

2015

A Pilot Study Investigating the Reasons for Playing Through Pain and Injury: Emerging Themes in Men's and Women's Collegiate Rugby

Leilani Madrigal

University of Nebraska-Lincoln, leilani.madrigal@csulb.edu

Jamie Robbins

West Chester University


Diane L. Gill

University of North Carolina at Greensboro, dlgill@uncg.edu

Katherine Wurst

University of North Carolina at Greensboro, kmwurst@uncg.edu

Follow this and additional works at: <http://digitalcommons.unl.edu/athleticresearch>

 Part of the [Bioinformatics Commons](#), [Biomechanics Commons](#), [Biophysics Commons](#), [Exercise Science Commons](#), [Motor Control Commons](#), and the [Psychology of Movement Commons](#)

Madrigal, Leilani; Robbins, Jamie; Gill, Diane L.; and Wurst, Katherine, "A Pilot Study Investigating the Reasons for Playing Through Pain and Injury: Emerging Themes in Men's and Women's Collegiate Rugby" (2015). *Athletic Performance Research*. 7.
<http://digitalcommons.unl.edu/athleticresearch/7>

This Article is brought to you for free and open access by the Athletics at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Athletic Performance Research by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

A Pilot Study Investigating the Reasons for Playing Through Pain and Injury: Emerging Themes in Men's and Women's Collegiate Rugby

Leilani Madrigal, University of Nebraska-Lincoln

Jamie Robbins, West Chester University

Diane L. Gill, University of North Carolina at Greensboro

Katherine Wurst, University of North Carolina at Greensboro

Abstract

Collegiate rugby is a competitive, collision sport, yet insufficient empirical evidence exists regarding participants' perspectives on pain and injury. This study addressed male and female rugby players' experiences with injury, and their views about playing through pain and injury. Eleven rugby players (five male; six female) competing in USA Rugby's National College 7's tournament participated in semi structured interviews, which were recorded, transcribed, and content-analyzed. Two major themes emerged: passion for sport and sport ethic. Passion for sport was composed of (a) love of the sport, (b) meaning of the sport, and (c) desire to be on the field. Sport ethic included: (a) helping the team, (b) game time sacrifice, (c) personality, (d) minimize, and (e) accepted behavior. The researchers explain these findings and propose strategies for increasing future athletes' understanding of the dangers associated with playing through pain, and confronting the currently accepted culture of risk.

Keywords: injury management, sport, health behavior

Sport provides individuals with opportunities to showcase athletic talents and be competitive, while having fun and being social. In addition, sport increases positive emotions and energy, while decreasing rates of heart disease and obesity (Berger & Molt, 2000; Blair & Morris, 2009; Warburton, Nicol, & Bredin, 2006). One possible negative consequence of sport participation, however, is injury. Injury is a growing concern for athletes at all levels of play. In fact, Williams and Andersen (2007) estimate 25 million people in the United States become injured due to participation in sport, exercise, and recreational activities per year.

Collision sports (e.g., rugby, ice hockey) are distinctly different from contact sports (e.g., dance, basketball), not only in their rules, but also in the direct and intense physicality involved (Maxwell, Visek, & Moores, 2009). More specifically, these sports are characterized by the numerous collisions and tackles participants are involved in throughout the course of play (Gabbett, 2005). Gabbett and Domrow (2007) studied collision sport athletes in Australia for two seasons, finding an overall injury incidence rate of 88.5 per 1000 training hours. More

recently, Peck, Johnston, Owens, and Cameron (2013) assessed injury rates in intercollegiate rugby players over a five year period. Their results revealed that 71/129 (55%) women sustained 200 injuries (2.82/ athlete) and 151/240 (63%) men sustained 459 injuries (3.04 injuries/athlete). Results of these studies indicate the high risk nature of the sport and the likelihood for incurring an injury during one's career. Furthermore, research suggests that injuries may become chronic in nature due to the mentality of the player who learns to play with injuries or becomes accustomed to them (Howe, 2001; Roderrick, Waddington, & Parker, 2000).

Antecedents to Playing Through Pain

The underlying question, therefore, is why do individuals elect to play through pain and risk further damage or more severe injuries? One of the most widely accepted reasons cited for playing through pain and injury is the sport ethic. According to the sport ethic, injury is deemed an inherent risk in sport and athletes are supposed to accept that risk and play through pain (Hughes & Coakley,

1991). Pain and injury are thus normalized and accepted, as athletes are told to “shake it off,” “suck it up,” or “take it like a man” (Curry, 1993; Howe, 2001; Malcolm, 2006). Although masculine words are often used when referring to the message of the sport ethic, the findings to date on gender differences and playing through pain are equivocal. Nixon (1996) found in NCAA Division I athletes, from a range of sports, that males expressed tougher attitudes toward pain and injury, as well as stronger feelings of pressure from coaches and fans to play hurt as compared with their female counterparts. Whereas, more recently Weinberg, Vernaue, and Horn (2013) found no gender differences in basketball players’ attitudes about, and behavioral tendencies to, play through pain and injury.

The issue of gender appeared to be negated by Malcom’s (2006) findings related to softball coaches. The study found a clear acceptance of the sport ethic with coaches who ignored complaints, made jokes when athletes experienced pain, and told them to shake off minor injuries. Further support for the sport ethic among coaches was revealed by Nixon (1994) who found that college coaches believed those who played through injury deserved the most respect. This concept deemed “the sport ethic,” which is enforced by coaches and teammates (Malcom, 2006), encourages the belief that a true athlete must be willing to do whatever it takes to remain an active participant, even if that means playing through pain and injury (Hughes & Coakley, 1991; Nixon, 1996). One’s socialization in sport is said to create these attitudes and ensuing behaviors, but there is also the possibility that playing through pain is more internally driven.

More specifically, one’s passion may play a pivotal role in the decision to play through pain. Passion is characterized as a strong inclination toward an activity that people like, find important, and in which they invest time and energy (Vallerand et al., 2003). According to Vallerand et al. (2003) there are two types of passion; harmonious passion (i.e., the person controls his/her favorite activity) and obsessive passion (i.e., the favorite activity controls the person), that become internalized into one’s identity. Harmonious passion leads individuals to freely choose the activity (Vallerand et al., 2003). People who have obsessive passion, by contrast, internalize the activity, making it central to their identity and allow it to control their behaviors and choices (Vallerand et al., 2003).

Obsessive passion may develop because the activity influences their social acceptance or self-esteem. For example, an athlete entering a new school may join a team and suddenly find she has a new group of friends and is earning accolades based on her athletic achievements. She may love the sport and accompanying benefits of being on the team. This is all positive and may lead to harmonious passion for the sport. The danger arises when her passion for the sport becomes her sole focus and everything else (e.g., relationships, academics, health) becomes irrelevant. In addition, research has shown that obsessive (but not harmonious) passion predicts rigid persistence in ill-advised activities (Vallerand

et al., 2003). In football players, obsessive passion related to increased levels of general negative affect and a rigid decision to return to play in the following season (Vallerand et al., 2003). Football players exhibiting harmonious passion, to the contrary, displayed a more flexible sense of deliberation and considered factors such as expected level of improvement, predicted playing time, and the return of friends to the team when contemplating their return (Vallerand et al., 2003). In the context of injury, student dancers who exhibited obsessive passion spent less time engaging in activities to promote healing when injured and were more likely to report personal pride as a reason for not seeking adequate treatment for their injuries (Rip, Fortin, & Vallerand, 2006). Taken together, individuals who elect to play through pain and injury may do so as a result of the strong passion they feel for their sport and a feeling of compulsion to keep going.

To date there has been a great deal of research addressing the playing through pain mentality in a variety of sports, yet rugby has been studied primarily in Europe (Lee et al., 2001) and among professionals (Howe, 2001), with fewer studies addressing this topic among collegiate rugby athletes in the United States.

Growth of Rugby in the USA

Collegiate rugby has grown dramatically since the 1970s (Peck et al., 2013). In the past seven years, there has been an exponential growth in youth and collegiate sports, especially among women participants (Hull, 2014). In 2002, the National Collegiate Athletic Association (NCAA) classified women’s rugby as an emerging sport. Based on a report done by USA Rugby in 2011, 32% of all rugby participants are female (USA Rugby, 2011). Rugby has also been reinstated by the International Olympic Committee and will be featured in the Olympic Games in 2016, which will likely encourage cross-over athletes interested in new forms of competitive sport participation. Despite the growth in interest, most collegiate programs retain club rather than varsity status, resulting in little training and conditioning support, volunteer coaches, substandard field conditions and facilities, and limited medical coverage (Peck et al., 2013).

Purpose

Given the high incidence of injury in collision sports and the growing popularity of rugby in the United States, more research is needed to better understand this population’s perspective on injury and playing through pain. Therefore, the purpose of this pilot study was to identify if injury reports of a sample of college rugby players was comparable to previous findings (Gabbett & Domrow, 2007; Peck et al., 2013) to gain greater insights into the actual prevalence and severity of injury in this sport. In addition, we hoped to gain a better understanding of a sample of collegiate rugby athletes’ mentality regarding playing through pain or injury, as well

as any implications of gender in connection to one's play through pain and injury mindset.

Methods

Participants

Participants included five male and six female rugby players participating in USA Rugby's National College 7's tournament. A convenience sample has been acceptable in qualitative research (Creswell, 1998), thus participants were recruited directly from the tournament. Although recruiting was limited by time constraints, game schedules and weather; the final sample did represent athletes with a wide range in rugby experience. More specifically, these athletes had played the sport anywhere from nine weeks to eight years. The majority of participants (73%) played high school sports in their past (i.e., soccer, basketball, baseball, football, volleyball, track, softball, lacrosse, cross country, and wrestling), with 56% having played soccer. The majority of athletes began playing rugby in college, with the exception of one male and one female who began their playing careers in high school.

Procedure

After acquiring IRB approval, the primary investigator contacted the USA Rugby tournament director for permission to contact players at the tournament site. Rugby players were recruited during USA Rugby's National College 7's tournament, which includes a variety of high-level collegiate athletes from universities from all around the nation. Eight of the 47 teams that were present at the tournament are represented in this study. Those who confirmed their willingness to participate were then asked to read and sign a consent form before being interviewed during their "down time." Interviews were conducted on-site in a reserved room. Once all athlete interviews were completed, they were transcribed verbatim. All participants received a \$10 gift card after their interview for their participation.

Interview Guide

Using the same protocol as Olusoga, Butt, Hays, and Maynard (2009), the interview guide was created based on existing literature from sport psychology and sport sociology (Brewer et al., 1995; Weinberg et al., 2013; Williams & Anderson, 2007) to address factors related to sport injury. In addition, once all questions were created, they were reviewed by experts in the field. The first set of questions was informed by Brewer et al.'s (1995) finding that athletic identity is a strong indicator of injury risk, leading to questions related to sport background, entry into the sport and reasons for currently playing (e.g., what drives you to play your sport; how did you get started). According to Williams and Anderson (2007), injury history plays a role in the susceptibility to injury and reaction to future injury risk behavior, thus, the second

section focused on injury history, which was followed by questions related to playing or not playing through pain and injury; Curry, 1993; McEwen & Young, 2011; Weinberg, Vernau, & Horn, 2013). Finally, the interviews culminated with questions concerning reporting of injuries (e.g., do you report injuries; what influences your decision to report an injury). The questions were deemed valid as all respondents were able to answer them without further information or explanation from the interviewer. As well, each respondent provided answers that were relevant to the questions posed.

Data Analysis

Peer debriefings and triangulation were used throughout the analysis process according to qualitative researchers' recommendations and in accordance with previous studies in the field (Lincoln & Guba, 1985; Maykut & Morehouse, 1994; Patton, 2002; Partington, Partington, & Olivier, 2009). The main objective was to identify themes, while reducing researcher bias. Each investigator independently reviewed the transcripts and created codes to best explain the athletes' words (Patton, 2002). Results were then discussed, and each code was compared, and when necessary, defended before creating the final codebook, which contained the themes and definitions deemed by the investigators to tell the athletes' stories most precisely. A third reviewer was employed to triangulate the results and ensure that the codes created matched the words of the athletes. To do this, a subsample of the raw data and the codebook were given to the reviewer, who was asked to match the raw data (i.e., athlete quotes) to the themes defined in the codebook. The interrater reliability test was 87%, indicating acceptable agreement (Miles & Huberman, 1994).

Results

Results regarding athletes' experiences with, or observations of, injuries during their rugby experiences confirmed previous findings regarding the dangers of the sport. More specifically, athletes experienced and witnessed varying injuries to most every body part from head to foot. More specifically, they recalled observing the following injuries during their playing careers: (a) concussions; (b) broken collarbones; (c) dislocations and bruising of shoulders; (d) ACL, PCL, and meniscus tears; (e) finger injuries; (f) sprained ankles; (g) stiff joints; and (h) shin splints. They also have experienced all of the above mentioned injuries, in addition to broken ankles, noses, feet, arms, and fingers during their playing careers. Further injuries the participants incurred were muscle contusions, jaw dislocations, facial lacerations and tendonitis of the knee. The most common injury was concussion, which was experienced by six out of the eleven participants. There were very few differences

Table 1 Experienced Injuries by Gender

Location	Male	Female
Head	concussions	concussions
Upper Body	dislocated shoulders, snapped collar bone, broken noses	dislocated jaw, jammed/broken fingers, broken arm
Lower Body	sprained/broken ankles, thigh contusions, torn meniscus	sprained ankles, ACL tears

between male and female injuries, and those few differences are evident in Table 1. These findings help to justify the researchers' line of questioning concerning the athletes' willingness to play through pain and injury, as all participants witnessed and/or experienced severe injuries during their careers.

Playing Through

The results of the pilot study demonstrated athletes' willingness to engage in play through pain behaviors, and their reasons for doing so collapsed into two major themes; namely, passion for sport and sport ethic. Passion for sport was composed of: (a) love of the sport, (b) meaning of the sport, and (c) desire to be on the field. Sport ethic included: (a) helping the team, (b) game time sacrifice, (c) personality, (d) minimize, and (e) accepted behavior. Only moderate differences were apparent based on sex and very few athletes expressed reasons for not playing through pain or injury.

Passion for Sport

Love of the Sport. Male and female athletes mentioned their love for the sport itself, as well as the social aspects that accompanied their participation. Some loved the possibility of moving to the next level of competition, while others enjoyed the contact nature of the sport. Interestingly, the physicality of the sport was only mentioned by a few male rugby players; whereas, multiple female rugby players truly appreciated the hard hitting nature of the sport. More directly, they explained, "I really enjoy sports and hitting hard." Another stated,

I really like hitting people, and I like how physical it is. I didn't end up playing soccer in college like I had planned. It was a little bit of a letdown, and I was kind of looking for something to...get that out, that energy...out of my system. I just like being physical, honestly [that's] why I play rugby.

Overall, this love of the game itself and the social components promoted their willingness to play regardless of their physical condition.

Meaning of the Sport. The female athletes expressed even deeper meanings of the sport to their identity, explaining a stronger inclination to stay involved. For example, one athlete said,

I just grew to love it...I think really just the strategy and the methodical nature of it works for me. I'm an engineer [major] so kind of like a thinker, so that works for

me. I just like the confidence I feel from it. It's just really great. My teammates here and all the people that rugby has brought in that aspect; I can't imagine college without it.

Another athlete explained her childhood desire to play football, which was thwarted by her parents for fear she would hurt the boys, thus her current participation was compensation for her previously missed opportunity. This was something she always wanted to do, and now she was able to do it. Similarly, another athlete found her personal satisfaction on the rugby fields. She explained,

I had a really bad eating disorder when I was little. It took a long time before I was allowed to play sports and so I've always been fighting to do something and rugby is the epitome of that and every day I feel like I should belong there. I feel there's no better place to be.

Taken together these athletes' newfound confidence, opportunity to play, or feeling of connection encouraged greater commitment despite any accompanying pain or injury.

Desire to Be on the Field. In addition, athletes explained being on the field as one of the perks of participation, thus they were unwilling to relinquish that opportunity. As such, they would hide injuries from coaches to avoid being benched from participation. These athletes felt psychological pain when they were forced to watch from the bench and pride when they were contributing to the team's performance on the field. As one athlete stated,

There's a lot of things that we'll play through just because we need to... I can't explain it...there's a need to be there, to be on that field. It's hard to watch someone else; it's almost like pride, like you know you can do what you do and you want to so you want to be part of that building block.

There were various reasons athletes chose to play and continue playing through pain and injury, but the overall consensus was a passion which stemmed from their love of the sport and meaning of participation, which was felt most strongly when they were on the field as opposed to the sideline.

Sport Ethic

Helping the Team. Male and female athletes were willing to play through an injury or pain to help their team succeed. While male athletes aimed to limit the damage their playing or not playing would have on the team, females

were more concerned with how their play would benefit the team. More specifically, male athletes explained their willingness to play through injury to avoid letting the teammates down; while also recognizing the possible detriments of altered performance if they continued to play. One male athlete said, “today it was just too much. I could tell I would have been hurting the team more than helping if I were out there playing.” In contrast, female athletes were more focused on their personal contribution only, as the following demonstrates: “I feel like when I’m on the field I can rally my team. Because we have a really young team...on the field I’m much more helpful than off.”

Game Day Sacrifice. Athletes also distinguished between practices and game day when determining their willingness to play or not play through pain or injury. They explained sitting out of practices or less important games to ensure their readiness to play in more important games. They also identified the time of season when making their decision. One athlete stated, “Yes, I’m playing through [an injury] right now. I have a pretty good groin strain. But it’s nationals, so what do you do?” Another athlete explained it as follows: “If we’re a week away from national championships, I’m going to be a little more honest about how my body is doing as opposed to the season’s about to end and we’re winding down with no more big games. Okay. I’ll just deal with it.”

Personality. Other athletes attributed their willingness to play through pain and injury to their personality. More specifically, a male participant attributed his tough demeanor to being military-related, saying, “I think especially us being like a military academy...we try to at least tough it out more than most people.” A female athlete cited her conscientiousness, explaining that she is focused, knows what she has to do, and therefore she is willing to get back up and do it again.

Minimize. Interestingly, although all athletes experienced injuries, they tended to downplay the severity or the gravity of the injury, even claiming to “be lucky.” For example, one male rugby player said, “I broke my ankle playing rugby, then I dislocated my shoulder once, just 2 [injuries], I’ve been lucky.” Another male rugby player said, “A nose isn’t a super big deal. You can have surgery to get it back to where it was...I’ve broken that [nose]. It’s not that big of a deal. I’m going to break my nose again.” Although the females in this sample were slightly less likely to minimize or claim to be lucky (2/5) in comparison with the males (4/6), one athlete did say, “most of my concussions are at the end of the season, so I’ve been pretty lucky in that sense.” Another cited eight years with only one major injury as a “good track record.” One athlete, however, felt that in general females don’t know how to accurately judge the severity. She said,

Whenever I get injured I try to play through it more than anything because like it’s just a nagging injury, and it’ll

go away by tomorrow most likely because there’s a difference between being hurt and injured.... Especially girls think like an injury is anything that’s hurting, so I’m like, well, it’s just hampered, so play through it and if it’s really bad, it’s going to hurt tomorrow. There is no way to fully tell if you’re hurt or injured unless...you’re bleeding profusely or like your bone’s broke, or something. That’s kind of how I define it.

Another athlete explained that athletes minimize the severity in their own minds as a hopeful measure. More specifically he said,

I don’t think it’s that they don’t want to be honest with it. I think they want to not be injured, so then at that time they’re like ‘um no this isn’t an injury, it will be fine tomorrow.’ Like if you get kicked in the face, you’re going to be like crap this hurts but you’ll be fine tomorrow, and I think that’s how a lot of people go about their actual injuries.

Athletes also explained minimizing their attention to injuries or pain during play. For example, one athlete stated, “You forget it how it hurts. You’re just so focused, like it doesn’t matter...Your adrenaline takes over, or you’re focused on the game.” However, some of the female athletes specifically stated injuries they would not play through, including head, neck and spine injuries, and torn ACLs. Taken together, athletes tend to minimize the severity of, or the amount of attention focused on, pain or injury either because they really deem it to be inconsequential or in hopes of their denial working as a self-fulfilling prophesy, with very few admitting that there are just some injuries that you should not ignore.

Accepted Behavior. Athletes explained there are accepted aspects of the sport and required behaviors that follow. More specifically they commented that not being completely healthy was part of the sport. This mindset and willingness was also reinforced by teammates. One athlete explained that athletes are called derogatory names if they choose to sit out. Teammates make it clear that there are pains you must accept, by recanting stories of their own experiences with similar injuries. These moments and stories make it obvious to new players that you “don’t want to be that guy” who sits out or rests because of an injury that is deemed “not that bad.”

This notion was further reinforced through coaches who made their feelings known. For example, “Our coach always says there is a difference between being hurt and injured, and if you’re just hurt, you play through it and, so, that’s what we all tried to do.” Explaining an alternative perspective, one female athlete voiced the need for a change in the culture and the difficulties in making that happen. She said,

In rugby I think there’s such an emphasis on toughness and playing through ...we need to try and make it an environment where you feel comfortable saying ‘hey I got this injury’ ... but you know I’m going to keep playing

until I fall on the ground and can't run anymore so, I don't know but I'm going to try and make it so my body is still working when I'm older.

Clearly it is easier to accept rather than fight the play through pain mentality as even as this athlete explains the need for changes, she follows with her admission that she'll still play until she falls.

Refraining From Playing Through an Injury

Overwhelmingly, there were more comments related to reasons athletes would play through pain and injury as compared with why they would not play. In fact, the only other two reasons to not play through pain or injury were because of an external mandate (i.e., coach said no) or an impact on daily living. Only two male athletes mentioned the possible impact on daily living when asked if there was ever a situation they would not play through pain. One claimed, "Maybe like when I'm really old. If I'm still playing when I'm 50 I might, and maybe if it interferes with my job or something, I won't." Another male rugby player cited the external mandate when explaining his situation. He said, "I woke up this morning, and I tried to get out of bed and then, like just whenever I put pressure on it, I just couldn't walk on it...I couldn't cut or slow down so coach told me no." This attitude was not limited to males, as a female athlete explained,

I pretty much played through it all. I've played when I've had stingers. I've played with one arm before and I think ... the only thing that has stopped me, like a concussion. I mean I've never broken a major bone, but I've chipped bones in my hand and I still get those. I think a concussion would be the only thing, and that would be mandatory, my coach wouldn't put me in at all so that would be it.

Discussion

The main objectives for this study were to identify whether rugby truly is as injury laden a sport as previous research has found and to gain greater insights into rugby players' mentality concerning playing through pain and injury. The findings clearly confirm the high risk nature of collegiate rugby given the numerous injuries the participants experienced and/or observed during their time in the sport, which included everything from concussions to ligament damage, and sprains to breaks. It could be assumed that the injury or pain itself would dictate whether one plays or not, but the athletes in this study expressed numerous reasons for playing through, with very few reasons provided for sitting out. With regard to sex, overall, there were more similarities than differences between the male and female athletes' mindsets; however, the small sample size does not allow for generalizations. Taken together, the findings do suggest an influential impact of the sport ethic and passion for

sport on behavior and decision making of participants in this study.

Passion for Sport

The passion these rugby players had for the sport was evident through comments directed toward the love of the sport, the meaning the sport had for them, and their desire to be on the field. The rugby athletes were drawn to their sport by a, "love of the game." Athletes in the current study mentioned the fun of the game, love of the sport, and love of their team. Females specifically, loved the hard hitting nature of the game. According to Deci, Eghrari, Patrick, and Leone (1994) activity valuation is associated with continued engagement in those activities. Thus the meaning the sport plays for an athlete can impact their willingness to keep playing through pain.

Vallerand et al.'s (2003) passion theory also explains how athletes' value and love for their sport impacts their participation. Harmonious passion has been linked with positive affect when the activity results in positive outcomes (Vallerand et al., 2003). Therefore, if athletes enjoy their sporting experience, passion is likely to increase, which motivates their compulsion to play on (even if injured). Another factor influencing the passion for sport is the identity tied with being an athlete (Vallerand et al., 2003). Athletes in the current study could not picture their life without rugby, while others saw the sport as a welcome representation their prior personal struggles. Taken together, it is clear that these athletes felt being a rugby player was part of who they were.

Other athletes have similarly demonstrated the powerful connection they have to their sport and thus their willingness to play through pain so as not to lose it. Professional soccer players indicated they would play through an injury to avoid losing their role and their ability to play in important games (Roderick & Waddington, 2000). This too was identified in the current study, as both male and female athletes were willing to hide injuries and play through pain to ensure they would be on the field come game time. This willingness to push through at the risk of one's body has also been identified in dancers, where obsessive passion was associated with prolonged suffering from chronic injuries and more rigidity in their decision making while injured (Rip, Fortin, & Vallerand, 2006).

Clearly this is a dangerous approach and must be addressed with all athletes, who likely explain their willingness as a positive demonstration of their commitment and passion for the sport, not realizing that it could lead to further or chronic injury, while simultaneously setting a negative precedent for others who follow.

Sport Ethic

The sport ethic has been designated in the past as a reason why athletes are so willing to play through pain and injury (e.g., Nixon, 1993; Roderick, Waddington,

& Parker, 2000). In the current study, the sport ethic was clearly demonstrated through athletes' comments, thoughts and behaviors. These athletes were willing to play through pain to help the team. They were willing to sacrifice their bodies to participate in the games. Interestingly these behaviors and beliefs were so imbedded that some just saw their willingness as a personality characteristic, while others did not even recognize the severity of their injuries. Finally, this belief that one should play through pain was unquestioned and accepted as part of the sport they chose to play.

According to the sport ethic, athletes should be tough and not show signs of weakness, but rather play through the pain as a way of showing courage and dedication (Hughes & Coakley, 1991). Both male and female athletes demonstrated their dedication to the team by playing through an injury. Similarly, they explained their tough and persistent personality traits that helped them return to play even when hurt and likely were purposely expressed to avoid looking weak. Finally, their courage to play in "the big game," regardless of injury status, is further evidence of these athletes' willingness to adhere to the sport ethic. Liston, Reacher, Smith, and Waddington (2006) found that non-elite rugby university players had two codes: (a) willingness to be hurt; and (b) playing when hurt for the good of the team. Based on the current study's findings, it appears that these may be common to rugby players overall.

Consistent with previous literature (Nixon, 1996), acceptance and minimization of injury was evident in both sexes in the current study. Players indicated experiencing injuries that would appear to be severe, but then explain them to be unimportant, and describe themselves as lucky only to have "that" injury. This behavior has been accepted as necessary in the culture of sports (Nixon, 1996). Roderick, Waddington, and Parker (2000) found that soccer players were not only willing to play through their injuries, but they viewed them as less significant, and revealed no significant fear of injury. This mindset can be very detrimental if diminished fear leads to increased and unnecessary risk taking behaviors.

Practical Implications

A few athletes mentioned refraining from playing if they had specific injuries (head, neck, spine injuries, torn ACLs); with very few recognizing implications on daily living functions now or in their future. In fact, both males and females explained not wanting their coaches to know they were injured for fear of being held out of play.

Overall, athletes need to be educated about appropriate levels of passion for sport that do not adversely affect their health and well-being. Those who have developed obsessive passion, perhaps reinforced through the sport ethic of rugby, could be establishing maladaptive habits in injury prevention and management (Rip, Fortin, & Valerland, 2006). Sport psychology consultants can help athletes develop a more harmonious passion for their sport, focused on the love of the sport rather than contingencies

attached to it (e.g., how sport influences their self-esteem, popularity due to sport participation, etc.). Furthermore, helping athletes identify an alternate source of enjoyment beyond their sport would contribute to establishing a more harmonious passion, while increasing the likelihood that athletes will better handle situations when they may have to sit out of sport due to injury or illness in their future.

An additional suggestion for sport psychology consultants in working with athletes who are passionate about their sport and thus willing to adhere to the sport ethic may be creating anticipatory regrets to help them make more informed decisions. Anticipatory regrets involve deliberations over possible regrets one may experience and, which are addressed in advance of engaging or not engaging in a behavior (Gavanski & Wells, 1989). For example, athletes who have played through pain or certain injuries in the past may present their experiences to rugby players at the start of the season in an effort to help them see possible consequences of their choices. A small portion of athletes in the study mentioned not playing through an injury because of a vicarious learning situation, and similar experiences can be created for many more athletes in the future.

This practice also may be followed by discussions regarding severity definitions. Athletes in the current study spoke about severity of injuries, while simultaneously minimizing their own injuries. Although the ability to block pain, rather than catastrophize the situation, may benefit athletes in a collision sport, it may also be detrimental to the health of athletes. Athletes who are passionate about their sport and adhere to the sport ethic may take it to the extreme, and possibly cause unalterable damage. These, along with other efforts by sport psychology consultants may help change the existing culture of acceptance, which may lead to chronic pain and injury, to one of greater awareness regarding appropriate and beneficial play through pain and injury practices.

Future Studies and Limitations

Although the current study included perspectives from both male and female collegiate rugby players, the sample was limited, and generalizations cannot be made. More specifically, the sample was rugby players who agreed to participate in the study, and whose team qualified for play in the second day of the College National 7's tournament. This was a limitation due to missing potential participants who were eliminated from tournament play on the first day. Despite the limitations, the participants provided great insights, which will be useful in developing further studies aimed at better understanding this population and in creating interventions aimed at changing destructive practices.

Why people play through pain and injury is a weighty topic for sport psychology consultants, coaches, athletic trainers, and doctors alike. The sport ethic and passion seem to be two underlying factors that influence this behavior, and future studies are needed to further explore

these and additional motives in a variety of contexts, including less competitive levels of the sport to see how and when the beliefs and behaviors are acquired, learned, reinforced, and maintained in individuals as they progress to more elite levels of play. In addition, prevention must be addressed. What do these athletes do to prevent injuries, and are their practices based on sound empirical evidence? Who is instructing collegiate rugby players about prevention, training techniques, and post training practices to minimize injuries, and are these individuals qualified to provide such advice?

Conclusion

It is true that athletes must be capable of playing through some kinds of pain; however little has been done to educate collegiate rugby players, and likely other athletes, about which pains can be ignored, and which pains must be addressed. Sport medicine and sport psychology can play pivotal roles in better addressing this culture of risk. Sport psychology focuses on qualities like mental toughness as beneficial to sport performance, and although mental toughness might increase commitment and work ethic, it might also increase one's likelihood of getting injured, playing injured, and negatively impacting daily function today and in later life. The recent interest in consequences of head trauma during one's playing career on future brain function and health speak to the importance of this topic and need for further study (Harmon et al., 2013). The results of this study demonstrate the importance of education regarding injury severity, consequences of playing through pain and injury, as well as preventative techniques for averting injuries and minimizing further damage with existing injuries.

Acknowledgments – This research was funded in part by the 2013 Association for Applied Sport Psychology (AASP) research grant.

References

- Berger, B.G., & Molt, R.W. (2000). Exercise and mood: a selective review and synthesis of research employing the Profile of Mood States. *Journal of Applied Sport Psychology, 12*, 69–92. doi:10.1080/10413200008404214
- Blair, S.N., & Morris, J.N. (2009). Healthy hearts and the universal benefits of being physically active: physical activity and health. *Annals of Epidemiology, 19*, 253–256.
- Brewer, B.W., Linder, D.E., & Phelps, C.M. (1995). Situational correlates of emotional adjustment to athletic injury. *Clinical Journal of Sport Medicine, 5*, 241–245. doi:10.1097/00042752-199510000-00006
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five designs*. Thousand Oaks, CA: Sage.
- Curry, T. (1993). A little pain never hurt anyone: Athletic career socialization and the normalization of sports injury. *Symbolic Interaction, 16*, 273–290. doi:10.1525/si.1993.16.3.273
- Deci, E.L., Eghrari, H., Patrick, B.C., & Leone, D.R. (1994). Facilitating internalization: The self-determination perspective. *Journal of Personality, 62*, 119–142. doi:10.1111/j.1467-6494.1994.tb00797.x
- Fenton, L.T., & Pitter, R. (2010). Keeping the body in play: Pain, injury, and socialization in male rugby. *Research Quarterly for Exercise and Sport, 81*, 212–223.
- Gabbett, T. (2005). A comparison of physiological and anthropometric characteristics among playing positions in junior rugby league players. *British Journal of Sports Medicine, 39*, 675–680. doi:10.1136/bjism.2005.018275
- Gabbett, T.J., & Domrow, N. (2007). Relationships between training load, injury, and fitness in sub-elite collision sport athletes. *Journal of Sports Sciences, 25*, 1507–1519. doi:10.1080/02640410701215066
- Gavanski, I., & Wells, G.L. (1989). Counterfactual processing of normal and exceptional events. *Journal of Experimental Social Psychology, 25*, 314–325. doi:10.1016/0022-1031(89)90025-5
- Haromn, K.G., Drezner, J., Gammons, M., Guskiewicz, K.M., Halstead, M., Herring, S.A., . . . Roberts, W.O. (2013). American medical society for sports medicine position statement: Concussion in sport. *British Journal of Sports Medicine, 47*, 15–26. PubMed doi:10.1136/bjsports-2012-091941
- Howe, P.D. (2001). An ethnography of pain and injury in professional rugby union: A case of pontypridd RFC. *International Review for the Sociology of Sport, 36*, 289–303. doi:10.1177/101269001036003003
- Hughes, R.H., & Coakley, J. (1991). Positive deviance among athletes: The implications of over conformity to the sport ethic. *Sociology of Sport Journal, 8*, 307–325.
- Lee, A.J., Garraway, W.M., & Arneil, D.W. (2001). Influence of preseason training, fitness, and existing injury on subsequent rugby injury. *British Journal of Sports Medicine, 35*, 412–417. doi:10.1136/bjism.35.6.412
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.
- Liston, K., Reacher, D., Smith, A., & Waddington, I. (2006). Managing pain and injury in non-elite rugby union and rugby league: A case study of players at a British university. *Sport in Society, 9*, 388–402. doi:10.1080/17430430600673407
- Lopez, V., Galgano, G.J., Black, C.M., Gupta, A.T., James, D.E., Kelleher, K.M., & Allen, A.A. (2011). Profile of an American amateur rugby union sevens series. *American Journal of Sports Medicine, 40*, 179–184. doi:10.1177/0363546511427124
- Malcolm, N.L. (2006). “Shaking it off” and “Toughing it out”: Socialization to pain and injury in girls’ softball. *Journal of Contemporary Ethnography, 35*, 495–525. doi:10.1177/0891241605283571
- Maykut, P., & Morehouse, R. (1994). *Beginning Qualitative Research: A Philosophic and Practical Guide*. London: The Falmer Press.

- Maxwell, J.P., Visek, A.J., & Moores, E. (2009). Unsanctioned aggression in rugby union: Relationships among aggressiveness, anger, athletic identity, and professionalization. *Aggressive Behavior, 35*, 1-7. doi:10.1002/ab.20302
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative Data Analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Nixon, H. (1993). Accepting the risks of pain and injury in sport: Mediated cultural influences in playing hurt. *Sociology of Sport Journal, 10*, 183-196.
- Nixon, H. (1994). Coaches' views of risk, pain, and injury in sport, with specific reference to gender differences. *Sociology of Sport Journal, 11*, 79-87.
- Nixon, H. (1996). Explaining pain and injury attitudes and experiences in sport in terms of gender, race, and sports status factors. *Journal of Sport and Social Issues, 20*, 33-44. doi:10.1177/019372396020001004
- Olusoga, P., Butt, J., Hays, K., & Maynard, I. (2009). Stress in elite sports coaching: Identifying stressors. *Journal of Applied Sport Psychology, 21*, 442-459. doi:10.1080/10413200903222921
- Partington, S., Partington, E., & Olivier, S. (2009). The dark side of flow: A qualitative study of dependence in big wave surfing. *The Sport Psychologist, 23*, 170-185.
- Patton, M.Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Peck, K.Y., Johnston, D.A., Owens, B.D., & Cameron, K.L. (2013). The incidence of injury among male and female intercollegiate rugby players. *Sports Health, 5*, 327-333. doi:10.1177/1941738113487165
- Pike, E.C., & Maguire, J.A. (2003). Injury in women's sport: Classifying key elements of "risk encounters". *Sociology of Sport Journal, 20*, 232-251.
- Rip, B., Fortin, S., & Vallerand, R.J. (2006). The relationship between passion and injury in dance students. *Journal of Dance Medicine & Science : Official Publication of the International Association for Dance Medicine & Science, 10*, 14-20.
- Roderick, M., Waddington, I., & Parker, G. (2000). Playing hurt: Managing injuries in English professional football. *International Review for the Sociology of Sport, 35*, 165-180. doi:10.1177/101269000035002003
- Rugby, U.S.A. (2011). Retrieve July 5, 2014 from <http://usa-rugby.org/documentation/about/sgma-survey-2011.pdf>
- Vallerand, R.J., Blanchard, C., Mageau, G.A., Koestner, R.K., Ratella, C., Leonard, M., . . . Marsolais, J. (2003). Les Passions del L'ame: On obsessive and harmonious passion. *Journal of Personality and Social Psychology, 4*, 756-767. doi:10.1037/0022-3514.85.4.756
- Warburton, D.E., Nicol, C.W., & Bredin, S.S. (2006). Health benefits of physical activity: The evidence. *Canadian Medical Association Journal, 174*, 801-809. doi:10.1503/cmaj.051351
- Weinberg, R., Veranue, D., & Horn, T. (2013). Playing through pain and injury: Psychosocial considerations. *Journal of Clinical Sports Psychology, 7*, 41-59.
- Williams, J.M., & Andersen, M.B. (2007). Psychosocial antecedents of sport injury and interventions for risk reduction. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 379-403). New York: John Wiley and Sons. doi:10.1002/9781118270011.ch17