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The Last Taboo in Sport: Menstruation in Female Adventure Racers

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Abstract

Recent media attention has been drawn to the 'last taboo in sport', menstruation in the competitive female athlete. This thesis delves into the domain of sport to understand why this taboo exists and how menstruation is constructed in the gendered sport of Adventure Racing. With its traditionally patriarchal structure, the presence of women on the sportsground has long been resisted. Adventure racing is interesting because it requires a minimum of one woman in each team, and thus provides a unique context within which to study menstruation.

The sporting literature has typically framed menstruation within a biomedical perspective, where sporting behaviour results in menstrual dysfunction and therefore as a threat not only to the athlete's wider health, also her traditional role as child-bearer. The ability to construct menstruation as a positive experience has been limited, especially as the voice of female athletes themselves has been notably missing from the literature.

Seven female adventure racers participated in this study to elucidate their experiences within training and competitive environments. Semi-structured interviews were held with each participant, and their dialogue interpreted thematically as to how they construct and manage menses within this context.

The major themes drawn from the women's voice include the woman as the compulsory piece of kit, as subordinate and weak, and as the caregiver. Despite the women's right to compete, this equal opportunity did not transfer to their positioning within the team. Their perceived inferiority worked to keep menstruation hidden and bodies silenced in attempts to emulate the idealised masculine sporting body. In general, menstruation was constructed as a tolerated annoyance; it was to be dealt with by the individual akin to any other illness or injury that one of their male teammates might need to manage. In this way the women were able to compartmentalise their menses as an entity that could be controlled. It was constructed as 'something' that happened to their body, and thereby distanced themselves from the bodily process. Menstruation remained absent from talk, concealed in dialogue and action, and absence of menses was welcomed, its presence preferred once off the sportsground. The taboo status of menstruation remains firmly embedded in this gendered sporting domain.

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Chapter 1: Menstruation as taboo

Heather Watson, a British tennis player recently made international headlines when in an interview she cited “girl things” as a reason for her disappointing athletic performance in an Australian Open tennis match (BBC, 2015). What followed was a media furore (Cocozza, 2015; HuffPost Live, 2015; Lewis, 2015; McKenzie, 2015; Stuff, 2015), sparking claims that a Pandora’s box had been opened, with one commentator labelling the statement as a double edged sword (Houppert, as cited in Lewis, 2015). Houppert posited that Watson’s statement could both put the women’s movement back as the physical capabilities of women would once again be questioned, and at the same time could be viewed more positively and break the traditional silence around the topic. It can be argued that two common themes emerged from these mainstream media accounts whereby menstruation was coined as being the last taboo in sport, and sporting personalities explicated the need to openly discuss how menstruation is experienced by female athletes as part of their sporting lives.

The last time menstruation was so visible in the international coverage of a sporting event was nearly twenty years ago, in 1996. Uta Pippig, a German marathon runner won the Boston Marathon for the third time, despite as Shaughnessy (1996) explained in his race report for The Globe newspaper, suffering “female issues at the worst possible time”. Kissling (1999) examined the media coverage in the major American daily newspapers following Pippig’s historic win to see how menstruation was constructed (or erased) in this medium. Whilst the reports fell into one of three main categories (clinical coverage of menstruation, exaggeration of the negative effects of menstruation, or menstruation omitted entirely as the cause of Pippig’s difficulties), none could be easily identified as providing a positive spin on menstrual discourse. This lack of positivity surrounding menstruation is widely found in both popular culture and in the academic literature; instead, menstruation is commonly constructed as a negative phenomenon (e.g., Brooks, Ruble & Clarke, 1977; Chrisler, 2013; Jackson & Falmangne, 2013; Johnston-Robledo, Barnack & Wares, 2006; Johnston-Robledo & Chrisler, 2013; Kissling, 1996; Lee, 2002; Scambler & Scambler, 1985). For example, Lee (2002) contends that positive attitudes towards menstruation are not frequently reported; instead it is only the effects of menstruation on the body that are generally verbalised as positive. Scambler and Scambler (1985) describe this attitude as acceptance, and the nearest that women would reach towards displaying a positive attitude towards menstruation.

Kissling (1999) acknowledged that breaking the communication taboo of menstruation could have transformative potential for women to take pride in their bodies and their capabilities.

Yet given the media reaction to Watson's comments two decades on from Pippig's win, it is clear that the communication taboo may have been temporarily fragmented in 1996 but still has a long way to go to shatter permanently.

Menstruation is a biological process and it has been argued that it is one of the most important differences between a male and female biological makeup (Society for Menstrual Cycle Research, 2011). Menstruation can also be understood as an embodied experience, yet generally it is an event not visible to others to openly scrutinise or comment upon (Moreno-Black & Vallianatos, 2005). Therefore the way the event is communicated, and its associated cultural beliefs and mores become significant in how we construct the experience of menstruation. Menstruation has been referred to as a biopsychosocial process, a normal physiological process that both is affected by and affects behaviour (Chrisler, 2013). For example, Ruble (1977) found women who were led to believe they were premenstrual reported experiencing more physical symptoms in comparison to those who believed they were intermenstrual. Kissling (1999) argues that the biology of menstruation cannot be separated from the culture the individual is located within as they experience it. The predominant cultural understandings of menstruation influence how a woman constructs her own biological menstrual experience. For example Siegel (1985) studied Jewish women's experience of menstruation. In her study she investigated women who practiced Mikvah, a ritual in Judaism whereby women bathe at the end of their menstrual period, and women who did not practice this ritual. She found the wider American culture influenced the menstrual experience of all the women more significantly than the cultural practices observed as part of their religious beliefs. Chrisler (2013) argues that even though almost every woman around the globe will share the same physiological process of menstruation, it will be experienced differently depending on the individual's beliefs, attitudes and behaviour that have arisen from the sociocultural environment they are located within. Lander has thus claimed then that the interpretation of menstruation is always ideological (cited in Kissling, 1999).

Sport, has long been the domain of men, and one in which men have been allowed to express, cultivate and define their masculinity (Cahn, 1994; Messner, 1988). A woman was not traditionally allowed, nor encouraged, to take up space on the sportsground and to do so was considered unfeminine (Kissling, 1999). The medical science literature in the nineteenth and early twentieth centuries characterised women as physiologically inferior to men, their reproductive system and hormones ruling their bodies and leaving them in a weakened state (Hall, 1996; Cahn, 1994; Ehrenreich & English, 1979). Menstruation, along with pregnancy and menopause were traditionally viewed as physical diseases and surrendered women as

liabilities (Ehrenreich & English, 1979). As a result, women were seen as frail and advised to avoid strenuous movement for risk of harming their reproductive ability (Cahn, 1994). When a shift in thinking occurred and the benefits of a physically active society (for both men and women) understood, movement within the female population was finally encouraged, albeit for mild exercise only (Cahn, 1994; Lenskyj, 1986) and in sports that agreed with socially acceptable feminine traits of the time (Schultz, 2014; Hargreaves, 1994). In this way, the masculinity of male sport participants could be preserved and the dualism of the male athlete as superior, strong and aggressive, and the female athlete as inferior, weak and submissive could be maintained (Cahn, 1994).

The understanding of sport as being the traditional province of men, and its ability to masculinise male members of society, has meant that female participation in sport has always been met with resistance (Messner, 2002; Hall, 1996; Birrell & Theberge, 1994). Most human cultures utilise dichotomous classifications to structure their understanding of their world, and in Western culture this is commonly hierarchical (Birke, 1986). Women have traditionally been positioned as opposite and inferior to men and their biological makeup used to justify their exclusion from the sporting domain. The difference in anatomical parts between the two sexes has been used to construct and perpetuate differences between the genders, and as such, women have historically been cast as constrained by their reproductive organs in such a way that their social positioning has been seen as the natural order of life as if following some kind of mechanical or fundamental law (Hargreaves, 1994; Birke, 1986). Indeed, when women collectively fought for their right to participate in sport, it was an important site both symbolically and in actuality to reflect on and negotiate gender relations within wider society (Cahn, 1994).

Hall (1996) maintains that gender, like ethnicity or class, needs to be considered as a relational category as opposed to a dichotomous one as there is greater variation within a sex than between them (Hargreaves, 1994; Dyer, 1982). The emphasis on differences between the sexes underestimates and tends to ignore other connected factors such as race, socioeconomic status, sexual orientation, disability, and politics (Fausto-Sterling, 2000; Hall, 1996; Hargreaves, 1990). Indeed, it is argued that the continued insistence of women as biologically inferior to men has masked the fact that any differences are marked more by social constructions than an underlying biology (Hargreaves, 1994). In a relational analyses framework, sporting practices are assumed to have been historically and culturally produced; therefore they allow for study into how power relations are negotiated and contested rather than taking certain values, attitudes and behaviours to be accepted as 'fact' (Dewar, 1991).

After initial fascination with female sporting participation in the early twentieth century, the public gaze turned toward concern once again when the performance gap started to decrease between the two sexes (Cahn, 1994). The comparisons between men and women continued as questions of male superiority were raised and examined. The mere presence of women within the traditional male realm of sport questioned the hegemonic order of society (Hall, 1996). Those who fought for the right to participate had to convince detractors that sport would not masculinise females. However, in doing so this then raised the question that if sport was not in fact a masculinising domain, then where did that leave men who participated? This questioned the widely held belief that sport was an avenue for men to cultivate and define their masculinity (Cahn, 1994). Therefore, to preserve this notion the narrative of female sporting achievements were commonly linked either to traditional feminine activities outside the sports ground, or to the female 'masculine' athlete as a temporary one, and returning to her 'natural' feminine self eventually (Cahn, 1994). This allowed women to engage with athleticism, yet, posited as a temporary transgression, it still preserved the hegemony of man as the sporting superior.

The continual comparison of women's achievements with those of men deflects from the more important questions of how the existence of any gap, no matter the size, acts to reinforce the image of males as ultimately superior or why dominant Western sports are ones that allow the display of traditionally masculine attributes such as speed, power and strength (Dewar, 1991; Messner, 1988). Indeed, when one considers ultra-endurance sports such as running events over 42.2km (the marathon distance), women have been shown to start running faster than and outperforming men (Bam, Noakes, Juritz & Dennis, 1997; Speechly, Taylor & Rogers, 1996).

Yet even though the argument that a woman's biology should limit her participation in sport is now disregarded (Dyer, 1982), as late as the 1980s female exclusion from certain sports was still being officially justified on this basis. It was not until the 1984 Olympics, after repeated attempts, that the endurance sports of the 3000m and marathon distance running events were finally included in the female athletic programme (Hargreaves, 1994). The historical myth that women must avoid strenuous activity has indeed been hard to dispel, evidenced only recently, in the last Summer Olympic Games held in 2012 when women had the opportunity to compete in all sports in the programme that were offered to men, and women were finally allowed to compete in the traditionally masculine Nordic ski jumping event in the most recent Winter Olympics in 2014 (Ruggeri, 2014; Gleaves, 2010).

The current environment, at face value at least, allows girls and women to participate in any sport of their choosing, a right to be celebrated considering past discriminatory practices. However, whilst legally a female must be allowed to participate, the concept of gender equality is more fraught. As Gleaves (2010) notes, often the women's events, especially for endurance events, are of a shorter distance than the men's despite there being no scientific evidence to justify reducing women's participation to a lesser extent. This then leads to the lack of gender parity for reasons of historic sociocultural biases as opposed to there being any physiological reasons to support it with men positioned as sporting superiors, and women as unable to push their body to the same extremes as their male counterparts. Female inclusion is often seen then as a second tier competition in comparison with the men's events, and discourse around the sport often perpetuates this, with the female event referred to as the 'women's' event and the male event without any gender notation needed.

The positioning of the male sporting body as superior is arguably then still normalised in today's society. Masculine attributes are still seen as inherently advantageous in the sporting realm, as evidenced by the continued policy of the International Olympic Committee (IOC) to legally allow gender testing of athletes suspected to be men masquerading as women competing in female competition, or women who are gender ambiguous (Wells, 2010). As Gleaves (2010) notes, only women are ever subject to gender testing, as it is only being male that is seen as providing an unfair advantage to female competition, and not vice versa. Similarly, for transsexual individuals, the IOC policies prioritise restriction of competition for individuals who have undergone male to female reassignment, as opposed to female to male (McDonagh & Pappano, 2008). These policies thus perpetuate the association of women as inferior to men in the sporting realm, and women in need of outside protection from gender interlopers (Gleaves, 2010). Men's sport at the elite level does not meet the same scrutiny. Indeed, Wells (2010) argues that no clear guidelines exist as to what actually makes a female athlete 'female'. Instead one can argue that the dichotomy of male and female continues here, and it is not what a female athlete is, it is what a female athlete is not, and that is, the female athlete is most certainly not a male athlete. The need for gender verification relies on the assumption that maleness is of primary advantage in sporting competitions and that biomedicine will be able to expose any ambiguity in gender (Wells, 2010).

Messner (1987) has termed sport one of the "last bastions" of male power and supremacy that enables separation from the supposed feminisation of society (p. 54); hence, in this construction, one can understand why the differences in biology between the sexes has endured as a leverage point to protect the male's primary position in society. To maintain

power, men have had to defend their position based on anatomical difference. It could be argued that this enduring construction perpetuates the concealment of menstruation in sport. A menstrual leak, so to speak, reinforces the institutionalised association to a woman's biological inferiority (Delaney, Lupton & Toth, 1988; Lenskyj, 1986), and therefore she will do what she can to conceal this both physically and verbally to maintain her chance of equal positioning on the sportsground (MacDonald, 2007). The use of euphemisms abounds in women's attempts to disguise any discussion of menstruation (Ernster, 1975; Johnston-Robledo & Chrisler, 2011; MacDonald, 2007; Roberts, Goldenberg, Power & Pyszczynski, 2002; Lynch, 1996) and these are rarely positive (Delaney, Lupton & Toth, 1988). 'The curse', 'red plague', 'time of the month', 'on the rag', 'riding the cotton body' and 'Aunt Flo' are just some of the many terms used to avoid stating the word menstruation directly in conversation. As MacDonald (2007) argues, menstruation is concealed by "clotting the flow of bloody words" (p. 347). Jackson and Falmagne (2013) interviewed thirteen women on their menarcheal experiences. At some point during their interviews each woman referred to menstruation as 'it'. The authors argue that this is more than a deictic grammatical construction, and often their participants would invent code words or make vague references to menstruation in their talk. It has been argued that by avoiding using the term menstruation or menses in their everyday language women in effect distance themselves from the bodily process (Jackson & Falmagne, 2013). In a sense, this allows women to construct menstruation as something that happens to their bodies, as opposed to being a part of the body as a whole. As Jackson and Falmagne argue, this distancing allows women to mask its presence in their lives and perpetuate the taboo nature of menstruation.

The menstruating body is not a masculine one, and therefore by proxy it is not a sporting one (Young, 2005). It is not surprising then that it has been suggested that menstruation is associated with a culture of shame (Oxley, 1998), whereby the body has let the athlete down; in a sense, the embodied experience is not congruent with the strong masculine ideal the athlete is aspiring to. It is perhaps also not surprising that menstruation in the sporting domain has historically been associated with negative effects on performance (Lebrun, 1993; Constantini, Dubnov & Lebrun, 2005). A vast array of literature on this and the reverse relationship, the effect strenuous activity has on menstruation, has flourished over the past three decades (e.g., Brunet, 2005; Moreno-Black & Vallianatos, 2005). In their literature review of the effects of the menstrual cycle on sporting performance, Constantini, Dubnov and Lebrun (2005) found an absence of any statistically significant differences in performance as a result of menstrual phase differences. They contend that any differences in a woman's cycle

will impact more pragmatically with regard to management within the sporting environs as opposed to the body physiologically impacting directly on sporting performance. There was one exception however, with studies showing a potential adverse luteal-phase effect exists for endurance athletes competing in hot and humid environments (Cheung, McLellan & Tenaglia, 2000; Janse De Jonge, Thompson, Chuter, Silk & Thom, 2012).

Despite the lack of evidence to support the negative construction of menstruation in the sporting context, the wider cultural and social beliefs around menses appear to transfer into this domain. It has been argued that most races or sporting events are won by functionally significant, not statistically significant margins (Constantini, Dubnov and Lebrun, 2005). Therefore the presence of menstruation is seen to threaten the individual's chance of acquiring sporting success. Yet, women have won gold medals and set world records at every phase of their menstrual cycle (Delaney, Lupton & Toth, 1988). The taboo nature of menstruation, it seems, ensures that this is a little known fact.

The negative association of menstruation to sporting performance has been influential in the domain of controlling menstruation medically through the use of prescribed oral contraceptives (Constantini, Dubnov & Lebrun, 2005). With oral contraceptive use, an individual can control when she will experience menses, therefore she can also control the presence or absence of menses in the sporting domain. However, the effects of oral contraceptive use on athletic performance are not yet known nor are the health implications of continued hormonal manipulation on athletic bodies (Hitchcock, 2008; Burrows & Peters, 2007; Constantini, Dubnov & Lebrun, 2005). There are few studies in the wider literature that investigate the physiological effects of the oral contraceptive on the female body. Nor are there many studies investigating the wider social, psychological, and cultural implications impacting on an individual with continued menstrual suppression (Chrisler, 2013, Society for Menstrual Cycle Research, 2011).

Indeed, concern has been raised as to how oral contraceptives are marketed (Society for Menstrual Cycle Research, 2011; Mamo & Fosket, 2009; Johnston-Robledo, Barnack & Wares, 2006). No longer are these solely promoted as products to avoid unwanted pregnancy, pharmaceutical companies now construct these as lifestyle choice drugs. Women now have the ability to limit their cycle to four per year with the Seasonale product, or opt out completely with the more recently developed oral contraceptive marketed as Lybrel. The underlying message that these drugs continue to push is that menstruation in today's society is irrelevant, unwanted and a nuisance (Mamo & Fosket, 2009; Johnston-Robledo, Ball, Laut &

Zekoll, 2003; O'Grady, 2002). Menstruation can be hidden indefinitely when it is controlled by the use of a particular drug, and menstruation as a stigma and taboo thus perpetuates (Society for Menstrual Cycle Research, 2011).

Birrell and Theberge (1994) argue that in a patriarchal society, one of the main ways to maintain power over women is via the control of their bodies. Indeed, it is argued a woman not seen to be in control of her menstrual cycle is socially stigmatised in Western society (Johnston-Robledo & Chrisler, 2013). In the sporting world, there is an oft-used phrase of 'control the controllables'. This refers to athletes identifying aspects of their performance that they can control, and then focusing their attention exclusively on maintaining control of these variables (Hermansson, 2011). In a sense then, this popular principle renders a female athlete who chooses not to artificially control her hormonal cycle liable to accusations of not displaying the appropriate 'athletic attitude' (Moreno-Black & Vallianatos, 2005). Control then, is a highly valued characteristic of an athlete. To leak, as in to allow menstrual blood to 'escape' from the body is construed as an athlete not being in control. Similarly, to talk of any issues associated with menstruation in the sporting context can be seen as an athlete not being in control of their body. Thus silence around menstruation continues. Indeed, it has been claimed that it is acceptable to discuss menstruation when it is framed as a condition, as pathological, as a disease, yet to discuss it as an everyday ordinary experience remains uncomfortable (Houppert, 1999; Delaney, Lupton & Toth, 1988).

This construction of menstruation as a disease is in part assisted by the plethora of studies on the effect that sports training has on female physiology (e.g., De Souza et al., 2014; Loucks, 2003; Williams, Helmreich, Parfitt, Caston-Balderrama & Cameron, 2001). The interrelated conditions of amenorrhea, eating disorders and osteoporosis led the American College of Sports Medicine to create a special task force on women's issues (Brunet, 2005; Yeager, Agostini, Nattiv & Drinkwater, 1993). This task force collectively postulated that a serious syndrome existed that occurred in both elite female athletes and recreationally active girls and women (Otis, Drinkwater, Johnson, Loucks & Wilmore, 1997). They termed this syndrome the Female Athlete Triad, and since the term was coined in 1992, the biomedical fraternity has published extensively on all aspects of this 'condition'. The taskforce claimed that the condition was under recognised and under reported. Therefore they argued that not only should sports medicine professionals be aware of the specific aetiology of the newly-named disorder, coaches and trainers should understand how to recognise, prevent and treat it as well. Any female who showed signs of any one of the components, according to the American College of Sports Medicine, should be referred to a relevant medical professional (Otis et al.,

1997). The public scrutiny of the female athlete's body in this context is encouraged and in a sense legitimated by the medical profession. Menstruation in the sporting context is firmly located within the biomedical realm and is deemed pathological in this understanding. After fighting for equal right to participate in sport and quelling the argument that women's bodies are too frail for strenuous activity (Cahn, 1994), the female athlete triad 'syndrome' could be seen as another avenue to reinvigorate this traditional belief. Once again, sporting behaviour is seen to result in disruption to the normal hormonal fluctuations of the female body, and therefore poses a threat to the women's reproductive role. Yet, the proponents of the female athlete triad strongly advocate for continued regular participation as they argue the benefits of sporting participation far outweigh any of the proposed detrimental outcomes (e.g., Harber, 2011).

The increasing gaze on the sporting woman's body is reflected in the extensive examination of the model and an updated Position Statement was published in 2007 (Nattiv, Loucks, Manore, Sanborn, Sundgot-Borgen & Warren, 2007). It was argued that the original was too narrow in scope; hence the terminology was revised to be menstrual function, energy availability and bone mineral density (George, Leonard & Hutchinson, 2011). The triad is now referred to as a continuum ranging from optimum health to disease for each of the three separate but interrelated conditions as shown in Figure 1.

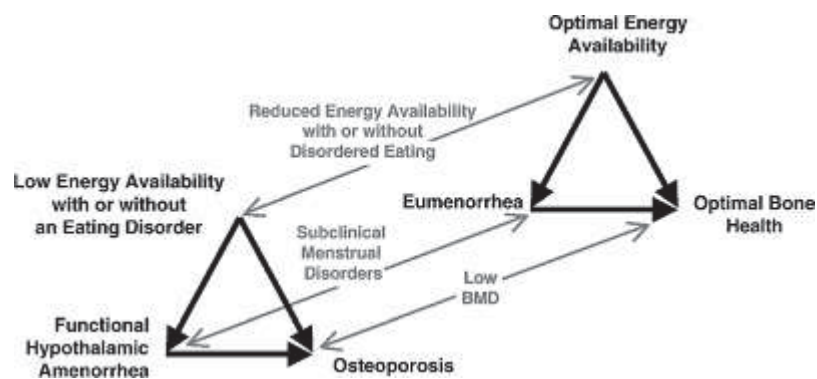


Figure 1. The Female Athlete Triad. (Source, De Souza et al., 2014)

Menstrual dysfunction has been linked to inadequate energy intake for the daily bodily demands (Lebrun, 2007). This may present as primary amenorrhea, defined as lack of menarche before age 15, secondary amenorrhea which is defined as lack of menses for 3 or more consecutive months after menarche, or oligomenorrhea whereby menstrual cycles are of greater than 35 days (International Olympic Committee Medical Commission Working Group Women in Sport, 2010). The failure of the ovaries to ovulate (anovulation) and luteal phase dysfunction (inadequate progesterone production), two asymptomatic conditions, may also

result from a continued state of low energy availability (Lebrun, 2007). It is not the training load itself that results in disruption to the menstrual cycle; it is believed to be strenuous training accompanied by inadequate dietary intake (Williams, Helmreich, Parfitt, Caston-Bladerrama & Cameron, 2001). This inadequate energy intake may be intentional, psychopathological or inadvertent (Nattiv et al., 2007). Indeed, it is noted that it is often hard for female athletes to balance the energy and psychological demands of their sport with the energy needs of their body (Harber, 2011). As a result, reproductive function along with bone mineral density can be compromised. In an energy deficient state, the body will redirect metabolic fuel from the physiological processes of reproduction to the basic immediate needs of the body to function (Loucks, 2003). The altered hormonal state that results can lead to long term effects on the bone, reproductive and cardiovascular health (Harber, 2011). One of the main reproductive hormones, estrogen, is not only fundamental for reproductive functioning but also plays a critical role in maintaining skeletal function (Liu & Lebrun, 2005), hence the interrelationships between energy availability, menstrual function and bone health in the female athlete triad. Therefore, often when a woman is suspected of estrogen deficiency, physicians will err on the side of supplementation (Gamboa, Ganskie & Atlas, 2008). It has been estimated that the prevalence of the oral contraceptive pill use in athletic populations is similar to the general population (Bennell, White & Crossley, 1999; Burrows & Peters, 2007). The reasons for its use include contraception, manipulation of cycle, and symptom management along with addressing bone health (Bennell, White & Crossley, 1999). Yet, the results are mixed in terms of effectiveness of oral contraceptive pills on increasing bone mineral density in amenorrheic athletic women. Despite regular withdrawal bleeds resulting, and hence the appearance of a regular menses, the metabolic factors of bone formation, health and performance that an organic menstrual cycle is linked to have not conclusively shown to be restored with oral contraceptive use (Nattiv et al., 2007; Liu & Lebrun, 2005). This has not lessened its likelihood of being prescribed however (Bergstrom et al., 2013; Bennell, White & Crossley, 1999), and the use of the oral contraceptive pill is noted to delay and reduce the likelihood that a woman will restore her full menstrual cycle naturally (De Souza et al., 2014; Falsetti, Gamera, Barbetti & Specchia, 2002). The visible sight of monthly menses, despite the lack of a fluctuating cyclic hormonal profile may well lead athletes into a sense of false security regarding their menstrual health status (Bergstrom et al., 2013).

The public gaze thus widens to include those women who appear healthy with no physical or easily observable signs of dysfunction. Every sporting woman can be considered at risk of this

'disorder' within this widened scope. In this positioning, menstruation is framed as another female specific dysfunction, located in the biomedical realm, and thus needing medical oversight and control. This body of research, whilst advancing the knowledge of the female body in a field that has historically placed women as atypical to the normal male prototype (Rostosky & Travis, 1996; Vertinsky, 1990), does little to move past a disembodied and pathologised perspective of female biology (Moreno-Black & Vallianatos, 2005). The continual focus on menstruation as a negative experience, either negatively impacting on performance, or the negative effect that sporting behaviour has on menstruation and a women's biology, has perpetuated the dominant ideology of the masculine body as athletically superior. Yet what has been missing from the extant literature is the voice from the women themselves, their experience of menstruation (both biologically and culturally) in their sporting worlds.

Hall (1996) maintains that any analyses that do not explore the way the people who participate in them make meaning of the subject will present an inaccurate and one-sided picture. Outside of the specific sporting context, there have been a growing number of studies of the female lived experience of menstruation in everyday life (e.g., Brantelid, Nilver & Alehagen, 2014; Donmall, 2013; Burrows & Johnson, 2005; Choi & McKeown, 1997). For example, Brantelid, Nilver and Alehagen (2014) interviewed twelve women in southeast Sweden on their experiences of menstruation through their life course. By using open-ended questions and allowing the women to speak freely in response to each of their questions the researchers were able to obtain a deeper understanding of how women are both influencing and are influenced by the social and cultural environments that surround them. For example, one of the main themes that Brantelid, Nilver and Alehagen identified was that the way their participants obtain and share knowledge within their family and social networks was heavily dependent on the level of intimacy between the participant and her mother. If the first discussions of menstruation within the family unit were relatively open, then the women themselves were more likely to talk openly and confidently about menstruation throughout their life course. In contrast, if the women had more restricted discussions with their mothers initially then they tended to feel more inhibited discussing the topic of menstruation (Brantelid, Nilver & Alehagen, 2014). These findings are important when one is trying to understand how a topic is perpetuated as taboo through time. These kinds of studies allow the phenomena of menstruation to remain located within and part of the individual woman's body, as discussions revolve around how the individual makes sense of her menstrual experiences through the different interactions they have had and as part of the society they have lived within. In this way menstruation is not treated as separate or removed from the

body. Instead, menstruation is regarded as a process that occurs within the woman's body, yet she (as a whole) remains the focal point. In this way, the women are the 'knowers' of their own bodies, and their voice is given prime importance in uncovering the way menstruation is regarded and experienced in our culture. The in depth accounts given by the women allow menstruation to be studied as a phenomenon, as embodied, and as part of the wider sociocultural mix at the same time. Thus, this allows for a more encompassing lens to study from and obtain a deeper level of understanding.

Despite this slight increase of women's voice in the academic research on menstruation, there have been few studies that have sought to elucidate this in the sporting context. Lynch (1996), Moreno-Black and Vallianatos (2005) and Held (2013) are the notable exceptions.

Lynch (1996) interviewed 41 New Zealand women on their management of menstruation when they are active in the backcountry (non-urban alpine, coastal and bush terrain). She found that whilst the women did not feel that keeping their menstruation a secret was crucial, many still felt feelings of embarrassment if they had to divulge this to others, especially men. There was also some degree of ambivalence, with one participant disclosing that she would not normally inform anyone, but then she also would not make a point of hiding that she was menstruating. For the majority, finding privacy to discretely change a tampon in this environment was an issue. Menstruation in the context of backcountry New Zealand was generally experienced as a tolerated annoyance; many women felt it affected their enjoyment levels; however, not to a level that would cause them to avoid participating altogether. Five women reported manipulating the date of their menstrual cycle with oral contraceptives to avoid menstruating whilst on their planned tramping expeditions. Lynch concluded that privacy, discretion and hygiene were the predominant concerns raised by this group of recreationally active women in New Zealand (Lynch, 1996).

Another study that has sought to understand women's experience of menstruation in a sporting context is that of Moreno-Black and Vallianatos (2005). These researchers interviewed 15 sporting women who were first year undergraduate students about their menstruation and menarche experiences. They describe the participants widely-held fear of leaking during a sports event and the goal of ensuring menstruation remained invisible to others. A common theme that emerged from these narratives was the participants' feeling of personal responsibility to control menstruation and meet teammates' and coaches' performance expectations. The authors termed this focus on disciplined control both in physical and psychological senses the 'athletic attitude'. In this construct, having control over

the body and any associated pain tolerated and managed effectively is highly valued. Indeed, Messner (1990) has argued that sporting injuries are generally worn with pride by men, and Young and White (1995) have found similar feelings in women. In this context, physical pain is associated with courage, and to play on despite pain is normalised and celebrated (Sabo, 1998). However, when that pain disseminates from an area in the body that is specifically female, as in the pain associated with menstrual cramps, the same glorification and verbalisation of playing through the pain is not so readily evidenced (Moreno-Black & Vallianatos, 2005). Choi and Salmon (1995) acknowledge the existence of a widely-held belief that women who exercise will have less severe menstrual symptoms; thus it could be argued that this had led coaches to relinquish responsibility for assisting their athletes to navigate through this pain. A woman who will hide any trace of her menstruation will similarly hide any evidence of associated pain (Moreno-Black & Vallianatos, 2005).

However, both Lynch (1996) and Moreno-Black and Vallianatos (2005) interviewed recreational as opposed to higher level athletes. Held (2013) in contrast, administered an online quantitative survey in addition to conducting two focus groups of 24 intercollegiate athletes in USA. She contends that women in this context are in a state of flux; they are aware of their ability to discuss menstruation if they choose, yet at the same time, they are still managing how to broach the subject in a socially acceptable way. In a sense menstruation is no longer identified as a taboo subject by the participants; nonetheless they are still hesitant to speak openly on the topic. The institutionalised need for menstruation to be verbally hidden still perpetuates. Held also found that the level of comfort in discussing menstruation differed depending on the sex of the athlete's coach. Female coaches were seen as easier to talk to, as the participants believed women were more likely to understand as they are assumed to have been through the same experiences as the athletes. A discussion with a male coach in comparison was seen as awkward and generally avoided. She goes further and surmised that there was a wide-arching belief that to disclose any detail on menstrual-related pain was to portray oneself as weak and be viewed negatively by teammates and coaching staff, yet at the same time, discussion on menstruation through the relaying of pain shifted the dialogue to the medical realm and in a sense gave it legitimacy (Held, 2013).

The Adventure Racing Team offers a unique context to investigate the experience of menstruation. Multisport developed in New Zealand in the early 1980s with the Alpine Ironman and Coast to Coast events. This new sport encompassed running, cycling and kayaking in off-road territory. In the late 1980s, Gerard Fusil introduced three new concepts to the sport: a team format that stipulated the team must have at least one woman, the race was

conducted over multiple days, and teams had to navigate their way to various checkpoints throughout the course together. The term Adventure Racing was born (Paterson, 1999). From the outset, Adventure Racing has seen men and women compete together to cover harsh terrain in all extremes of weather, often with little to no sleep for days on end. Paterson (1999) states that Adventure Racing individuals need to be “tough, resourceful, positive and not given easily to complaining” (p. 21). It is an endurance sport, and whilst the reasoning behind the historic compulsory mixed gender team makeup is unknown with no formal discussion taking place (G. Hunt, personal communication, August 28, 2015), the sport developed at the same time that equal opportunities for women in sport was being pushed internationally. Hence, from its inception, Adventure Racing has normalised the place of women on the start line alongside and against men.

It has been noted that the performance gap between males and females is lowest within endurance events compared to strength or speed based sports. Indeed, Dyer (1982) has argued that women may be better suited than men to endurance events due to their generally higher intramuscular fat levels, more efficient energy production systems and temperature control mechanisms over long durations, which combined may mean women fatigue more slowly than men. The sporting attributes of both mental and physical skill, intelligence, communication, teamwork, and endurance as opposed to anaerobic speed are highly valued and necessary for success in this event (Paterson, 1999). It could be argued then, that Adventure Racing is a sport whereby differences in capabilities between the sexes are less marked, if present at all.

Many researchers have suggested that cultural beliefs and traditions of wider society are reflected in the way sport is understood and played out (Hall, 1996; Hargreaves, 1990; Messner, 1988). The experience of women competing within these teams should provide an interesting site to investigate how traditional beliefs around gender and sport are constructed and negotiated through the dialogue around menstruation.

This thesis will delve deeper into how female Adventure Racers experience menstruation in their sporting world and how they negotiate their female presence in a male dominated sphere.

Menstruation, as aforementioned, is an embodied experience. Thus, the views a woman holds regarding her menstruation, the way she experiences it, manages it, and communicates about it will be individualised according to her own physiological body. Yet the way menstruation is valued and discussed in society will also affect how a woman understands and makes sense of

her experience. It is not the goal of this research to claim uniform experiences across the population; instead, it is to give voice to women in an under-researched area that has historically been treated as taboo.

Chapter 2: Method

Participants in this study were seven women aged between 26 and 43 years and living in New Zealand at the time of the interview. All seven participants were New Zealand European/Pakeha, tertiary qualified and working in professional employment. The sample was purposefully homogenous, and drew from a small sub-population which could meet the recruitment criteria of female and current (in the last three years) Multisport athletes who are or have been competing nationally in a multi-day Adventure Racing Team. These participants had been involved with endurance-based sport for many years (for example, cross-country running, kayaking, orienteering and rogaine) before entering into the sport of Adventure Racing. The seven participants had all completed at least one Adventure Race within the previous year prior to the interview. As the sample draws from a very small pool of athletes nationally, to protect their and their teammates' anonymity, no further information regarding their professional background, area of residence or extent of experience within Adventure Racing will be provided. The information collected on this participant pool places them in a fairly homogenous group in terms of their educational background, professional status and sporting background.

The participants in this study were recruited via two main methods. Initially, a past multisport athlete known to the researcher contacted female athletes that were known to her via email. In this email she forwarded the information sheet and provided contact details of the researcher should the athlete wish to participate in the study. The second method of recruitment was via snowball sampling, where the athletes who had agreed to take part in the study forwarded the information sheet to women known to them who would also meet the recruitment criteria. The information sheet is provided in Appendix 1.

The study was approved by the Massey University Human Ethics Committee prior to commencing recruitment or the collection of any data. One of the considerations identified through this process was the need to manage any potential dual relationships of the researcher with her role as an event organiser in the Nelson/Tasman area. Despite the researcher organising running and triathlon events, although not Multisport or Adventure Racing events, there was still the potential for the researcher to be known personally to the participant. It was thus decided that recruitment requests would be through the researcher's contact initially, and via email only, to lessen any potential feelings of coercion to participate. This method allowed respondents adequate time to consider the research without coercion. As clearly stated in the information sheet, respondents were under no obligation to accept the

invitation. Whilst it was recognised that the researcher may have been known to some of the potential participants through her own sporting connections and part-time work as an event director, the nature of the topic area was not seen to conflict with any of these roles.

Adventure Racing in New Zealand is a minority sport and therefore the Multisport community is a very small one. In consideration of this, preserving confidentiality was of utmost concern due to the assumption that most elite level athletes will be known to each other and to the rest of the Multisport community. The following procedures were instigated to assist the preservation of confidentiality. Pseudonyms were used for any quotations used in this thesis and for any subsequent reports. In addition, care was needed to consider the other team members' confidentiality; therefore any quotations that included names of other team members or other multisport friends were adjusted with the use of pseudonyms. The quotations selected for use were checked for any potential identifying features. If deemed necessary, these segments were modified. The researcher has done her utmost to protect participant's identity by using only quotations that were not deemed to compromise anonymity. In other places, the researcher has paraphrased the participant's words to further decrease this risk.

As the research was conducted in Aotearoa/New Zealand, cultural considerations were deemed necessary prior to any recruitment phase to respect and follow the principles of the Treaty of Waitangi. To this end, the researcher contacted the local Kaihautu and through his guidance the researcher then met with two local Maori women to discuss the nature of the proposed research. Through this discussion, it was evident that the likelihood of women identifying as Maori participating in the research was slim. However, should any Maori women consent to participate, one of the kuia kindly offered to sit in with the participant during the interview process if that was preferable to the individual. As aforementioned, all participants identified as New Zealand European/Pakeha, therefore this support was not needed and no further consultation was required. The research sought to give voice to women, and elucidate their experiences of menstruation within a sporting context. It was not the aim to generalise findings to the wider population, therefore no analysis based on ethnicity has taken place. The ethnicity with which participants identified was collected solely to locate the research.

Those women who volunteered scheduled an individual interview with the researcher, which lasted between 36 minutes and 75 minutes in a location and at a time suited to the participant. This included the participant's home or a local café. The researcher travelled to the city or town that the participant was residing in to conduct the interviews to enable all

interviews to take place face to face. Due to the assumed taboo nature of the topic, it was deemed necessary to conduct interviews in this manner to enable maximal chance of good rapport to be built with the participant, which in turn would allow a conversational dialogue to proceed. It was identified that there was a minimal chance of harm through participating in this research, with potential embarrassment or discomfort in discussing a taboo topic. However, since the researcher is also female and has sport experience herself, this potential for personal harm was considered slight. The participants also had the option to decline to discuss any topic if they felt it would be too uncomfortable.

At the beginning of the interview participants received both written and oral information about the aim of the study, the approach, and how the interview transcripts would be used. As outlined in the information sheet, participants had the right to decline to discuss any particular topic and withdraw their data from the study at any time up to one week after the interview. It was also made clear to participants that they were able to ask questions at any time during the interview, or ask for the audio recorder to be turned off at any stage. Written informed consent was obtained before starting the interview and turning the audio recorder on. The consent form is provided in Appendix 2.

The women were interviewed using a semi-structured interview schedule and asked to discuss their experiences of menstruation both through their life course and within training and competition phases, along with their experience of being the only female participant in a team with three other males. The interview schedule is provided in the Appendix 3. Throughout the interviews, emphasis was placed on maintaining a conversational style and participants were encouraged to speak openly and freely on their experiences. The researcher prompted participants when it was deemed necessary to elaborate on areas of discussion. In general, the women were extremely enthusiastic to share their experiences of Adventure Racing. When talk shifted to more direct conversation regarding menstruation, the dialogue however became slightly more stilted, and more consistent prompting was needed by the researcher to continue more in depth discussion of the topic. This created tension for the researcher since to prompt within this particular sub-topic would mean asking more probing questions on how the participant managed their menses in the training and racing environment. It was felt at the time that this may have created a tendency for the participant to frame their experience as negative. However, on reflection, this was not deemed to be the case as participants would often report symptoms and relate these across their life course, not exclusively in the training and racing context. Also, the tendency for some of the women to provide brief answers without much elaboration initially was able to be interpreted within the wider analysis of their

conversational tone. On analysing the exchange between the researcher and the participant, there was also ample space for the participant to provide their experiences as positive.

Throughout the interview participants were given the opportunity to discuss any aspect that they believed relevant and near the conclusion of the interview the researcher checked the interview schedule to ensure the main topics had been covered. There was additional opportunity given to the participant before concluding the interview to discuss any other aspects they wanted or thought important to raise. A \$15 café voucher was offered as compensation at the conclusion of the interview and the participants were thanked for their time.

The interviews were audio-recorded and transcribed with significant pauses, laughter and other informal features of speech including phrases such as 'you know', 'like' and 'um' retained. Anonymity was maintained through the removal of identifying information and pseudonyms were assigned to participants and any teammates mentioned as described earlier.

Throughout the research process all digital recordings and transcripts were kept securely in a password-protected folder on the researcher's personal computer, and backed up on a password-protected flash drive. The printed transcripts and associated thematic notes, including any handwritten field notes were kept securely stored in a locked filing cabinet. This cabinet was only accessible to the researcher and supervisor during the duration of the study.

All completed consent forms were kept in a sealed envelope within a securely-locked filing cabinet. These were located separately to other research data by the supervisor. At the conclusion of the study, all research data has been stored at Massey University in a secure location and will be disposed of by the supervisor after a five year duration.

The researcher made minimal field notes during the interviews as it was felt this could potentially negatively affect the conversational tone of each interview. Therefore, immediately after the interviews, the researcher made any salient notes that had arisen from each interview. In addition, the researcher noted down any key points or questions that were raised by comparatively reflecting on the interviews prior to the transcription phase.

Throughout the transcription phase, the researcher would replay segments of the interview and make notes alongside the transcript as to the tone of the participant's voice and the ease or restraint inflicted in the participant's voice. These notes then guided the researcher in the significance of how the topic was relayed and thus interpreted as being constructed by the

participant. Once each interview had been transcribed, the researcher then listened again to each interview in full whilst checking the transcript for accuracy, and making any additional notes on themes as they arose.

This process was relatively straightforward; however, additional time was needed to transcribe the interviews that were conducted at cafés as opposed to the participant's home. This was due to the level of background noise in the café making some segments of speech hard to decipher. It was also poignant to note that the conversation appeared to flow more easily when the interviews were conducted in the participant's home. This may have been due to an increased feeling of comfort for the participant and therefore a more relaxed manner or it may have been due to the awareness of other patrons potentially being able to listen in to aspects of conversation in the café environment. For two of the interviews, the participant's partners were present in the home, albeit in different rooms. However, these two interviews were perceived by the researcher as more succinct in comparison to other interviews that were conducted in the home environment. The researcher needed to prompt more regularly for these two respondents to elaborate further on each topic. The reasoning for this is unknown; perhaps this may have been due to the participant perceiving the need to vacate the room the interview was conducted in more speedily to not inconvenience the partner in their own space. Or perhaps the participant was more guarded in their talk of the topic given the presence of their male partners close by.

In a few instances, the line of talk regarding infrequency or absence of menses with participants meant the researcher had to ethically consider how deep to probe with questioning without being perceived as being overly concerned, or as appearing to find the content of discussion surprising. This was of particular concern when talk moved to fertility as these participants had not disclosed any prior concern over their ability to have children in the future. The researcher tried to maintain an air of neutrality and ask additional questions in a passive manner without coming across as questioning their fertility status or insinuating any potential future fertility issues. Similarly, the researcher had to consider how to respond appropriately to questions about other individuals participating in the research. Often the participant would suggest people to contact for inclusion in the study, and if the researcher wanted the information sheet to be forwarded to them. Whilst not wanting to sound deceitful, nor affect the conversational ability of the pending interview, this meant the researcher had to navigate carefully on how to answer this question without divulging any other participant's identity. Often, the researcher would answer yes to forwarding the information sheet regardless of whether that particular individual had already agreed to

participate or not. Through these discussions it was found that two participants had already discussed the aims of the study with each other prior to their interview. This was not considered as a concern, however, as they had mentioned their mutual surprise at the topic of study, and some of their past experiences of menstruation in Adventure Racing. One of the aims of this current study is to give voice to women's lived experience in the sport, therefore this prior conversation was not perceived as detrimental to the aim of this study. If anything, it would be considered as further 'data' for interpretation of the level of discussion amongst adventure racers in general.

As the researcher moved through the transcription phase, she would at times refer back to earlier interviews and comparatively assess whether certain themes that emerged were backed up in these dialogues. After each interview had been fully transcribed, re-played and then checked for accuracy, the interviewer read through each transcript making notes on the ledger as key ideas, themes or questions arose. These common overarching themes were then noted separately and each transcript re-read for identification of supporting ideas under each theme. These themes were then black-boarded and connections made between each key idea identified. This blackboard process meant many chalk scribbles were written and erased as the key ideas were drawn out and linked to varying themes through successive readings over the data. This process helped to draw out the meanings behind the dialogue of each woman's voice.

The following section thus presents these interpretations the researcher has made with relevant and appropriate quotes used as exemplars of the participant's own dialogue. In some instances emphasis has been placed on participant's quotes by the use of bold type. This was the researcher's emphasis to align the reader to her interpretation of the women's voice under each general theme given.

As the themes were identified and interpreted, the researcher went back to the literature to find relevant theory to assist the understanding of how the women have constructed their experiences within their situated environment. This process was not an easy one due to the lack of women's voice regarding their menstrual experience in the sporting context; however, the researcher was able to find articles on women's experiences of menstruation in general to aid this process, and then interpret this within the sociocultural milieu of Adventure Racing based on the shared experiences provided by the women in this study. The researcher also attended the Female Athlete Health Symposium in Cambridge to further understand the current sporting environment for high performing New Zealand female athletes and to hear

the latest research, along with clinical and field experience of those working in this topic area. This symposium was multidisciplinary, with psychologists, sociologists, sport scientists, coaches, athletes and educators in attendance and presenting various topics linked to the female athlete triad.

Once the analysis was complete, the researcher had a final read through of the quotations used and checked again for any identifying information. This led to the researcher removing the related pseudonym for one of the quotes, as it was decided that the particular example given could render the pseudonym ineffective as the true identity of the individual could be known through reading the example provided.

One of the surprising themes that was identified in the current research was the women's perception of their place in the team as fulfilling the compulsory criteria of their sport. After analysing across the entire participant dialogue it was clear that the gendered nature of Adventure Racing was important in how the woman's race was experienced and also how menstruation was then experienced within this context. This led the researcher to the decision to situate the research context clearly first, to provide the reader with an understanding of the women's gendered experience of their training and racing environment. Following this analysis of the gendered nature of their sport, menstruation is then interpreted both within this locale and in the wider sociocultural setting. These findings from the research are thus provided in Chapter 3.

Chapter 3: Findings and Discussion

This chapter is presented in two sections: the first section relates to the gendered nature of Adventure Racing, and how the women in this study experience and make meaning of their involvement in this sport. The second section then interprets the women's menstrual experiences within this gendered Adventure Racing context.

3.1: Gendered Sport

It is only recently that women have been able to compete in all sports that men compete in, yet it could be argued that there has not thus far been enough time to see a similar cultural shift in the way women are perceived in the sporting context. In a world where the female body is still constructed as weaker, inferior and in direct contrast to the male body, McDonagh and Pappano (2008) argue that sport not only reflects this lived reality, it actively constructs it. Adventure Racing has, however, normalised the place of women alongside and against men from the sport's inception. The three men to one women minimum requirement for team composition ensures that women are on the start line for each Adventure Race that is held. Their attendance is compulsory. The men cannot compete unless they have a female alongside them. Yet since the women who participated in this research came to the sport of Adventure Racing after years of participating in other sports, they did not line up devoid of these wider influences. In general, women who compete in these races are older and have a history of outdoor-based sports behind them. This later age of commencing Adventure Racing means that the women have already been exposed to the gendered nature of sport prior to their involvement in their Adventure Racing team. The fact that women have always had a place on the start line since the sport's inception arguably then does little to create an unbiased environment for equality between the two genders to be played out. These women (along with their male teammates) enter the world of Adventure Racing with well-developed ideas and beliefs around female and male roles, and how appropriate masculinity and femininity should be displayed in current society. As Messner (1990) points out in his research with young male athletes, they enter the sporting world equipped with gendering identities, they are already socialised into a world where sport is seen as a site to display masculine ideology. To extend this thinking, women also then enter the sporting world within a wider sociocultural context that still favours masculinity over femininity. One cannot assume that because they are competing in a sport that is inclusive of female athletes, with both genders competing with and against each other, that gender becomes non-existent and each individual is seen as gender neutral.

The women talked of their participation in Adventure Racing as their right; that is, it reflects the notion that the opportunities should be the same for men and women in the world of sport as it should be in any other domain of life in Western society. The women felt they had just as much right to be on the start line as their male counterparts. As Phoebe relates,

Um I think it's more of a sport where you are treated as an equal with the guys, and so you don't want to have special allowances and things, and I'm sure there's things that, I don't know, are easier for women than the guys, I don't know what, but yeah, so I think it's just one of the few sports that is kind of a bit gender neutral.

However at the same time, the way the women constructed themselves within the team unit reflects the wider sporting and sociocultural belief that women are indeed weaker than the men. Once alongside the men, they didn't necessarily see themselves as at an equal level because of their perception of themselves as weaker. For example, as Phoebe describes,

Probably not, no, I think lots of girls probably do, but that's, yeah, me, I don't really. Mmmm. Yep. I don't see it as a reason to be ..., I suppose I see it as more of a challenge, like I feel like if I'm keeping up with them fine, maybe I feel like I'm doing a little bit more than them cause I'm a girl, but .. (...) I think it's really good that you can um just compete with guys, like, it is so unique that you can do that, but I think that's one of the best parts of it actually. It's not a disadvantage to be a fe, well you know, they all need to have a female in their team, so they kind of respect you for that reason, because they wouldn't be racing without you, so, they need to appreciate you a little bit.

Despite their belief that women had the right to be and should be on the start line with the men, under the surface, their inclusion was also seen in part as fulfilling the criteria of having at least one woman in the team. This rule of competition in effect places the women immediately into a position of subordination, as she can be seen as being in the team because of her gender first and foremost, not primarily because of her athleticism. There was a common theme to refer to the female member as a compulsory piece of kit, whilst often in jest; this reflects the deeper beliefs of women in the team composition. For example, as Daisy relates,

*But yeah, you have to have your skills, you've got to have your Nav [navigator], and then you've really got to have someone who is capable of back up Nav, or stepping in really, that's the bonus. You've got to have your strong sort of packhorse type, um, and **you've also got to have your female** I suppose. And then I suppose, it's a little bit different cause, it's almost like, I call the chick like the **mandatory bit of kit**, which is a bit tongue in cheek, but it kind of is, you know?*

This common reference in the women's dialogue to refer to the woman as compulsory as opposed to earning her spot on the team then leads to the women being grateful when they

get to be more actively involved in the team for reasons aside from their gender. One of the roles in the Adventure Racing team that was constructed as of prime importance was the role of Navigator. This person (or persons) was responsible for ensuring the team stayed on their devised course to reach each checkpoint. This role was rarely assigned to the female member of the team; therefore for two of the participants they felt lucky when they were 'allowed' this responsibility.

*Um, I quite like it. It's quite fun with the guys, there's no drama (laughter). They look after you, like the teams I've been in, **I've been really lucky**, the guys have been really um good at keeping an eye out, and um helping carry water bottles, or towing me on the bike, all that sort of thing. Yeah, **and also** involve me with the navigation, that sort of thing, so, I've found it pretty fun. (Sarah).*

As evident here, it is not common for the women to be in the position of power within the team unit, instead she is there first because of her gender, and second because of her skill set. The common experience is for the woman to be positioned as inferior to her male counterparts at the outset. For one of the participants, Ellie, however, she remarked how her position in the team differed markedly from the majority of other female adventure racers in that she was picked primarily because of her skills in navigating. Despite her contention that the playing field is equal and women shouldn't be treated any differently to the male competitors she also admits that her experience differs from that of most female adventure racers. Therefore her experience is not the norm.

*I don't mind it, it doesn't bother me, um I guess, in rogaining I've always raced with a male as well, so you get used to it from that, and probably with my job, (...) that has made it a bit, you kind of more used to being the only female, (laughter) and so I've got a bit of an interesting one where I'm the navigator as well, which **not many of the females would be**. Yeah, so, that, I think, in some ways it makes it more difficult, but I find it also helps because **you're an important part of the team for another reason other than being a girl**. Like I don't know quite what it would be like to be just the girl and that's kind of your role, and to me I would be like well what kind of use is that? (laughter) (...) like I'm just here as a **piece of compulsory equipment** that you have to carry along. **But when you're the navigator you, they need you**, (laughter) quite a lot, well they can't do it without you, so. (Ellie).*

Interestingly, when the women described their experiences of Adventure Racing when they raced in an all-female team, their roles were strikingly different.

It's quite good because you have to work everything out for yourselves, and help each other out. When you're in a team with guys, they, certainly in the earlier stages of the race, they help you out a lot more than you're able to help them, you just have to try and keep up and not complain. (Sarah).

In the three male to one female team composition, there was a tendency for the women to

actively take on the submissive role and put their “*blind faith*” in the men in their team. The inferiority of the woman in the team unit was in part perpetuated by the women in their willingness to go along with whatever their male teammates decided, “*you just follow them, and um know that they’re strong and they will probably get you out of a mess if you get into one.*” (Phoebe). “*I trust them wholeheartedly that I never make my own decisions, I just turn to them and just do what they say.*” (Olivia).

Whilst the participants clearly identified a gender imbalance within their teams, this was not necessarily regarded as a negative experience. Indeed, often the women recognised that being the only female had certain advantages. For example, Phoebe felt that being the only female took the pressure off her. In this combination she did not feel like she was competing against the males in her team because she did not see it as a level playing field to begin with.

Yeah, I guess when it is three guys, and you’re the only girl, you don’t feel like you’re competing against them, which I think there could be a tendency to do like if there are more girls in the team. Cause there’s someone who, I suppose, is more of an even playing field with you, you kind of want to be faster than them, or you know if you’re a competitive person I guess, there’s that tendency.

The different experience in competing with an all-female team or a 3:1 male to female ratio was also noted through the way the women described their own strengths. Often the women would only talk of their strengths when they were talking comparatively of their experiences in an all-female team. For example, Sarah talked of her role as trying to keep pace with the men without complaint, whereas in a female team she talked of her strengths (as opposed to her perceived weaknesses).

in a team with guys, um, probably just being able to suffer (laughter), and not complain too much (...) in a team with girls, probably navigating, and also looking out for how the other ones are doing, like, seeing if they need something to help them along.

Here, in the 3:1 male to female ratio team, the woman is present, but she is silent. She can participate, yet she needs assistance from the men to do so. She is most definitely not equal when she lines up alongside and against men on the start line. Adventure Racing then is a reflection of the wider sociocultural system it operates within. It has been argued that sport is a domain in which the attitudes, values and beliefs of the wider society are both reflected and reproduced (Koivula, 2001). Through the experiences of these seven women in the current study, it appears Adventure Racing is no different. Adventure Racing is a sphere that both constructs and strengthens the belief of males as sporting superiors.

As reflecting the historical sociocultural ideas surrounding femininity, the female as principal caregiver role also transferred into this sporting context and it was often the women that held this role in the team composition. *“I look out and make sure that everyone’s comfortable, you know, like looking out for them from a perspective that everyone is going okay.” (Olivia)*. This was commonly enacted in a medic-based role where they would tend to any first-aid needs within the team, *“so I’m kind of the team medic so you bring other skills as well.” (Daisy)*. This stereotypical association of woman as carer was also reinforced with talk around the need for the woman in the team to control the men, rein their highly competitive nature in, or *“to stop the guys going crazy”(Ellie)*, and ensure they did not overwork themselves on the first day. *“Um, yeah, I don’t know if they’re as good at looking after themselves and pacing themselves sometimes (laughter). ” (Sarah)*.

The portrayal of men as more knowledgeable or skilled with regard to practical aspects was also reinforced in the women’s talk. For example, as Sarah describes, *“they often tend to be better at things like fixing bikes and pumping up boats, and carrying things, and um, securing gear boxes, and all the practical things. ”* Indeed, when considering an all-female combination, it was not strength or speed that was posited as potential for decreased competitiveness, it was the women’s ability to fix any practical issues that may arise.

We joke about it, we say oh you guys better learn how to look after your bikes, because that will be what gets you, you’ll have a mechanical and you won’t be able to fix it, and you’ll have to wait for a guy team to come along and help you (laughter). (Ellie).

Here, the women are not only reflecting the wider sociocultural gender stereotypes, they are reinforcing them through their willingness to let the men take more active roles in the team. Ehrenreich and English (1979) have described how since the 1940s and 1950s psychologists and sociologists have historically been fixated with appropriate gender or sex roles. Previously, sex and gender had not been differentiated. However, from the mid twentieth century the realisation that you were born with a sex (albeit only either male or female, no sex ambiguity was considered) and that gender was something that was learned was pivotal in a child-raising movement to inculcate appropriate sex roles in children. This social pressure enforced upon families to teach girls that to be feminine in society one should be emotional, supportive and nurturing. In contrast, boys learnt that to be masculine they should obtain technical prowess and develop competitiveness and physical prowess, with one medium to do so through sports involvement. It seems the doctrine of female as carer, and male as all-knowing fixer has been passed onto yet another generation as the women here continue to

impart these historical stereotypes and enact them in their Adventure Racing teams. They 'look out' for the men in their team, monitor their pace and tend to their ailing bodies. The women rarely take control of the team and guide them through the course with their technical navigational skills, nor display physical strength above and beyond their teammates. Birke (1986) has argued that women have historically been cast as constrained by their biological bodies, as if possessing an "essence of femininity" that will naturally limit their capabilities in comparison to men (p. 2). She contends that this femininity is inescapable, that by presenting as a female the social positioning is automatically determined. In the Adventure Racing context, when the woman lines up alongside her male teammates, despite insistence by some of the women that it is an equal playing field, the construction of their positioning in the team shows that for the most part they are not equal. They are generally immediately limited in the roles they will be able to enact within the team because of their gender. Their female body has relegated them to be constructed as inferior to their male teammates.

Another stereotypical masculine trait in Western society is that of strength (Cahn, 1994). For the women in this research, strength was a dominant theme throughout all interviews. The predominant dialogue around their own gender and that of their male teammates, whilst stating they did not perceive themselves as inferior to the men, still constructed themselves to be weaker physically. A lot of talk centred around strength and weakness, a dualism that is associated with the two genders.

*I know that I'm not as strong as them in some aspects, so, from a physical point of view, no, I don't see myself as being equal. Not on the first day, after that, I think yep, I can, because most of the time I feel like I am, during the races. Like I do my fair share of carrying gear and you know like we all work together.
(Olivia).*

Despite an awareness of the traditional viewpoints on a female's strength, it was still hard for these women to escape the institutionalised belief and therefore the women were continuously constructed as less physically strong than their male teammates.

*and I guess I shouldn't really be like that, but I mean it is, that's the whole, and I think that's the whole physiology, physical side of things is because, and as much as I hate saying it, males are generally a bit stronger than women.
(Emma).*

Not only did the women construct themselves as weaker, they also pushed the other dualistic notion of the men as stronger and not in need of physical assistance from the female in the team. This belief meant that the women would often be the first ones to be looked after or looked out for in any situation presenting during the race. This belief also meant that the

other male teammates would not be afforded the same level of assistance, initially at least.

*I don't really think of myself as being the only female, but um, being the, the guys do look after you, (...) I reckon it is actually a good thing at times, because you will be the first person that they will want to look after, I think because **they think you're more vulnerable and weaker**, and so I don't mind being looked after every now and again (laughter) (...) on the first day (...) it will be you know, look after Olivia, because it's often a lot faster, and I find it a harder to keep up, as most females do, I think, and so you know we shuffle gear around, and um I think and I do get looked out for more than what they look out for each other. (laughter) (...) I think, if it was a really strength based thing later in the race **I will still need help**, like often I will cross rivers with Matt [teammate], so I don't get washed over, and he will look and make sure, and so they still look out for me in that respect, but **not something they would necessarily do for each other**. (Olivia).*

The male as the protector was enacted in the Adventure Race; however, this was displayed in relation to the female only. The male team members were not deemed to be in need of protection from the other males in the team. Instead, the male, constructed as physically and technically superior was able to reinforce this construction by protecting or assisting the female team member. The women also reinforced this construction in their willingness to accept this help and use it to their advantage. Cahn (1994) has argued how traditionally sportswomen have been described in the media as temporary transgressors, returning to their feminine selves after their sporting appearance. Similarly, she has also argued how reporters have historically emphasised women's more feminine traits to offset any achievements that may question the masculine hegemony of male as sporting superior. Here, a male teammate that may be displaying weakness in comparison to the other two men can still enact his masculinity by offering assistance to the female in the team. The women can still remain 'feminine' in their perceived need for male protection or assistance whilst simultaneously displaying the typically masculine traits of sporting prowess in the Adventure Racing sportsground. Their presence actively reinforces the dichotomous construction of male dominance and female submissiveness.

The act of distributing gear around the team was one way in which strength, and arguably masculinity, was visibly enacted. Each athlete has their own personal gear to carry during each stage, and then there are team gear components that also need to be carried. The women described how often the men would carry more gear than the female teammate, especially at the beginning of the race. As teammates tired, this gear would be redistributed in an attempt to keep everyone moving forward effectively.

but basically you tend to just, like I, we have to carry a tent, one tent within the team, and then you have your own personal compulsory equipment, but then there's some team equipment, and most of the time I don't carry the team equipment, I usually carry all my own stuff, if there's stages where we have to carry an extra pair of shoes or something, the boys will often carry my shoes. (Emma).

As the carrying of gear was associated with strength, the opposite, having to share your gear thus equated to weakness in the women's talk.

*it's much, actually better if you can, if someone else can take your gear **if you're feeling weak**. (...) And I think we're all switched on enough, that we can manage the team in ourselves and say 'hey, look I'm struggling can you take my gear?' And that's one of the other things, you have to get over that feeling weak if you say that, otherwise, it's not a bad thing saying I'm struggling, because you're making the team move better if you can. (Emma).*

So definitely at the start of the race they'll carry a bit more gear than me, cause they know I'm probably not the strongest at the start and toward the end its probably more even and they don't default, by default help me out because I'm the women, its more, whoever is in need of the most help towards the end of the race gets the help. (Phoebe).

Because of this association of carrying gear to strength, and therefore to masculine ideals, the male teammates were often seen as not wanting to ask the female team members to carry their gear. This could be interpreted as being seen as a public omission of weakness and question their hegemonic portrayal of masculinity, as described by Olivia,

I wouldn't say they are as happy to ask me as they would to ask each other. But if I offer, then they will say yep, but they won't necessarily come to me and say can you take some of my gear? (...) I'd say that, they won't come to me first which is fair enough.

In contrast, the women identified that within these gender roles, it was easier for them to ask for help than it would be for the male team members. It was also perceived that the men would be more willing to accept offers of help than they would to actively ask for it.

I think that's where it is easier being a girl, like I know some guys will have a hard time asking one another for help. Not the experienced ones, I think people that have been racing for a while know that that's what you have to do, but um, for the ones that are a bit green, might have that ego thing and not want to ask for help (...) they'd probably ask guys first, but, um, if I was in a position to help and they knew that then they would probably be willing to accept help, yeah. (Phoebe).

All of the participants described the first day of an Adventure Race as the worst day to show up any differences in physical abilities based on gender. They saw males as stronger and faster

when starting from a rested state, and therefore found this to be the hardest in terms of matching speed with their male teammates.

cause the first day is often the hardest and fastest. And so they're all fresh. And so, if you're all starting fresh then they're much stronger and faster than me. But then going into the second and third days, things sort of plateau and even out a bit. (Olivia).

Because of this, the men would often carry more gear to lighten the load the female teammate was carrying in an effort to make it easier for them to keep up to the male standard of pace.

"the guys look after me really well, and um, and like you know, the strategy of you know, taking a lot of my gear, and making me a little bit lighter, so I can move a bit quicker". (Anne).

Whilst this assistance was generally seen as an effective strategy to move the whole team more efficiently through the course, it also meant the women could immediately take on the subordinate role through their identification of gender. *"because when you are the only female you can be like, you know, if you ask for help, you'll get it, you know". (Olivia).*

Despite the women describing any physiological differences as absent after the first day of racing, there was still an underlying construction of the women as holding the men back after that first day. As explained in Phoebe's talk, she explicates the pressure she feels to keep up to be as good as the males in the team. Once again, the female body is constructed here as not as capable as the male body.

You always kind of feel like there's a bit of, well I always feel like there's a bit of, the teams only as fast as the female in the team, and so you kind of feel this pressure to, be good enough.

The female is constructed as holding the men back, a kind of 'handbrake' and thereby reducing the overall speed of the team to the pace that is set by the woman after day one.

cause you're like ahhh I'm going to be holding everyone up, but, you're only, if you're a good team, then, then you're going, you know, then, they're helping me out and you're only as fast as yourself, and things, and I actually find sometimes now that I'm not always the weakest link, and, and especially in that, those longer distance things, because everyone, you know starts off a lot stronger, but then they come down to, you know this is going to be a long day ... and everyone gets down to a, um a similar level. (Anne).

It is interesting to note that the female is never described as faster or stronger than the male athletes at any stage of the race; she is only at best ever constructed as the same as them, or able to keep up with the male pace once the men have slowed down after day one. The construction of the female as typically slower than their male teammates reflects the traditional beliefs about female endurance ability. However, the majority of physiological

research has been conducted on the male body and therefore training guidelines for preparing the body for athletic success have developed on the male prototype (Harber, 2011; Tarnopolsky & Saris, 2001). Females have been at an historic disadvantage, and the gender gap has reduced significantly in the past few decades (McDonagh & Pappano, 2008). McDonagh and Pappano (2008) contend that sport is now only beginning to show just what is possible for the female body given access to physiologically specific conditioning and societal support. Indeed, in endurance sports, women are now more commonly outperforming men and it has been suggested that women are physiologically superior in ultra-endurance sports (McDonagh & Pappano, 2008). Yet despite these findings, the women still perceive themselves as either slower, or only able to keep pace with the men after the first day of increased intensity once the men reduce their speed. They are not purporting to be stronger or faster than the men after that first day of racing; instead they describe how they can match the speeds of their teammates from day two onwards. Therefore, the construction of the women as less able than the men is still perpetuated. The sport of Adventure Racing is very much still a gendered sphere where wider sociocultural beliefs are both reflected and actively constructed. The ideal body in the sport of Adventure Racing, as purported in sport in general, is a masculine one. The male body is posited as stronger and faster. The inclusion of women in the Adventure Racing team has been perceived as equal at face value, yet, is constructed here as slowing or restraining the men from their supposed superior speed advantage.

3.2: Menstruation in Adventure Racing

Menstruation in the Adventure Racing context was constructed as something to be dealt with, managed efficiently and the focus brought back to covering the course in the least possible amount of time. For competitive adventure racers that is the goal, to be the quickest team to reach all the checkpoints. The movement in this sport then is about speed endurance and who can stay on their feet the best to make constant forward momentum.

It's all pretty basic out there. Life is simple, you just keep moving, make sure you're eating and you get to the next checkpoint. It's pretty much all that you're worried about. I like that simplicity. (Daisy).

Whilst the women stated that they did not perceive their menses to necessarily hamper their potential for attainment of sporting success, they did however unconsciously align menstruation to slowing the body down. For example, Sarah provided an analogy: as if she's "got a handbrake on", and feeling "slow in training and racing." The logistics of changing and

dealing with disposal of a tampon takes additional time to a normal toilet break, *“Yeah, I mean it’s a bit of a pain you have to stop for a little bit longer than normal, um, now and then, but you just have to deal with it”*. (Sarah). Indeed, even when the women spoke of any discussions they had with other training friends aside from their male teammates, the general dialogue centred around menstruation as slowing the female member down within their team unit.

*and their teammate, oh actually two times I’ve heard of guys saying oh she’s got her period, and dadadadada, and the guys just deal with it. But I guess they have a bit of sympathy, so their teammates have spoken up when they have their period. And so this year, my friend, the female had her period, and **he just said, oh that she wasn’t going as fast, and she wasn’t feeling great, and they didn’t know that.*** (Anne).

Menstruation was generally seen as a tolerated annoyance in the context of the sporting female body. *“It’s an inconvenience for racing that’s for sure”*(Daisy). The term annoyance was used prevalently by the women in their experience of menstruation. They accepted it as part of the norm of being female, yet they did not see it as mutually agreeable to their sporting experience.

This construction of menstruation as an annoyance often derived from it being described as a hassle, or something additional to deal with or *“put up with”* (Sarah), *“an added stress that I don’t want to deal with”* (Anne). It was another aspect to consider, prepare for and manage. The women described the level of detail around their race preparation and menstruation often fell into a category that was something additional to be managed on top of all the other demands of an adventure race. There were various aspects of preparing appropriately, for those on the oral contraceptive this could mean remembering to take the daily hormone pill while out of their regular daily rhythms. The concept of regularity with regard to day and night is somewhat lost in an adventure race, as the athletes move for days on end with minimal sleep. Hence the usual daily timing when in a home environment of ingesting the oral contraceptive is absent in the adventure race. For some, this could mean planning ahead and ‘running their packets’ to avoid bleeding during the race itself. For others though, the additional preparation would entail ensuring they packed tampons and then carried these in their kit during the adventure race.

and also your physical performance isn’t as good, as well as the hassle of managing it. (Anne).

and then you probably, potentially feel like rubbish. Um, yeah, and I do know of quite a few women that just manipulate their ..., you know, just run their

packets and stuff, which absolutely, why wouldn't you? Yeah, I think within sport it's not seen as the best thing in the world around race day. Fair enough. (Daisy).

I would imagine that that would be a bloody nightmare (laughter). And I guess more so from a hygienic perspective I feel, having to cart tampons, dirty tampons and replace them and that sort of thing. I imagine it would just be miserable. (Olivia).

Oh yeah, hygiene, and then what do you do with it? And there's nowhere to wash your hands and then suddenly you're eating, and you know, and that's just massive. (Daisy).

The nature of an adventure race results in teams being away from modern comforts, such as toilets, hand basins, or even rubbish bins for days on end. As argued by Lynch (1996), New Zealand women are raised in a culture that emphasises hygiene practices with encouragement of hand washing before and after changing pads or tampons. This cultural norm was evident with the women in this study, as concern was expressed about how to change tampons in the wilderness hygienically. The women appeared to be reflecting the current sociocultural belief and practice, and were not actively constructing this as any different. In general, the women highlighted the lack of information available, and therefore the limited knowledge that exists in this group on the appropriate way to deal with used tampons whilst out in the wilderness.

I guess that's something that no one ever brings up. Like there's been some races, not Godzone, but this one race in [...] I've done a couple of times, where they would say right you've got to take human waste containers and if you go to the toilet you've got to you know bring your waste out in a container, so I guess in that situation maybe you're meant to carry it out with you, but yeah. (Phoebe).

Yeah (...) so you'd have to probably bury it like you do with toilet paper, yeah. I don't know whether that's the proper thing to do. Probably is. (Ellie).

I don't know, I think they would have to dig a hole, I would imagine. And I have seen some evidence of people just leaving it there too, which is pretty nasty (...) and definitely in Adventure Racing, they say please, if you have to go to the toilet, please get off the track, and dig a hole or something. (Anne).

As identified by Lynch (1996), there is a dearth of literature on how to dispose of menstrual waste in the outdoor environment, and it seems this lack of information is perpetuated within the Adventure Racing community. These elite adventure racers themselves do not know what the expected or general practice is to deal with tampons in this environment. Not only is this not brought up within the Adventure Racing guidelines, it is rarely discussed between the women themselves. For some of the women they mentioned they often did converse with female friends regarding their cycle, yet often this same openness did not transfer through to

their sporting environment with other female multisport athletes in either training or competition situations.

oh yeah with friends. Um, like other sort of girlfriends I guess, and talking about periods and how annoying they are. I haven't really talked to anyone specifically about it in with racing, um, mainly because I guess it's not too much of a worry or an issue for me. And I've been lucky enough to not have it while I've been racing so far. (Emma).

Here, it seems one can discuss menstruation as part of a female body, yet to discuss menstruation as part of a sporting body in the Adventure Racing context is still taboo. This was exemplified in the dialogue of Ellie who claimed that menstruation for her was not a taboo topic “*and yeah, I guess it's not a taboo subject (laughter) amongst me and my friends, yeah*” [including her female multi-sporting friends]. Yet later on in her discussion she contradicted this “*and it's something that probably people don't talk about much, and so don't know*” [within the Adventure Racing context]. This verbalisation of menstruation not being a taboo topic any longer, yet still constructing it as taboo, was also found in Held's (2013) study of competitive athletes in the USA. It seems women are aware they can speak of their menstrual experience, and yet to do so is still seen as socially stigmatising. Unconsciously, women are avoiding talk of menstruation until it is absolutely necessary. If the women are able, it will remain absent from their talk. Here, menstruation is constructed as aligning with the female body, it is not congruent, however, with the sporting body, thus talk of menstruation remains absent in the sporting realm.

The taboo nature of menstruation in the Adventure Racing context was also in part assisted by the women's framing of menstruation as just another illness or injury, another bodily effect to manage, no different to any other condition that their male teammates might need to manage.

But everyone has got some issue or whatever. Whether they've got an allergy that they've got to, or a bee sting, or eat something or you know they've got an injury that they've got to take drugs for, or ongoing medication, or asthma or something. So you know, you sort of manage a whole range of things, even if it's not that, so it's just another one. (Anne).

The construction of menstruation as an illness or injury was achieved not only through the women's talk, it was also achieved through their actions. Notably, the placement of tampons inside the personal first-aid kit of the woman's pack acted to align menstruation to this positioning. This was described as not only for personal use in case they began bleeding

during a race, the tampons were also justified as beneficial for more generic first-aid applications.

Yeah, always, so even if I don't think it's going to happen I will always take some, even in a 24 hour rogaine I will take a tampon with me. It's useful for stopping enormous bleeds in people anyway; quite often people will have them in their first-aid kits for that reason. (Ellie).

It could be argued that the location of where the tampons are kept does more than solely assist logistically finding them. Here, not only is menstruation framed by the women as just another illness or aspect of the body that requires management, the need to hide menstruation, or disguise its appearance is evidenced through the way the tampons are carried. Their positioning in the pack in the first-aid kit aligns with menstruation as another medical condition, an aspect of the body to be treated. Yet, tampons are also constructed as being needed in the kit for first-aid applications; hence their primary purpose is masked slightly by a secondary use for nose bleeds or the like. If these packed tampons become visible to others, they can be explained as being there for applications aside from absorbing menses and the women can maintain face in the appearance of what is considered a socially stigmatising product.

Roberts, Goldenberg, Power and Pyszczynski (2002) experimentally investigated participants' reactions to a confederate dropping either one of two items, a tampon, or a hair clip. In their study, they found that both male and female participants rated the confederate as lower in competence, less likeable and tended to distance themselves both psychologically and physically if she dropped a tampon in comparison to the similarly feminine, but less socially stigmatising hair clip. Roberts et al. (2002) concluded that drawing attention to women's bodily functions associated with menstruation conjured institutionalised representations of women as inferior and less capable. I would argue that the female adventure racers in this study are unconsciously reframing any reference to their packed tampons' functions to avoid similar implicit references to their difference as a woman in the team. If the tampons are seen by others, the women can not only refer to their multiple uses, they can maintain their perceived capability by not showing any embarrassment and instead explaining away the use of the small, white, cotton products.

One can begin to understand then why these women feel the need to construct menstruation as akin to any other illness or injury that might need to be dealt with during an adventure race. Given the women's association of menses to slowing the body down, constructing it as an illness or injury alleviates part of the threat of accusations of holding the team back from

advancing more quickly through the course because of 'women's issues'. If constructed as any other physical impediment, then menstruation becomes more pragmatic, more an aspect to deal with quickly and efficiently as any individual would need to do in managing any other illness or injury that appears during the race. In this framing, menstruation is not seen as significant or worthy of generating any dialogue.

The majority of women then saw no need to discuss aspects of their menses with their male teammates during a race. For the most part, the women believed they would only need to bring up menstruation if they were noticeably suffering from it.

I probably would say if it was an issue, but I wouldn't just say like, before the race, hey guys, I'm having my period or anything. I'd only probably pipe up if I was having some issue or something, yeah. (Anne).

The women felt that any talk would only relate to the noticeable effects from their menstruating bodies.

*If I was just feeling really, well if I had a dodgy tummy or something, um, I would probably tell them in just that sense, they wouldn't really need to know why. But they would probably know why (laughter). But um, that's probably what I would do. I'd just be like, oh I'm not really feeling that good and then deal with that as the **separate issue**, cause that's what the **real issue** is really, is that you're not really feeling really good and you're going to have to stop to go to the toilet all the time. And all that sort of stuff is normal in Adventure Racing. (Ellie).*

The women are distancing the symptoms from the cause, as a 'separate issue'. In this way menstruation can remain hidden and concealed within the women's bodies through their choice of wording on the outward signs of menstruation. The hesitancy of the women to discuss these symptoms was also evident in the way they described their response to pain. There seemed to be an implicit threshold to pass before the women would even consider discussing menstruation, or the symptoms of menstruation, with their male teammates. Pain was normalised in this group of Adventure Racing women and therefore there was a common tendency to only verbalise the feeling of pain if it was at a level that would affect the overall pace of movement of the team. The individual was expected to manage and suffer through their own pain and certainly not make a discussion of it. In this way, it was the individual's responsibility to manage themselves so as not to hamper the efforts of the team.

everyone hurts I suppose, it's just inevitable, it's maybe just how you deal with it and take that on board (...) you just go in knowing you're going to deal with a certain, well a lot, of discomfort and pain anyway so you roll with it. (Daisy).

The normalising and acceptance of pain in the sporting context has been examined and confirmed by sociologists since the 1980s (e.g., Pike, 2005). Physical pain is associated with courage in the sportsground and its appearance is not only normalised, it is often celebrated (Sabo, 1998). The sporting ideal of pushing through pain, and prioritising sporting performance over the athlete's individual wellbeing was common to these female Adventure Racers. "There's always something that is niggling or annoying you in Adventure Racing, like, you're always uncomfortable pretty much, (laughter)." (Ellie). The use of painkillers was therefore common practice, with both male and female athletes regularly taking these in an effort to quieten any appearance of pain. Thus, the dialogue around pain and the use of painkillers was limited to accessing and explaining the need for this pain relief. The women verbalised continuing on and personally managing their individual pain and only stopping when it became "too much".

*but like **everyone knows that there is going to be some level of discomfort and suffering, and, and um, I guess cause I've raced with reasonably experienced people, they all know that you've just got to push on through a bit of that, so, um and we know that if someone says they need to stop and do something then it must be at the point where they actually do need to, rather than just you know moaning cause they're a bit sore, um, in which case, you're best kind of tell them just suck it up. So yeah, um, so I suppose you trust one another that if there's a reason to stop, that it's actually, it's kind of serious (...)** you just have to trust one another that you actually, putting, like putting up with as much as you can and, um, not sort of wimping out I guess, **accepting that pain is going to be a big part of it.** (Phoebe).*

Pain in this construction is an entity; it is something that can be managed or controlled through willpower. The stronger the individual or the more courageous, the more able they are to withstand pain. Consequently the more pain they can withstand, or "put up with", the better adventure racer they are perceived to be. Therefore, understood in this way, pain is seen as separate to the mind. It is located within the body, yet is viewed as something that can be compartmentalised and dealt with. To succumb to pain too early would be perceived as being weak, not the idealised display of strength that athletes, and especially masculine athletes, are epitomised to be. Therefore, a lot of the women's talk centred around keeping quiet about their experience of pain, and only verbalising this to their male teammates if it were severely hampering their ability to maintain the pace set by the team. They wanted to be perceived as strong, just like their male teammates. In Aalten's (2007) ethnographic study of female ballet dancers, she found women would routinely silence their bodies in an attempt to master control of any physical pain. For the female adventure racers, they too saw mastery

over the body's physical pain as desirable, and silence over physical suffering was encouraged. *"you just have to do your best and get through it."* (Sarah).

Menstrual pain was also viewed in this way, and the women constructed this as something that they had to deal with or get through. Menstrual pain, just like pain emanating from any other part of the body was silenced. To disclose directly to their male teammates that they were suffering menstrual pain would be to portray one's body and therefore one's self as weak. As found with the women in Held's (2013) research, discussing menstruation with the opposite gender was not a comfortable dialogue. Therefore, the female adventure racers couched this by talking of symptoms that their male teammates might also be affected by. Menstruation was not discussed directly, it was disguised through talk of dodgy tummies, stomach aches or increased toilet usage.

Menstruation is not a process readily identifiable as congruent with their sporting selves and their ability to manage the pain from menstruation is akin to their management of pain from any other bodily function or aspect. This framing of menstruation as 'something' to be controlled in the body as opposed to a part of the body's experience was common among the women. Menstruation was constructed as something that happens to the body. In this way the women arguably have a disembodied relationship with menstruation.

The way menstruation was described in dialogue also assisted this distancing of the women from their bodily process of menstruation. Jackson and Falmagne (2013) have argued that by avoiding menstrual terminology and instead by using euphemisms, vague references and "it-ifying" (p. 390), the women's dialogue works to construct this distance between the woman and her menstrual cycle. The use of 'it' as opposed to using the term menses or menstruation directly in conversation was common with these adventure racers, as was the use of vague references or leaving out reference all together. For example, *'their ..., you know.'* (Daisy).

Yeah, yeah,...so I guess there's a wide range, and I guess I'm on the easily manageable scale .. it is always in the back of your mind, cause you know, when you're planning these things .. you're going through ... ok, I've got this, this, and then ok, you've always got to, you've also got to ... think about that. ... and how am I going to manage it so the gear .. spare gear for that, you know, or just in case, and taking the pill, and then remembering to take the pill.
(Anne)

talking to Alice, she said she had it in the last Godzone [Adventure Race] and um, that she was, yeah, just couldn't believe it, and it was .., it didn't sound ideal, but she was very lucky with how it all worked out. (Olivia).

Through this dialogue, the women can in conscious thought keep menstruation compartmentalised as a 'something' instead of a process occurring within and as part of their normal self. This avoidance of discussing menstruation directly and maintaining an appearance of strength akin to their male teammates was particularly salient when one of the women described her experience of starting her menses in the middle of an Adventure Race. Due to an unplanned river crossing, and unknowingly her supply of packed tampons being submerged she needed to replenish her store. Luckily, the course went through a small town and she was able to purchase additional supplies. However, the internal dilemma she faced was apparent, as she could not enter the supermarket without feeling obligated to explain the reason for her detour. To do so, this meant she needed to bring menstruation directly into the topic of conversation and this left her feeling inferior and arguably ashamed.

*I did tell one of them, just cause I wanted to explain why I was bailing into the supermarket when they were off to get hot pies and things (laughter). Yeah, yeah, yep, **I felt pretty stupid** having to tell him, but yeah that was fine (...), he was fine, oh well, you just go and he was very discreet about it.*

In this situation, her relief is evident when her male teammate maintains discretion. Here, she is able to maintain concealment of her bleeding body by only divulging to one of her three teammates. No further discussion is needed, she can resume her role in the team and continue concealing her menstruating body.

The menstrual cycle is invisible, apart from when the lining of the uterus is shed during menses, at which point the woman is culturally constructed as dirty and polluted (Chrisler, 2013). At this point, the female body is potentially noticeably different to the way the male body exists. It is leaky, and fluids are aligned clearly with the feminine realm, not the masculine one (MacDonald, 2007). Therefore, the predominant culture encourages concealment of menstruation, both in talk and action. Menstruation in Adventure Racing thus remains hidden, something that happens inside the woman's body and she is afforded no licence to publicly experience this positively. We live inside and through our bodies, we are embodied beings, yet, it could be argued that the experience of menstruation remains constructed here predominantly as something that happens to the body as opposed to within it. The sporting body here is definitely not constructed as a menstruating one.

This active absence of menstruation in talk and action was also reflected in the women's welcoming of absence of menses during their major events. Whilst they did not consider menstruation as annoying enough to modify their planned activity, thus would still train and race during their menses, absence was definitely desired and preferred. For some women, the

preference for absence meant use of the oral contraceptive pill to manipulate their cycle to avoid menses during competition altogether. For example, Anne describes her tolerance for menses during training, yet not in the racing context.

*Cause I was like, oh, **the last thing I wanted** (...). Like, with this other pill, I couldn't predict, like, with the other one, with my original one, you stop taking it, bang, [bangs hand on table], you have it, you know it was so like clockwork. So predictable. But, with the other one, there was a little bit of uncertainty, of when you were going to have it, and sometimes it wouldn't actually come through. It would skip, so it was like a bit of a Russian roulette, so I was like, oh **I don't need that**, so I went on the Mercilon to get through that, and I didn't have a period during that time. So that was good, and I think I will just do that again. (...) when you're training, it's like oh, it doesn't matter so much, when I was training, I wasn't like going out and trying to get a personal best, you know, like do something, you just sort of, you know, live with a bit. You can't control everything! Like I don't want to be some like control freak! (laughter) (...) it was just when I was doing races and stuff.*

The perceived annoyance of having to deal with menses during an adventure race meant that some of the women were so keen to avoid menstruation during their pinnacle events that they would consider visiting their GP for a prescription to artificially control their cycle to avoid bleeding for the duration of the race only.

yeah I don't know what I would do, like I, potentially if it was coming up about when I was going to race, like race something like Godzone maybe I'd consider trying to you know delay it through medications, but I guess because I'm not on the pill regularly I wouldn't feel that comfortable about, because there are some medications you can take to stop your period or you know delay it for a week or whatever, but you know that may have other effects that you feel a bit, I don't know cause I'm not on it all the time, I'd be a bit weary. (Emma).

The idea of control was epitomised here and for a number of the women the oral contraceptive provided the ability to maintain control over their bodies.

and now I'm on the pill, so, that's how I manage it basically (...). And so if I'm coming up to a race, what I'll do is, about a week before I'm due to go away I will just stop the pill and get a break through bleed and then just restart it again after the race. (Olivia).

In Adventure Racing, the way the movement is carried out is less important than the body's ability to withstand the high physical demands. Therefore, mastery over mind and body is paramount, thus the women tend to construct their sporting body as a machine in this context. It is a tool to do the job of sports performance. The body can be divided into parts that are responsible for each discipline, for example arms for kayaking and legs for trekking. The workings of the reproductive system are seen to have no function in this sport, it is irrelevant. What is of more importance is mastery over the body and controlling any

'problems' with the system as they arise to ensure the machine keeps working towards achieving its purpose. As Sarah relates,

or if it's not too bad you just put up with it and then something else will start hurting, so, yeah, the old niggles will go away and new ones will come along as the race progresses (laughter). Or you might change disciplines and your sore arms won't be such a problem on the trekking stage, and then you go onto another kayaking stage and have sore legs by then, so you sort of go through your stages.

In a sense then, having control over when they bled meant the women on the oral contraceptive were able to control a part of their body 'machine' to enact the task of sports performance more effectively for them. The concept of control over the body and the ability to manipulate aspects of the body are not new to sport. Indeed, as Moreno-Black and Vallianatos (2005) have argued, a female athlete who chooses not to artificially control her hormonal cycle can be accused of not displaying the appropriate level of commitment and attitude to her sport.

When the body is a machine, it is something that can be controlled and is separate to the thinking self. This type of thinking is consistent with a masculine view of the body; the body is viewed as a tool or weapon to carry out sports performance (Messner, 1990). Menstruation is not seen as functional to performing the act of Adventure Racing; therefore to consider the menstrual cycle within the sporting body does not align. The feminine menstruating body is not constructed as the prime athletic body here. Menstruation to the majority of the female participants then fits into this category, detached, and not part of their athletic selves.

The aligning of the body to mechanistic or militaristic constructions has existed since the eighteenth century (Birke, 1999) and implies that the body is able to be separated into parts and controlled. The concepts of control and regulation are paramount in the study of physiology, and maintaining a constant internal environment is seen as the primary goal of the body systems. To have a fluctuating hormonal profile as is the case with the menstrual cycle does not align with the predominant construction of the body as a machine. It is 'out of control' (Chrisler, 2011). The female body is treated in this construction as pathological and non-conforming to the inner workings of the ideal masculine body. Once again, menstruation is constructed as an illness or disease.

Kuppers (2004) in her essay on Visions of Anatomy refers to our increasing fascination with machines in biomedicine and their ability to provide a picture of the internal workings of the body. She argues that the body interior has become the latest frontier of knowledge with the

technological advances allowing increasing visions or representations of the processes occurring beneath the skin. Koppers argues that we tend to only feel the existence of these internal organs and organ systems when in periods of pain; therefore the inner workings of the body, that which lies beneath the visible and proprioceptive skin, is normally absent in our schematic representations of our selves. Indeed, Birke (1999) contends that culturally we have shifted from listening and responding to the talk of individual persons with regard to their bodily experiences to instead trusting readouts from devices that will supposedly inform us more honestly and objectively what is actually going on within a person's body. The individual's knowledge becomes invalidated, and any talk of fluxes or flows has become relegated outside of privileged talk in Western culture. One can begin to understand then why for some of the women in this study they had a rather detached relationship with their menstrual experience. To talk about the rise and fall of hormones, and any bodily changes felt during this time is not encouraged in today's society. This talk would only be valid if originating in the biomedical realm. Instead, menstrual dialogue is notably absent. In the sporting world of Adventure Racing, the body is spoken about as if somewhat insignificant to the individual's conscious thought. It is an object, a machine, and something that is just the same as anyone else's body and can be controlled. *"Pffff, it's just a body (laughter), it does what it does, we've all got one" (Daisy).*

In a context where menstruation is not deemed relevant or functional, and instead absence is welcomed, one can begin to understand why use of the oral contraceptive might be perceived as common practice. The daily hormonal manipulation gives women the ability to decide when they will experience a withdrawal bleed, and therefore control over their menstrual cycle. Yet, the prevalence of oral contraceptive use in sporting women has been shown to equal that of the general population (Bennell, White & Crossley, 1999; Burrows & Peters, 2007), not have markedly higher rates of use. This was the finding in the current research; of the seven participants, only two were currently using the oral contraceptive to control their menstrual cycle. The conclusion is that there must be a significant number of women competing in sport who are menstruating normally, not controlling it through the use of the oral contraceptive pill. For some of the women they described their reluctance to take artificial hormones as their bodies did not respond well, or they simply did not wish to introduce exogenous hormones into their body. Their outward display of control over their flow then, comes from their ability to conceal their menses and not show any visible effects of this in the public domain.

Indeed, absence of menses was so desirable that for many of the women who had irregular menses, their lack of concern was evident. The irregularity of menstrual cycle fits the oddity of 'woman as athlete' and further strengthens the association for these women to the athletic woman as different to the 'normal' woman. Their absence of menses did not appear to incite concern for their wider health; they did not foresee any of the issues that have been raised in the literature connecting menstrual irregularity with the female athlete triad (e.g., De Souza et al., 2014). Instead, their absence of regular menses was welcomed.

Interestingly, this irregularity had been a mainstay since menarche for three of the women, yet this was never particularly concerning for them. They portrayed themselves as different to the 'normal' female, as they were heavily involved in sports from their teens. Therefore, menstruation was not something that was embodied as part of their developing athletic bodies.

Yeah, so I am a bit different, a bit odd, in that I was very late with my menarche, in fact my Mother took me off to the doctor, and then I got it about a week later, as always happens. But I have very infrequent periods, very very infrequent periods, and I always have done. And um, possibly it was because at high school I was running so much. Um, there hasn't really been a long period of my life when I've done no training (...), so it's never been a problem for me because I hardly ever get them. (...) It didn't worry me at all, it worried my mother, but I just like, it wasn't even on my agenda. (Olivia)

The lack of association of their developing body to that of a 'normal' developing female arguably shows a distancing of their concept of self from the hegemonic feminine body. Menstruation to these women was not on their 'agenda', and they described themselves in a way that distanced themselves from the normal pubertal woman. The identification here of the individual as having an athletic body and the embodiment of an athletic identity means these women did not associate their bodies with normal menstruating female bodies. They were 'different'. Once again it seems, as Young (2005) has posited, a menstruating body is not a masculine one, and therefore by proxy not a sporting one.

The tendency to welcome, and indeed normalise, cessation of menses in the elite sporting world is nothing new. Dr Carol Otis, a renowned women's sports doctor, described in an interview with McDonagh and Pappano (2008) how it used to be believed that a woman was in peak physical condition for her sport if she had stopped menstruating. Indeed, in Conway's (1996) analysis of print and television media coverage of Uta Pippig's historic Boston marathon win she directly questioned why Uta was even able to bleed. It is as if Pippig's elite runner status, with low body fat composition should unquestionably result in menstrual dysfunction.

Despite medical evidence to the contrary, this widespread belief that competitive female athletes do not menstruate still continues today (Thorpe & Bentley, 2012; Troy, Hoch & Stavrakos, 2006). Notably, Anne herself showed this belief, *“and I suppose those top athletes, a lot of them, don’t actually have their periods, cause they’re racing quite a lot”*.

The women who experienced irregularity of cycle in their early years had continued to experience this throughout the ensuing years. They were comfortable to continue seeing their irregular menses as part of their sporting lives. Indeed, often this was used to explain their lack of cycle. None of the participants had children, nor were considering starting a family in the near future. Their fertility had not entered their conscious thought.

I think probably for me I’m probably less concerned about my situation, I think (...) I can reassure myself that everything, I think other people in my situation and other people are quite shocked when they hear about my menstrual history but it doesn’t actually worry me too much (...) and it will possibly change if I ever decide that perhaps we want a family it will become a bigger issue. But at the moment it’s just convenient (laughter) yeah, it’s always been the way for me so it’s quite normal, yeah. (Olivia).

This lack of concern over their absent or irregular cycle was similar to that shown in a study conducted by Thorpe with amenorrheic runners (Thorpe, in press). Menstruation was only seen as relevant when reproduction was immediately desirable. In this respect, for the women in Thorpe’s study, medical advice was more likely to be acted upon if they wanted to have a family in the future. Here, as with the women in Thorpe’s studies, when a family is not desirable then the women are comfortable for menstruation to be absent, it is *‘convenient’*. In this construction, menstruation is only seen as a necessary bodily process when the visible outcome, a developing foetus, would be seen by the external world. The internal workings of the body, the reproductive system, are not seen as vital to the sporting body in this scenario. The process of bone modelling and other related hormonal effects is not visible to the women; hence the hormonal cycle of the female body is not desired at this time in their life. There is no believed need for its occurrence. It does not fit with the identity of a sporting body. It is inconvenient and irrelevant. *“No, so maybe it’s, maybe that’s why I don’t really care as much, because it’s not an issue for me, you know I’m not looking to have children or anything, so it doesn’t concern me, yeah.” (Phoebe).*

Similarly, as has been argued in the literature by MacDonald (2007), a menstruating body can be ignored by exerting control over it. Here I would argue that the women who experience irregularity are able to ignore the process of menstruation as their sporting involvement is seen as controlling, or the reason for, the absence. There is rarely bleeding, therefore rarely

do these women need to 'deal with' the topic of menstruation, either in their actions, within internal dialogue or in any communicative manner. Menstruation can be ignored completely when it is absent.

The nature of the adventure race, with its multi-day format and subsequent sleep deprivation meant the women associated the event with over-stressing their bodies and their biological rhythms. This further normalised absence of menstruation in this context.

I wonder if you'd get it in an Adventure Race, yeah, because um, you just like, your body doesn't know what is going on, I wonder if it just thinks it's one whole big long day, because you're not sleeping and you're exercising during the night which is not a normal thing to be doing. (Ellie)

Ellie also noted that for some of the women she knew, she thought for them it was "quite common to miss a couple of periods" after an Adventure Race. She then related how this was also what her experience was after an Adventure Race "I missed maybe two afterwards, and then the one I got after that was a bit funny, or really light, yeah, and not regular." Despite her absence of menstruation, she was not concerned.

Well, nah, not really, because I knew it has stressed my body out super, like yeah, and the fact that you don't sleep for a week really, has got to mess your body clock up a bit, yeah, and I figured that was kind of what it did.

This absence of menstruation was once again pitted as normal in the sporting context. The Adventure Racing experience is seen as extreme compared to the normal lived daily demands, and therefore the body will reflect this difference.

Probably if you are doing more than one in a year, than yeah I would say so (...) I think just cause you're putting your body into so much stress, so probably, you know it goes into that survival mode a bit more, and it's like on hold for a while, I guess it's that kind of thing, just not an essential function, so yeah. (Phoebe).

This desire for absence of menstruation is arguably in part assisted by the feeling of luckiness that was present with this group of women. This theme was apparent when the women described their lack of menses during races, absence altogether or their perceived reduction in menstrual related symptoms. For example, as Olivia very rarely bled, she felt she was lucky in comparison to other women as she was never in a position that meant she would need to either discuss her menses with other women or her male teammates, nor would she need to deal with it during an adventure race. "Nah, no, very lucky." Similarly for Sarah, "No, I haven't had to. I've been lucky so far."

The welcoming of absence was also arguably perpetuated by the continual framing of menstruation as negative. Indeed, for some of the women, when they did not menstruate regularly or had their cycles controlled via exogenous hormones they considered themselves 'lucky' to escape what they perceived to be standard symptoms of regular menses.

I'm really lucky. I've um, probably been on the pill since about age 18, and effectively what that's done is probably, um, well it has, is put me into um, that artificial override if you like. So, because of that, very light to non-existent periods and that total loss of um, still, you still probably get that feeling in that week, knowing when you've got your period, but you often don't, so incredibly lucky and um, that loss of bloating and just yuck that you can normally feel around that. (Daisy).

I guess I'm lucky enough, like my periods are, like some people are all like you know, severe bleeding or severe side effects or whatever. I guess like being on the pill, it lightens those effects and everything, so it hasn't been a bad issue for me. (Anne).

The framing of menstruation in its 'natural' state, without artificial manipulation, was commonly referred to as undesirable by some of the participants in this study. For example, when Daisy reflected on her cycle prior to starting oral contraceptive use, it was perceived as more negatively affecting her experience.

Yeah, you know, I think just normal period stuff. Nothing endo-wise or over the top. You just knew it was coming, and you felt yuck, and the cramping, and just you know, um, and to not have that is really cool.

Here, the 'normal' menstrual experience is associated as a negative one; therefore if the women do not experience the perceived negative effects that they believe are common to menstruation then they position themselves as lucky or different to the norm. This common belief that other women are more severely affected by symptoms has been described in the literature before (Brooks, Ruble & Clarke, 1977; Scambler & Scambler, 1985) which suggests it is a cultural stereotype as opposed to deriving from 'actual' experiences per se (Ussher, 1989). The framing of menstruation as negative is common in popular culture (Chrisler, 2013; Jackson & Falmagne, 2013) and the construction of this in the Adventure Racing context is no different. Despite the majority of women feeling lucky that their menstrual experience rather minimally affected them in comparison to other women, the silence around their own experience means that this cultural stereotype is no different in the sport of Adventure Racing. Instead, the wider sociocultural belief is reinforced in this context. None of the women constructed menstruation as an enjoyable experience, and for those that did experience regular cycles, it was something that was endured as part of the requirement of having a

female body. For the majority, the sporting body welcomed absence of menses and this absence subsequently reinforced the topic of menstruation as taboo.

There were exceptions, however, and the understanding of menstruation as part of a healthy female body was raised by two of the women.

It's much better to be having regular periods for your overall health than to get too worried about them being a problem, and most of the time like, you know I've had periods on tramps before and that's fine, you just carry tampons and change them, and yeah, and it's annoying but it just happens, mmm. (Emma).

Um, yeah, I guess it is a positive thing, sure it's a hassle, but um no, it is on the whole a positive thing. Well it probably means that things are in balance, um that you're not overly stressed, or, yeah, that there's no kind of problem, yeah. (Sarah).

Yet, despite the acknowledgement of the relationship of overall health to a regular menstrual cycle, the dialogue was not specific to the sporting body. The women referred to overall health in relation to their body as a female one, not necessarily a female sporting one. Menstruation may be accepted; however, is far from celebrated or welcomed in the sportsground. This is a finding similar to that of Scambler and Scambler in their 1985 study, with acceptance the closest their participants came to displaying a positive attitude towards menstruation. It appears thirty years on that there has been little shift in attitudes amongst women despite the acceptance of women within the sporting domain.

Interestingly, this attitude of acceptance was described by those women that experience regular menses and therefore have fluctuating hormonal profiles as part of a 'natural' menstrual cycle. The ability of their bodies to experience fluctuations in their reproductive hormones could arguably allow for a more embodied experience of menstruation in comparison to those on artificial manipulation. They have accepted their menstrual cycle as part of their female body and are thereby perhaps more willing to experience it in its natural form. When an individual takes exogenous hormones such as the combined oral contraceptive pill, their reproductive hormones do not show the same profile. Instead, it is more homogenous, without the marked peaks and troughs that a woman in her 'natural' state assumedly would be. Thus perhaps the women who naturally experience both the rise and fall of reproductive hormones have the ability to experience and thus associate a more positive change in their body physiology than those whose cycle is absent. Indeed, for the women who did experience a 'natural' cycle, they were able to describe phases that they associated with increased performance.

then in a couple of weeks when you're feeling good, you just feel really good like you can keep going forever, [post bleeding]. Yeah, about two weeks after. (Sarah).

*I think I guess when you do a lot of sport, you do notice um how your body changes quite a lot, so over the last maybe two or three years when I have been doing a lot more training and sport and really doing a lot, then maybe have noticed a bit, that um, sort of **in the middle of the month I tend to feel stronger** (laughter) and **everything seems a little bit easier**, and it seems you know all good and easy to do things, and then um, I think things feel a bit harder in the rest of the time. But then I don't think it ever actually is what in reality happens in how fast I am, it's just how I feel about it, or how easy it feels but you're still able to push yourself a bit harder and you're, maybe suffer a bit more (laughter). (Ellie).*

Here, the women are describing a segment of their cycle distinct from their menses. They are aware of a phase of their cycle that they personally experience as positive, and a time when their performance is enhanced. This increased awareness of the internal workings of their reproductive system, and their regular experience of this, arguably enables a shift towards congruence of their sporting bodies as menstruating ones. These 'regular' women were willing to experience their menses during a race as they saw menstruation as part of their selves, and embodied menstruation more readily into their identity. Indeed, for Sarah, she believed menstruation to be so much a part of the normal female body that to manipulate the menstrual cycle by artificially controlling it with the oral contraceptive would be something akin to cheating on the sportsground. *"It's sort of like cheating (...) you have your good times and bad times."* Yet, despite their more positive views of menstruation during some phases of their cycle, these women would still prefer not to experience their menses whilst racing if the racing calendar by chance aligned to their menstrual cycle. Despite their personal experiences, the wider sociocultural attitudes of menstruation as a negative phenomenon are still impacting their beliefs.

As has been described in the literature previously (e.g., Malson & Ussher, 1996), women continue to construct menstruation as negative through their descriptions of menstrual pain and positing it as an inconvenience. Thus, even when a woman thinks positively of the menstrual cycle as a whole, there is little to no medium through which to express this attitude in current society, and especially within the sporting context. It seems only the 'polluting' or 'dirty' aspect of bleeding has been given voice, and this is far from being construed as positive.

As aforementioned, menstruation is tolerated, yet it is an annoyance on the sportsground. The women welcome absence of menses during an adventure race and link this desire to both bodily performance and the practicality of changing tampons in remote areas. For the female

adventure racers of this study menstruation is still socially stigmatised and the desire for absence is reflected in their dialogue. The women disguise and conceal any talk of menstruation within their team. Menstruation within Adventure Racing remains disembodied, a 'something' to master control over, and not a topic for normal everyday conversation. Menstruation in Adventure Racing then is very clearly still taboo.

Chapter 4: Conclusion

I would argue that for the majority of these women menstruation is an accepted part of their lives; they accept it as part of their bodies being female. Yet, their identities as sporting individuals make the association of menstruation as part of their sporting selves fraught. Women have long been posited in the wider sociocultural milieu as temporary transgressors, their place on the sportsground only temporary, not permanent, and thus they will return to their 'feminine' selves eventually (Cahn, 1994). These seven female adventure racers live in a Western culture that demands they are to be afforded equal opportunities, and should not be discriminated against based on their gender (Ministry of Justice, 2002; United Nations, 1979). It is their right to be on the start line alongside and against men. They have had a permanent place in the sport since the inception of Adventure Racing. Yet, they are also present in a culture which still upholds the male body as superior in the sporting domain. New Zealand Law through the Human Rights Act 1993 allows an exemption to discriminate based on gender for competitive sporting events, citing participants can be excluded from competition if strength, physique or stamina are the main components of performance required. These Adventure Racing women then compete within a society that legally still positions males as sporting superiors and their construction of themselves reflects this. They believe they should not be discriminated against, and therefore have the right to be on the start line. At face value, they perceive themselves as equal. Yet as their dialogue on their experiences within Adventure Racing has shown, it was apparent that they did not see themselves as equal physically. Their 'self' may be equal; however, their 'body' was not.

In a sense, menstruation by its very appearance in this domain does this discriminatory work. The women spoke of menstruation slowing their body down, both physically and through increased stoppage time to deal logistically with changing tampons. Thus, these athletes constructed menstruation as just another illness or injury like one their male teammates could suffer from. Similarly, their talk of menses was couched in this domain in terms of stomach aches or increased bowel movements. This acted to alleviate the threat of hampering their team's potential for success based on their menses, or 'women's issues'. Whilst the presence of women on the sportsground is more accepted in society now than two decades ago, the menstrual cycle remains absent in this sphere. Menstruation is absent from their talk; it is concealed in both dialogue and action, and its absence is preferred whilst competing on the sports field. For these female adventure racers, menstruation arguably conjured institutionalised representations of women as inferior and less capable than their male

counterparts and thus menstruation remained hidden. Women may be accepted on the sportsground, however, menstruation was not. Therefore, to have a sporting identity, absence of menses was ideal; it was a process that was far from embodied. The presence of menses removed them from their embodied sporting self. In effect, menstruation acted to reinforce a woman as a temporary transgressor in the sporting domain.

The push for equality in society has been driven from years of fighting that bodies should not be used as tools for oppression (Vertinsky, Jette & Hofmann, 2009). For eons women have been defined in society by their biology and to emphasise biological differences has prolonged the argument of the women's body as limiting her capabilities (Birke, 1999). Therefore, the body has become in a sense detached from the individual whilst this argument formed and developed. The body has been seen as something to be manipulated, something that one has control over and is not determinative on who someone is or what they are capable of. In sport, athletes are constantly trying to push their bodies further, faster, and more strongly. The relationship with the body becomes one of mastery, one of constant pushing and recovery. The body in this construction is just that, a body, "*we've all got one.*" Indeed, Birke (1999) has argued that since the 1970s the focus in women's health books has been on control over the body, and with that control comes a separation of the woman's own biological body from her social self. Menstruation falls into the category of 'something' to be controlled. In this study this control was apparent through their use of words to disguise menses, through their active silencing of any menstrual related pain, and through the use of the oral contraceptive to manipulate when (if ever) they bled.

For these Adventure Racing women, they had a detached relationship with their menstrual cycle. They have lived in a world where menstruation has been constructed as a process that should not be used as an excuse for non-participation in sport, nor affect their enjoyment levels. Menstruation should not be self-limiting. This approach, whilst encouraging and enabling women to remain active, has also constructed menstruation as something that does not need to be talked about. It is not significant enough for discussion. Menstruation can thus be managed by the individual and need not be openly discussed. Menstruation remains hidden and invisible in both words and actions. Menstruation in the context of Adventure Racing remains taboo.

On the surface, in endurance sport the bodies of women and men are most similar in terms of their performance capability. However, once one starts looking under the skin's surface, to the invisible physiology, the reproductive systems signal a major separation from this

alignment of masculine and feminine bodies. To bring menstruation into the visible, into dialogue, can be construed as a potential threat of returning to the 'biology as destiny' argument. In this argument, the difference between the sexes is used to position men as superior and women as frail, ruled by their hormones. Yet men and women do have different physiologies, and as De Souza et al. (2014) have argued, it has taken decades for these important sex differences to be recognised in the literature. Perhaps we are now entering a time point where these differences will not be seen as determinative. Birke (1999) contends that the biological body has been peripheral to most feminist theory and it is only recently that there has been a 'turn to biology'. The body is contentious in theoretical work; it is as if to theorise about the female body would signal a return to biological essentialist notions, thus subsequently for the most part the body has been ignored (Frost, 2011, 2014). Yet to ignore the body altogether does little to redress the positioning of the female body as inferior.

Instead, with continued increasing opportunities for female sportswomen we may potentially reach a point where these differences are not constructed as dichotomous, as either inferior or superior. Alternatively, one can hope that as a culture we may move towards the construction of the female body as different to a male body, but just that, different. As Sonia Waddell succinctly argued in her speech at the recent New Zealand Female Athlete Health Symposium "What has been recognised in horse racing for far longer than in human sport is that fillies and colts are very different. They are trained differently and they are managed differently, yet they compete equally against each other" (Waddell, 2015). Menstruation may be a marker of difference from the male body, but it does not need to be a marker of inferiority on the sportsground.

Many of the women in this study reflected on their later age of starting the sport of Adventure Racing, yet they also recognised the sport's growing popularity and therefore the different formats the race may take. This has allowed an introduction to the sport of women of differing ages, and the growth in the younger population was indeed raised by a few of the women. It would be beneficial to extend this research to those younger women and girls to see if their experiences differ and to understand their construction and experience of menstruation within this space. Similarly, whilst this current study understandably sought to elucidate the lived experiences of women in a field where their voice is notably absent, future research could look at the construction of menstruation within the experiences had by their male teammates. Are the male adventure racers actively reinforcing these institutionalised beliefs, or are they quiet on the topic of menstruation because the women in their team are quiet?

In wider society, the breaking of the taboo nature of menstruation appears to finally be gaining momentum (Gharib, 2015). In 2015 we have seen a rise in both the news and social media of menstrual related topics. Kiran Gandhi purposefully ran the London Marathon with menstrual blood freely flowing onto her leggings, Rupi Kaur posted an image on Instagram of herself in blood stained pyjamas and drew online attention when it was removed twice from publication, and the online reactions worldwide to Donald Trump's misogynistic comments to a female Fox News host erupted on Twitter (Bobel, 2015). However, whilst there may be more discussion occurring online and in other news mediums, discussion in everyday conversation and specifically in the conversation within the three male and one female Adventure Racing team remains virtually non-existent. Menstruation, as evidenced by its sensationalist news headlines, remains stigmatised. The taboo status of menstruation remains firmly embedded in this gendered sporting domain.

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Appendix 1: Information Sheet

The Last Taboo in Sport: Menstruation in female adventure racers INFORMATION SHEET

My name is Amanda Dykzeul, and I am a postgraduate student at the School of Psychology at Massey University. I am currently enrolled in the Master of Science (endorsement in Health Psychology) programme and undertaking this research project to fulfill the requirements for this degree.

Recent media attention has been drawn to what has been termed the 'last taboo in sport', menstruation in the competitive female athlete. Indeed, there appears to be very little on the experiences of top level athletes in managing their monthly cycle both within training and competition environments. This study aims to give voice to the female experience.

The Adventure Racing Team setting offers an interesting dynamic to investigate this from, with the minimum requirement of one female and three men per team.

I would like to invite you to take part in this study if you are:

- female
- a current (or recent, in the last three years) Multisport athlete who is/has been competing nationally in a multi-day Adventure Race Team

If you are willing to participate, I will ask you to take part in one interview of approximately one hour's duration. In the interview we will discuss a series of topics related to your experiences of menstruation through your life-course, how you manage this in a sporting environment, both within training and competition in multi-day races, along with your experience of being a female in a team of predominantly male athletes.

The interview will be audio-recorded to allow for later transcription and analysis of the data. I may also take notes during the interview. The interview will take place at a venue of your choice and at a negotiated time outside of your current work/training hours and commitments. I will give you a \$15 café voucher at the close of interview to thank you for your participation.

To ensure confidentiality you will be asked to choose your own pseudonym for this study. Any identifying information will only be accessible to myself and Prof Kerry Chamberlain (research supervisor). The interviews will be transcribed by me. The recorded information will be erased once the transcripts have been checked for accuracy. All of your information will be stored securely. I will do my utmost to ensure that information, including brief quotes from your interviews, used in my thesis or any publications will not identify you.

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- decline to answer any particular question
- withdraw your data from the study at any time up to one week after the interview
- ask any questions about the study at any time during participation
- ask for the recorder to be turned off at any time during the interview
- provide information on the understanding that your name will not be used and I will do my utmost to protect your confidentiality
- be given access to a summary of the project findings when it is concluded.

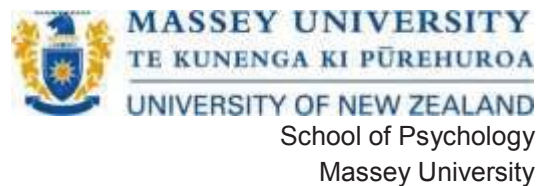
Please feel free to contact the researcher, and or the research supervisor, if you have any questions about this project:

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This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, MUHECN15/023
If you have any concerns about the conduct of this research, please contact Dr Andrew Chrystall, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43317, email humanethicsnorth@massey.ac.nz.

Appendix 2: Consent Form



The Last Taboo in Sport: Menstruation in female adventure racers

PARTICIPANT CONSENT FORM

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:

Date:

Full Name - printed

Appendix 3: Interview Schedule

Interview Schedule (Probes & Prompts)

Tell me, how did you get to be involved in Adventure Racing?

- Other sports dabbled in/been involved in?
- Team/Individual Sports?

What is it, you enjoy about Adventure Racing / multisport?

Adventure Racing is noted for its commitment of one female in each team at the elite level – tell me, what is it like being the only women in a team of males?

How did you come to be in your current team?

Who is involved with your training?

- Self-coached/coached?
- Team training sessions, training partners (other than teammates), individual training
- Self-feedback / assisted by support staff / doctors / physios

Let's talk about menstruation

Could you tell me a little bit about how this been across your life course?

How does it play out in training environments?

How does it play out in the competitive environments (races)?

Is it something that is openly discussed in your team?

In your view, why or why not do you think?

Have you ever discussed your cycle with others - (other training partners or other female athletes, coach)?

In your experience, is the sport of Adventure Racing set up to cater for women?

If not already covered in above, prompts can include:

- Management of (and how it can affect their training and performance), ie is it planned/integrated into training loads at exercise prescription stage?
- Description of their own experiences (symptoms)
- Logistics of dealing with sanitary items in a multi-day adventure race
- Medication (contraceptive pill to control when)
- Support sought for management of – doctors?

Is there anything else you would like to discuss with regards to this topic?