugh, P. (2019). Language choice matters: When profanity affects how people are judged. *Journal of Language and Social Psychology, 38*(1), 126-141.  
<https://doi.org/10.1177/0261927X18758143>
- Dodo, E. O., Lyoka, P. A., Chetty, I. G., & Goon, D. T. (2015). An exploration of the perceptions of spiritual rituals among elite players and coaches associated with religiosity or psychological variables. *African Journal for Physical, Health Education, Recreation and Dance, 21*(1), 103-127.
- Gould, D., Udry, E., Bridges, D., & Beck, L. (1997). Coping with season-ending injuries. *The Sport Psychologist, 11*(4), 379-399. <https://doi.org/10.1123/tsp.11.4.379>
- Heaney, C. (2006). Physiotherapists' perceptions of sport psychology intervention in professional soccer. *International Journal of Sport and Exercise Psychology, 4*(1), 73-86.  
<https://doi.org/10.1080/1612197X.2006.9671785>
- Heil, J., Wakefield, C., & Reed, C. (1998). Patient as athlete: A metaphor for injury rehabilitation. *The Psychotherapy Patient, 10*(3), 21-39. [https://doi.org/10.1300/J358v10n03\\_03](https://doi.org/10.1300/J358v10n03_03)
- Hemmings, B., Watson, N. J., & Parker, A. (Eds.). (2019). *Sport, psychology and Christianity: Welfare, performance and consultancy*. Routledge.
- Hyysalo, P. (2016). *FightBack: Toinen mahdollisuus [FightBack: Second chance]* Tammi Publishers.
- Jay, T., & Janschewitz, K. (2008). The pragmatics of swearing. *Journal of Politeness Research: Language, Behaviour, Culture, 4*(2), 267-288. <https://doi.org/10.1515/JPLR.2008.013>
- Kamphoff, C., Thomae, J., & Hamson-Utley, J. J. (2013). Integrating the psychological and physiological aspects of sport injury rehabilitation: Rehabilitation profiling and phases of rehabilitation. In M. Arvinen-Barrow & N. Walker (Eds.), *Psychology of sport injury and rehabilitation* (pp. 134-155). Routledge.

Kerulis, M. (2020, March 23). Why do people laugh during a crisis? The role of humor part two: Examining the role of laughter during difficult times. <https://www.psychologytoday.com/us/blog/sporting-moments/202003/why-do-people-laugh-during-crisis-the-role-humor#:~:text=We%20have%20established%20that%20our%20current%20health%20crisis,bonds%2C%20which%20are%20vital%20during%20these%20tough%20times.>

Kuiper, N. A., & Martin, R. A. (1998). Is sense of humor a positive personality characteristic? In W. Ruch (Ed.), *The sense of Humor: Explorations of a personality characteristic*. De Gruyter.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. The University of Chicago Press.

Larson, G. A., Starkey, C., & Zaichkowsky, L. D. (1996). Psychological aspects of athletic injuries as perceived by athletic trainers. *The Sport Psychologist, 10*(1), 37-47.  
<https://doi.org/10.1123/tsp.10.1.37>

Lazarus, R., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.

Lazarus, R. S. (2006). *Stress and emotion: A new synthesis*. Springer Publishing Company.

Ledger, S. D. (2005). The duty of nurses to meet patients' spiritual and/or religious needs [Article]. *British Journal of Nursing, 14*(4), 220-225.  
<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=16521546&site=eds-live>

Maoz. (2013). The world religion dataset, 1945-2010: Logic, estimates, and trends. *International Interactions, 39*(3), 265-291.

McCabe, C. (2004). Nurse-patient communication: An exploration of patients' experiences. *Journal of Clinical Nursing, 13*(1), 41-49. <https://doi.org/10.1111/j.1365-2702.2004.00817.x>

McCann, S., Barto, J., & Goldman, N. (2019). Learning through story listening. *American Journal of Health Promotion, 33*(3), 477-481. <https://doi.org/10.1177/0890117119825525e>

McGreal, S. A. (2017, March 24). Is using profanity a sign of honesty? Claims that swearing is a sign of honesty are highly questionable. *Psychology Today*.

<https://www.psychologytoday.com/us/blog/unique-everybody-else/201703/is-using-profanity-sign-honesty>

Munday, I., Newton-John, T., & Kneebone, I. (2020). 'Barbed wire wrapped around my feet': Metaphor use in chronic pain. *British Journal of Health Psychology*, 25(3), 814-830.  
<https://doi.org/10.1111/bjhp.12432>

Najah, A., Farooq, A., & Rejeb, R. B. (2017). Role of religious beliefs and practices on the mental health of athletes with anterior cruciate ligament injury. *Advances in Physical Education*, 7(2), 181-190.  
<http://search.ebscohost.com/login.aspx?direct=true&db=lbh&AN=20173270420&site=ehost-live>  
[http://file.scirp.org/Html/6-1600345\\_76299.htm](http://file.scirp.org/Html/6-1600345_76299.htm)

email: amiranejah@yahoo.fr

Newman, H. J. H., Howells, K. L., & Fletcher, D. (2016). The dark side of top level sport: An autobiographic study of depressive experiences in elite sport performers. *Frontiers in Psychology*, 7, 868.  
<https://doi.org/10.3389/fpsyg.2016.00868>

Olusoga, P., & Thelwell, R. (2016). Coach stress and associated impacts. In R. Thelwell, C. Harwood, & I. Greenlees (Eds.), *The psychology of sports coaching: Research and practice* (pp. 128-141). Routledge.

Pack, S., Arvinen-Barrow, M., Winter, S., & Hemmings, B. (2020). Sport psychology consultants' reflections on the role of humor: "It's like having another skill in your arsenal". *The Sport Psychologist*, 34(1), 54-61. <https://doi.org/10.1123/tsp.2018-0148>

Pack, S., Hemmings, B., Winter, S., & Arvinen-Barrow, M. (2019). A preliminary investigation into the use of humor in sport psychology practice. *Journal of Applied Sport Psychology*, 31(4), 494-502.  
<https://doi.org/10.1080/10413200.2018.1514428>

- Peres, J. F. P., Moreira-Almeida, A., Nasello, A. G., & Koenig, H. G. (2007). Spirituality and resilience in trauma victims [Article]. *Journal of Religion & Health, 46*(3), 343-350.  
<https://doi.org/10.1007/s10943-006-9103-0>
- Piemonte, N. M., & Abreu, S. (2020). Responding to callous humor in healthcare. *AMA Journal of Ethics, 22*(7), E608-614. [https://journalofethics.ama-assn.org/sites/journalofethics.ama-assn.org/files/2020-06/msoc1-2007\\_0.pdf](https://journalofethics.ama-assn.org/sites/journalofethics.ama-assn.org/files/2020-06/msoc1-2007_0.pdf)
- Roy, J., Mokhtar, A. H., Karim, S. A., & Mohanan, S. A. (2015). Cognitive appraisals and lived experiences during injury rehabilitation: A narrative account within personal and situational backdrop. *Asian Journal of Sports Medicine, 6*(3), 1-4. <https://doi.org/10.5812/asjasm.24039>
- Roychowdhury, D. (2019). Spiritual well-being in sport and exercise psychology. *SAGE Open, 9*(1).  
<https://doi.org/10.1177/2158244019837460>
- Rutledge, P. B. (2011, January 16). The psychological power of storytelling: Stories leap-frog technology, taking us to authentic experience. *Psychology Today*.  
<https://www.psychologytoday.com/intl/blog/positively-media/201101/the-psychological-power-storytelling>
- Scaletti, R., & Hocking, C. (2010). Healing through story telling: An integrated approach for children experiencing grief. *New Zealand Journal of Occupational Therapy, 57*(2), 66-71.
- Scholl, J. C., & Ragan, S. L. (2003). The use of humor in promoting positive provider-patient interactions in a hospital rehabilitation unit. *Health Communication, 15*(3), 319-330.  
[https://doi.org/10.1207/S15327027HC1503\\_4](https://doi.org/10.1207/S15327027HC1503_4)
- Smith, B., & Sparkes, A. C. (2002). Men, sport, spinal cord injury, and the construction of coherence: Narrative practice in action. *Qualitative Research, 2*(2), 143-171.  
<https://doi.org/10.1177/146879410200200202>

- Smith, B., & Sparkes, A. C. (2004). Men, sport, and spinal cord injury: An analysis of metaphors and narrative types *Disability and Society*, *19*(6), 613-626.  
<https://doi.org/10.1080/0968759042000252533>
- Smith, B., & Sparkes, A. C. (2005). Men, sport, spinal cord injury, and narratives of hope. *Social Science and Medicine*, *61*(5), 1095-1105. <https://doi.org/10.1016/j.socscimed.2005.01.011>
- Steen, G. (2008). The paradox of metaphor: Why we need a three-dimensional model of metaphor. *Metaphor and Symbol*, *23*(4), 213-241. <https://doi.org/10.1080/10926480802426753>
- Steinmetz, K. (2016, December 15). Swearing is scientifically proven to help you \*%\$!ing deal. *TIME*.  
<https://time.com/4602680/profanity-research-why-we-swear/>
- Stephens, R., Atkins, J., & Kingston, A. (2009). Swearing as a response to pain. *Neuroreport*, *20*(12), 1056-1060. <https://doi.org/10.1097/WNR.0b013e32832e64b1>
- Stephens, R., & Umland, C. (2011). Swearing as a response to pain-effect of daily swearing frequency. *The Journal of Pain*, *12*(12), 1274-1281. <https://doi.org/10.1016/j.jpain.2011.09.004>
- Stewart, M. (2015). The hidden influence of metaphor within rehabilitation. *SportEX Journal*, *66*, 10-14.  
<https://www.co-kinetic.com/content/the-hidden-influence-of-metaphor-within-rehabilitation>
- Sylwester, K., & Purver, M. (2015). Twitter language use reflects psychological differences between democrats and republicans. *PLoS ONE*, *10*(9), e0137422.  
<https://doi.org/10.1371/journal.pone.0137422>
- Vingerhoets, A., Bylsma, L. M., & Vlam, C. D. (2013). Swearing: A biopsychosocial perspective. *Psychological topics*, *22*(2), 287-304. <http://hrcak.srce.hr/file/159883>
- Walinga, J. (2014). Stress, health, and coping. In C. Stangor & J. Walinga (Eds.), *Introduction to Psychology - 1st Canadian Edition*. BCcampus.
- Ward, R. S. (2007). Physical therapy: Stories that must be told. *Physical Therapy*, *87*(11), 1555-1557.  
<https://doi.org/10.2522/ptj.2007.presidential.address>

Watson, N., & Czech, D. R. (2005). *The use of prayer in sport: Implications for sport psychology consulting*.

Retrieved 4 from

Wiese-Bjornstal, D. M. (2019). Christian beliefs and behaviours as health protective, resilience, and intervention factors in the context of sport injuries. In B. Hemmings, N. J. Watson, & A. Parker (Eds.), *Sport psychology and Christianity: Welfare, performance and consultancy* (pp. 54-70). Routledge.

Wiese-Bjornstal, D. M. (2019, November). The integrated model of religiosity and psychological response to the sport injury and rehabilitation process: A Christian illustration. *Canadian Journal for Scholarship and the Christian Faith*.

Wiese-Bjornstal, D. M., Smith, A. M., Shaffer, S. M., & Morrey, M. A. (1998). An integrated model of response to sport injury: Psychological and sociological dynamics. *Journal of Applied Sport Psychology, 10*(1), 46-69. <https://doi.org/10.1080/10413209808406377>

Wiese-Bjornstal, D. M., Wood, K. N., Principe, F. M., & Schwartz, E. S. (2022). Religiosity and ways of coping with sport injuries among Christian athletes. *Journal of the Christian Society for Kinesiology, Leisure and Sports Studies, 7*(1). <https://trace.tennessee.edu/jcskls/vol7/iss1/6>