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**You Don't Look Like a Runner: Female Athletes' Experiences of Body Expectations
and Ideals**

A thesis presented in partial fulfilment of the requirements for the degree of
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Abstract

The aim of this thesis was to explore the experiences of female middle to long distance runners who felt they did not fit the ideals and expectations associated with being a runner using qualitative research methodologies. Eleven participants completed free-writing responses to the prompt ‘You don’t look like a runner’ with any experiences (past and/or present) they felt aligned with the statement. I then conducted semi-structured interviews with each of the participants, including questions stemming from their free-writing response. I identified four main themes through reflexive thematic analysis of the data: running was an important part of participants’ lives as *Running is Part of My Identity* and being told they did not look like runners sometimes led to the adoption of harmful behaviours to try and meet the idealised runner’s body. These harmful behaviours resulted in negative short-term and long-term health outcomes for some participants because *Weight and Eating Behaviours Have an Impact on/are Impacted by Running*. External sources played a key role in impacting how participants viewed their bodies and how they thought they were supposed to look because *Those I am Surrounded by Impact how I Feel About My Body*. The idealisation of a thin body will continue until the conflation between running success and the way a woman’s body looks is disrupted. Further research and work is needed in this space for meaningful changes to be made and *Change is Needed for Future Generations of Women Runners*.

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Chapter 1: Introduction

Athletes are seen as the epitome of physical health. They train their bodies and minds to perform at a high level, constantly seeking out new avenues which may lead to improvements. Over the years, world records have continued to fall as athletes find better and new ways to improve. But at what cost? A study on elite female¹ athletes in New Zealand found that 73% felt pressure to change the way they looked to fit sporting ideals (Heather et al., 2021). A further 15% of the athletes employed some form of disordered eating habits to reach what they perceived as the ideal body (Heather et al., 2021).

This thesis is focused on body expectations and ideals in sport, specifically women who compete in middle to long distance running (hereafter simply referred to as ‘running’). The research is important as body expectations and ideals can have consequences for the physical and mental health of athletes as they push their bodies past a point of health and towards ill-health in the pursuit of reaching their sporting goals (Carson et al., 2021). Embedded deep within running culture is the idea that in order to be successful, you must be thin, encouraging women to restrict what they eat while also training excessively to reach an idealised body they are expected to conform to (Carson et al., 2021). This research focuses on the lived experiences of these ideals in competitive women runners in New Zealand.

Body Ideals and Expectations

Body ideals refer to the body composition seen as most suitable or desirable. Every sport has a defined body composition that is viewed as ‘ideal’ for performance. High Performance Sport New Zealand (HPSNZ) (2020) label the body ideal that athletes aim to achieve in their respective sport the “performance body”, with that body composition seen as most advantageous for the respective sport.

¹ When the term ‘female’ is used in this literature review, it is because that is the terminology used in the study being cited. When not citing specific studies, I will use the term ‘women’ to be more inclusive of all those who identify with the gender and gender roles of being a woman. However, the term ‘female’ was used to recruitment participants for this study and as a result the participants are all cis-gender women.

For example, if you were to describe what a typical basketball player were to look like, you would most likely identify someone incredibly tall and muscular. These are the physical characteristics commonly associated with basketball players and those which would be viewed as most beneficial towards their performance. All groups have expected characteristics associated with members that originate from what is seen as typical of someone belonging to that group, with all group members expected to embody these characteristics to some degree (Gibbons & Gerrard, 1997). McMahon and Barker-Ruchti's (2017) study on females in Australian swimming found that a sexually immature and boyish body composition was idealised for female swimmers. Similarly, in middle to long distance running, there is a typical body composition that is seen as 'ideal' for performing at a high level. This ideal composition is thin, with little to no body fat (Carson et al., 2021; Gross, 2020) and if athletes are able to attain this, it is assumed to lead to success because "lighter is faster" (Carson et al., 2021, p. 434). The idea that being thinner will result in running faster times is extremely pervasive amongst runners, with just over half of adolescent female runners subscribing to this belief (Tenforde et al., 2015).

There is evidence that supports the role that body mass (Sedeaud et al., 2014) and fat mass have on performance (Auersperger et al., 2009). However, there are many other factors which can determine an individual's success in running. For example, research has attributed Kenyan and Ethiopian dominance in running to a combination of biomechanical, physiological, psychological and training factors (Wilber & Pitsiladis, 2012). Cunningham (1990) suggested $VO_2\text{max}$ (maximum oxygen uptake) to be the greatest physiological variable influencing performance in their study when they compared female and male cross country runners. Bale et al. (1985) determined that success in running may be based on a number of factors, including how much a person trains and how long they have been training for. However, these researchers still stated "a runner with a slim physique who trains regularly and often has the greatest potential for success in distance running", despite the fastest group of female runners in their research having the highest average weight (Bale et al., 1985, p. 121).

It is statements like these from researchers that may mislead people into thinking that lighter is better, despite research demonstrating there are a number of factors impacting performance (Bale et al., 1985; Cunningham, 1990; Wilber & Pitsiladis, 2012).

Body expectations can come from a variety of sources, such as society (Coppola et al., 2014; Lunde & Gattario, 2017), spectators (Lauer et al., 2018), coaches (Carson et al., 2021; Coppola et al., 2014; Kong & Harris, 2015; Lauer et al., 2018), teammates (Scott et al., 2020) and ourselves (Tenforde et al., 2015; Voelker et al., 2020). When participating in sport, “the body is the object of the most intense scrutiny” (Besiner & Brownell, 2012, p. 444). In middle to long distance running, this “intense scrutiny” manifests itself in an expectation to be extremely lean in order to be able to perform optimally and create an acceptable body for others. The objectified sporting body is seen as one which can be “trained, disciplined, modified, displayed, evaluated, and commodified”, by the individual inhabiting the body alongside a number of others, such as coaches and officials (Besiner & Brownell, 2012, p. 444). Gross (2020) identified two categories of running bodies, “bodies for selves” and “bodies for others”. These categories are connected, with bodies for selves being the control one has over their body and bodies for others “encapsulating the idea of bodily capital as a source of distinction and pride” (Gross, 2020, p. 422). Actions that appear to be for ourselves may very well create a more worthy body to others, despite that not being the conscious intention of the action.

When HPSNZ refers to the “performance body” for each sport, this may be seen as referring to an athlete’s body primarily as a body for others rather than a body for self. Bodily worth is seen here for what it is capable of in the sporting realm and how this is viewed by others, as opposed to the control the athlete has over their body or the impact that theirs or others actions may have on an individual’s health. The way women runners look communicates more than just a physical appearance, it can potentially demonstrate to others their achievement and that their body is “worthy of respect in the sport” (Carson et al., 2021, p. 434). However, this respect may only be garnered if they are able to reach the idealised runner’s body (Carson et al., 2021).

It is not uncommon for athletes to feel as though they do not fit their sport's ideal body (Nemeth et al., 2020), and to feel pressure to change the way they look to fit these ideals (Carson et al., 2021; Heather et al., 2021). The ideal body for a sport may appear rigid "with little room for deviation and acceptance of body diversity" (Voelker & Reel, 2015, p. 297). Unless they attain this ideal body, sportswomen may feel that they have not reached what they are capable of, athletically (Carson et al., 2021, p. 435). This makes it difficult for many to fit ideals, and leaves those who do not meet them feeling as though they do not belong in the sport or that they will not be successful.

Physiologically, there is some evidence supporting the association between runners being lean and having little body fat (Kenney et al., 2015). According to Wasserfurth et al. (2020) there is an "undeniable" correlation between body weight and performance in sports like distance running. The body mass of competitive runners has been found to decrease proportionally to the distance raced (Auersperger et al., 2009). For instance, Sedeaud et al. (2014) looked at the anthropometric characteristics of the top 100 male track athletes in the world from the 100m to the 10,000m in 1996-2011 and found that body mass index (BMI) decreased as distance raced increased. BMI is calculated using height and weight and is thought to be indicative of whether an individual is at a healthy weight, with BMI measurements ranging from underweight to obese (Kenney et al., 2015). However, this measurement is considered unreliable when used on athletes due to it not differentiating between weight from muscle and from fat (Kenney et al., 2015). There has also been critical work against BMI being used as a measure of health, with Flegal et al. (2019) identifying major issues with the data collected by Global BMI Mortality Collaboration, including using a very selective data set. Despite these issues, the results from Sedeaud et al.'s (2014) study would appear consistent with expectations for runners.

Much of the available research in sport performance and physiology, including Sedeaud et al.'s (2014) study, focuses on male competitors (Holtzman & Ackerman, 2021). Females are seen as harder to study due to their fluctuating hormone levels that are associated with their menstrual cycle;

this can also make it more expensive to have them as study participants because researchers need more participants to stratify based on physiological variables like the menstrual cycle (Holtzman & Ackerman, 2021). Because of this, studies are typically conducted in males and for many years it has been assumed that the results will and can be generalised to females (Sims, 2019). This can have damaging consequences to the performances and health of sportswomen who are given potentially spurious advice based off studies on men (Holtzman & Ackerman, 2021).

Bale et al.'s (1985) research on female marathon runners suggests that the linear relationship between weight and performance is questionable. While female marathon runners in their study had an average weight that was lower than their sedentary counterparts, they also found that those females in the group that ran the fastest times had the highest average weight compared to the two slower groups (Bale et al., 1985). This could be attributed to the slower runners having significantly higher absolute fat and percent fat, meaning their weight resulted more from fat versus muscle than the fastest group (Bale et al., 1985). Regardless, this research demonstrates that there is not the straightforward relationship between weight and running fast in female athletes that may have been assumed previously. Body ideals and expectations in sport continue to be perpetuated and make athletes believe that in order to reach their highest level of performance, they must look a certain way (Stoyel et al., 2021).

Social Media and Thin Ideals

In addition to there being some research support for this ideal, which works its way into sport-specific discussions, body ideals may also be perpetuated through platforms such as social media, where images and videos can be viewed and shared by others (Walseth & Tidslevold, 2020). The way athletes' bodies look in social media posts may conflate the relationship between their physique and physical ability, thus conforming to look the same way becomes "an understandable and perhaps inevitable next step" (Stoyel et al., 2021, p. 6). In addition to sport-specific body norms, runners face

pressure towards thinness from other spheres of their lives. Brown & Tiggemann's (2020) research on the effect of viewing celebrity Instagram images found participants who were shown images of celebrities reported more body dissatisfaction and less body appreciation as a result of appearance comparison than those shown neutral images of travel destinations. Similarly, Mulgrew et al.'s (2020) study on the effect of having thin and average-sized models found that participants had lower levels of appearance satisfaction after viewing petite models compared to after viewing those of an average build.

Social media provides a platform where it is easy to compare yourself to others, taking images out of the context of real life (Brown & Tiggemann, 2020). Celebrities have professionals doing their hair and makeup, picking outfits, taking photos and editing photos. The image seen on social media is not necessarily reflective of reality and can create an unachievable image to emulate. The negative impact on women's body satisfaction and body appreciation remains even when celebrities caption their photos in a way to expose their unrealistic nature, like highlighting the hours spent photoshopping the images (Brown & Tiggemann, 2020).

While Brown and Tiggemann's (2020) research focuses primarily on celebrities, it is possible that images from professional athletes would have a similar impact on those viewing them. Social comparison theory proposes that people have a need to compare themselves to others, and those they compare to are often similar to them (Festinger, 1954). Athletes in particular may be more likely to compare their bodies to other athletes and to models (Franzoi & Klaiber, 2007). These comparisons, in particular to models, can lead to increased negative thoughts about their own bodies and desires to change their bodies (Franzoi & Klaiber, 2007). Further, young people using social media are more concerned about their body image and display more eating pathologies than those who do not use social media (Fardouly et al., 2020). Social comparison theory also posits that people join and stay in groups which they see themselves belonging to (Festinger, 1954). This potentially has implications for women runners feeling as though they do not look like runners, and therefore, do not belong. If the

desire to be a runner is strong enough, then they may feel a lot of pressure to conform to looking a certain way and “deep experiences of failure and feelings of inadequacy” if they are unable to do so (Festinger, 1954, p. 137).

Body expectations issued in society in general are complicated by gender ideals and sport-specific ideals. Often, these ideals can be at odds with one another (Krane et al., 2004), making the relationship sportswomen have with their bodies “mentally and emotionally complex” (Carson et al., 2021, p. 434). The most commonly valued body by young women athletes is an aesthetically pleasing body, which is associated with being “fit and thin” (Walseth & Tidslevold, 2020, p. 720). This idealised body is expected to strike a perfect balance of athleticism and thinness. Athletes have described the socially ideal body for women to attain to be “small, thin, and model-like” (Krane et al., 2004, p. 326). This is similar to the ideal running body identified by Carson et al. (2021) and Gross (2020). Comparatively, an athletic body may be bigger and more muscular (Krane et al., 2004). That a runners’ body ideal for sport is similar to social expectations may make it hard to avoid pressure to be smaller. Women runners’ have to navigate general sporting ideals, sport-specific ideals and social ideals in relation to their body perception.

A runner’s body is seen as a corporeal representation of how dedicated they are to the sport (Carson et al., 2021). Being in good shape for running can be seen as representative of many other positive personal attributes, such as “self-discipline, motivation, diligence, and perseverance” (Gross, 2020, p. 448). But what is classified as ‘good shape’? The words themselves would suggest that ‘good shape’ is related to an individual’s body composition. However, body composition is influenced by many different factors, with training being only one of them. Not fitting this expectation is also not necessarily an indication that an athlete is any less disciplined, motivated, diligent or perseverant. Traits analogous with being a successful athlete can also be seen as risk factors for athletes developing an eating disorder (Thompson & Sherman, 1999). For example, an individual who is seen as dedicated to training through an athletic lens could be seen as excessively exercising through a

clinical lens (Thompson & Sherman, 1999). An athlete praised for being in shape and dedicated to training may in fact be demonstrating signs of an eating disorder, with praise potentially re-enforcing their disordered behaviour.

Gendered Dynamics

Earlier in the thesis when you were asked to describe what a basketball player was supposed to look like, you likely imagined their physical attributes. It is likely you also identified this player to be a man, as the physical attributes associated with being a basketball player are incongruent with the physical attributes associated with being a woman. Sport is a gendered activity, in which the bodies of women are alienated and seen as objectifiable (Paul, 2015). Women who participate in sport have the critical lens of others watching and judging them, their body becoming one which is more for others than for themselves (Gross, 2020). This is especially emphasised by the uniform worn while competing (Stoyel et al., 2021). Lauer et al.'s (2018) study on how collegiate female athletes feel about their uniforms and body image identified comments from significant others in their lives, like coaches and parents, influenced how they felt about their uniform and their body. Feeling the pressure of having others watching can make athletes feel more self-conscious about how they look and lead to athletes engaging in behaviours to modify their body to try and meet perceived ideals (Lauer et al., 2018). Gross (2020) views runners' bodies as being both for self and others, however Lauer et al.'s (2018) research would suggest that for women, this may be more skewed towards being for others.

McMahon and Barker-Rutchi's (2017) research identified that female swimmers were expected to conform to "boyish corporeality" in order to perform well (p. 171). During early childhood, there are very few differences in body composition between children of different biological sex (Kenney et al., 2015). However, due to physiological differences, as children age and go through puberty they develop differently, with females tending to have a higher fat mass (+3-6kg) and relative body fat (+6-10%) compared to males, this divergence being driven by the differential

production of key reproductive hormones (Kenney et al., 2015). It is unrealistic to encourage female athletes to look the same as male athletes, particularly as they develop through adolescence. While being encouraged to conform to “boyish corporeality” (McMahon & Barker-Ruchti, 2017, p. 171), sportswomen are flooded with “heteronormative notions of feminine appearance” from many sources (Heather et al., 2021, p. 5). Those that are athletic and muscular are seen as posing “a threat to ideologies of male physical superiority” (Dworkin & Wachs, 2009, p. 4). Sportswomen must juggle the expectations of what it means to look like an athlete in the sport they compete in alongside the expectations of what a woman is supposed to look like.

These expectations converge when young female athletes reach puberty (Lauer et al., 2018). Sports uniforms become more gender-specific alongside the heightened pressure to have a “female athlete body” as well as a “societal female body ideal” (Lauer et al., 2018, p. 60). Training clothes and racing uniforms for middle to long distance women runners are often tight fitting and can be revealing. Nemeth et al. (2020) found that all of the female runners in their study did not feel entirely comfortable in their racing uniform, due to its revealing nature. They also found that participants felt tight fitting uniforms highlighted differences between athletes and made it easy for athletes to compare themselves to other athletes, similar to findings by Stoyel et al. (2021).

Impact of Coaches

Coaches play a powerful role in athletes’ development, influencing not only their training, but many other elements of their lives. For example, research has found runners to have over 99% compliance with their prescribed training from coaches (Barnes, 2017). However, the same research also indicated that athletes and coaches have very different perceptions of how hard prescribed training is (Barnes, 2017). The message coaches try to communicate can sometimes become lost or misconstrued by athletes. It is important that messages from coaches are clear as athletes are very likely to comply. Comments made by coaches about athletes’ bodies can impact an athletes’

perceptions of their body (Coppola et al., 2014), and ultimately the behaviours they employ to modify their body to meet their coach's expectations (Lauer et al., 2018). Athletes who receive feedback from their coach to lose weight may report that they do not feel good about their body as a result, and may become upset, angry and/or demotivated by these comments; very few find such comments motivational (Heather et al., 2021). Despite there being little perceived benefit of giving such feedback, coaches continue to comment on their athletes' bodies (Cain, 2019; Goe, 2021).

Athletes may rely on coaches as a source of health-related information (Heather et al., 2021), so it is important that they are able to have open communication with their coach regardless of the gender. Female athletes often feel menstruation is not talked about openly and can be an uncomfortable topic of conversation (Brown et al., 2021). Some of these same athletes felt their coach's gender influenced whether they talk to them about their menstruation (Brown et al., 2021). It would appear evident that female athletes would particularly benefit from there being a greater number of women in supporting roles, such as coaching. An increase in the number of women in coaching may support female athletes to feel more comfortable talking about their health and menstruation. Gender has been shown to not impact on amount of information disclosed by athletes to coaches, but does influence the topics discussed (Officer & Rosenfeld, 1985). Those athletes with women coaching them were found to be more likely to talk about personal topics, compared to those with men coaching them (Officer & Rosenfeld, 1985). More recent research supports the notion that gender of support staff is a barrier against open communication about personal topics, such as menstruation in a high-performance sports setting (Heather et al., 2021). Additionally, women coaches have been found to be aware and more open to talking to their athlete/s about menstrual irregularities (Sherman et al., 2005).

Often, those in positions of power and influence over women athletes are men. For example, only four of approximately 66 coaches who attended the recent summer Olympics in Tokyo as part of the New Zealand team were women (McFadden, 2021). This is not uncommon, with coaching

typically being a male dominated profession, regardless of the gender of the athlete being coached. Up to 90% of those elite female athletes experiencing barriers in communication experienced them with their male coach (Heather et al., 2021). Importantly, this is not to imply that men who coach are inherently bad at coaching sportswomen, rather that there is a male dominance within coaching and to highlight the potential challenges posed by having a coach of the opposite gender.

Impact of Other Athletes

Athletes may disclose more to others in their lives, like peers and family members, than to coaches (Officer & Rosenfeld, 1985). Athletes spend a significant amount of time around other athletes in training, socially and/or during competition. Athletes who have a teammate that act as mentor to them are likely to be more satisfied with a number of areas of their athletic journey, such as their performance, compared to those who do not have a teammate to act as a positive mentor (Hoffmann & Loughhead, 2016). Women athletes are likely to list more sportsmen as role models, but to rate other sportswomen, and those competing in the same sport as more motivational (Midgley et al., 2021).

Other athletes provide a source of support, but also a source of comparison. Athletes often compare the way they look to those who around them who are performing or competing well (Stoyel et al., 2021). Athletes with poor psychological health are more susceptible to the negative influences of their teammates (Scott et al., 2020), with pressure from teammates being correlated with body dissatisfaction (Anderson et al., 2012). When at competitions, athletes are also likely to compare the way they look to their competitors as a means of ascertaining their sporting ability (Stoyel et al., 2021). Applications like Strava, a social network for runners and cyclists to share their workouts, make it easy for athletes to share and compare their training with their peers and competitors. This has become a heightened source of comparison during the Covid-19 pandemic as competitions have been postponed and cancelled (Buckley et al., 2021).

There is a complex relationship between athletes and their teammates with regard to health. Teammates are the most likely to notice when a fellow athlete is displaying eating disorder behaviours (Sherman et al., 2005). Athletes also often rely on other athletes as a source of information regarding their health, before doctors or coaches (Heather et al., 2021). Comparatively, athletes' relationships with their parents and coaches also influence eating pathology (score on Eating Disorder Examination Questionnaire [EDE-Q]), whereas relationships with teammates may not have such an impact (Shanmugam et al., 2013).

Impact of Body Expectations

An athlete's risk of developing an eating disorder is likely to result from "a combination of cultural values, elite sporting environment and person variables" (Hulley et al., 2007, p. 522). The belief that lighter equals faster can promote unhealthy behaviours, such as disordered eating and "body image disturbance" (Carson et al., 2021, p. 434), in an attempt to conform to these ideals. A recent study on elite female athletes in New Zealand found that 15% of participants employed some form of disordered eating habits in an attempt to attain what they saw as the ideal body (Heather et al., 2021).

Athletes can adapt their nutrition, the way they train, and what they do to recover in order to succeed in their chosen sport. Thorpe et al. (2021) describes sportswomen as 'biocultural creatures', who are constantly seeking out new ways to manipulate their bodies in order to perform at their best. Thorpe et al. (2021) adapted the term biocultural creatures from Frost (2016) to fit within a sporting context. Frost (2016) describes humans as biocultural creatures, because like all creatures, humans "develop, grow, persist, and die in an environment" which they have a symbiotic relationship with (p. 4). As biocultural creatures, sportswomen play an active role in the control they have over their bodies to achieve goals (Thorpe et al., 2021). This aligns with Gross's (2020) bodies for selves and bodies for others as goals can be influenced by societal expectations. The control that athletes have over their

body can be problematic as in some instances the inability to reach an ideal can lead to athletes developing a poor relationship with their body (McMahon & Barker-Ruchti, 2017). Thorpe et al. (2021) explored the concept of sportswomen as biocultural creatures in relation to low energy availability (LEA) and relative energy deficiency in sport syndrome (RED-S). They concluded that biology and culture converge in sport and impact the interaction sportswomen have with challenges, such as the incidence/risk of LEA and subsequently RED-S symptoms (Thorpe et al., 2021). Thorpe et al.'s (2021) research illustrates some of the potentially harmful health outcomes associated with sportswomen being biocultural creatures, particularly if they compete in a sport like running where thinness is associated with success (Carson et al., 2021).

Body Dissatisfaction

An athlete who is unable to reach the body ideals associated with their sport may feel dissatisfied with their body. Research comparing throwers and long distance runners found throwers have higher levels of dissatisfaction with their bodies in relation to society but runners were more dissatisfied with their bodies in relation to their sport (Kosteli et al., 2014). Throwers are often more muscular and strong, going against society's hegemonic idea of what women are supposed to look like. Comparatively, the way runners look more closely aligns with these expectations, so it is somewhat expected that in relation to society runners feel lower levels of dissatisfaction. However, the opposite is true when these two groups of athletes think about their bodies in relation to their sport (Kosteli et al., 2014). Kosteli et al.'s (2014) results would suggest that the way women athletes feel about their bodies is complicated and may be influenced by the sport they compete in and the context they are thinking of their body in. There are many different sources of body dissatisfaction in sport, with research highlighting pressure from teammates, peers, spectators and coaches to be positively correlated with body dissatisfaction (Anderson et al., 2012).

Anderson et al. (2012) conducted a study with female collegiate athletes and found 40.3% to be unhappy with their weight and out of those who were unhappy, 95.4% believed they were overweight. A similar study by Greenleaf et al.'s (2009) corroborated these results, with 54.4% of the women in their study being unhappy about their weight, and of those, 88.2% thought they weighed too much and wanted to lose weight. When athletes are focused on how others perceive them and how they look, this can detract from their athletic performance (Lauer et al., 2018). Athletes may feel they need to lose weight in order to fit ideals for their sport, particularly if their sport is seen as 'weight dependent', like running. There are many health risks associated with rapid weight loss, including dehydration, chronic fatigue, eating disorders, menstrual dysfunction, and bone mineral decline and disorders (Kenney et al., 2015). HPSNZ has recognised the negative impact that a preoccupation with body ideals, both by athletes and those around them, can have on an athlete's "self-esteem, performance and wellbeing" which can lead to "poor body image, damaged relationship with food, disordered eating, eating disorders and mental health issues" (High Performance Sport New Zealand, 2020, p. 2). The health issues that result from a preoccupation with weight may have a negative impact on an athlete's performance. Regardless of the impact on performance, the negative impact on an athlete's health is of sufficient concern to warrant action.

Low Energy Availability and Menstruation

LEA is a common health issue amongst athletes, with a study on elite cross-country runners finding nearly 80% of women to be at risk (Jesus et al., 2021). LEA occurs when an individual's body does not have sufficient energy to "support all physiological functions needed to maintain optimal health" (Wasserfurth et al., 2020, p. 1). An individual's energy availability, their energy left for normal physiological function, is determined by dietary intake minus exercise energy expended relative to fat free muscle mass (Wasserfurth et al., 2020). Athletes may unknowingly develop LEA when they train and compete in sports that demand a large exercise energy output (Bentall, 2020; Black et al., 2020; Wasserfurth et al., 2020), like running, if they do not adjust their food intake to

meet training and physiological demands. Alternatively, an athlete may deliberately not eat enough calories in an effort to attain a particular body composition or athletic performance (Black et al., 2020). Athletes participating in sport at an elite level are more likely to have LEA than those competing at a recreational level (Meng et al., 2020). However, elite athletes are also likely to train significantly more often and for longer than recreational athletes (Meng et al., 2020), which may contribute towards the high prevalence of LEA.

Decrease in body weight associated with being in a state of LEA can result in better performance in sports, like running, that are weight dependent (Wasserfurth et al., 2020). These performance improvements can reinforce unhealthy practices, such as under-fuelling and overtraining (Langbein et al., 2021). However, these athletes are likely to not reach their full potential as their performance is also inhibited by being in a LEA state and they may experience reduced recovery, exacerbated fatigue, poor mood or motivation (Wasserfurth et al., 2020). A LEA physiological state can have a number of negative impacts on an athlete's health, due to the downregulation of physiological function of their endocrine system, menstruation, bone health and metabolism (Mountjoy et al., 2018). When an athlete is in a state of LEA for a prolonged period of time, they may present with symptoms of the female athlete triad and/or RED-S (Areta et al., 2020). The female athlete triad, a component of RED-S, refers to the interrelated conditions of disordered eating/energy deficiency resulting in LEA that can result in secondary amenorrhea (absence of natural menstruation for >6 months) and subsequently low bone mineral density (BMD) (Kenney et al., 2015). RED-S has since been introduced as a means of encapsulating all of the physiological systems that may be down-regulated in a state of LEA, highlighting further implications beyond the three identified in the triad in addition to acknowledging that this may be experienced by males and females (Mountjoy et al., 2018).

A study in elite and pre-elite Australian female athletes found 80% of participants had at least one symptom of RED-S, and a further 37% had two to three (Rogers et al., 2021). A qualitative study

by Langbein et al. (2021) with endurance athletes identified sport-specific pressure, social environment, and psychological health as themes related to the onset of RED-S. This onset was promoted by physiological and psychological mechanisms, such as increasing training loads and perfectionism (Langbein et al., 2021). All female athletes in Langbein et al.'s (2021) study had previously sustained at least one stress reaction/stress fracture and had irregular menstruation while they presented with RED-S.

Loss of menstruation can be an indication of insufficient energy availability (i.e., LEA state) in the body, where the amount of energy being expended is greater than the amount being consumed. Lack of menstruation can lead to a decline in reproductive hormones which can impact BMD, cardiovascular health and mood. A study on LEA in elite and recreational level female athletes found 67.3% and 43.9% respectively experienced some kind of menstrual irregularity (Meng et al., 2020). Similarly, elite runners have been shown to have higher levels of menstrual irregularities compared to their non-athletic counterparts (Hulley et al., 2007). It would be expected that elite athletes may expend more energy through training than recreational athletes and sedentary individuals, leaving them more at risk for irregular menstruation. Further, runners with abnormal menstruation have been found to run around 18% more mileage compared to runners with normal menstruation (Cobb et al., 2003). It is reasonably common for female runners to lose their periods or have irregular periods, with 36% of collegiate runners in one study having abnormal menses (Thompson, 2007). Similarly, Cobb et al. (2003) and Tenforde et al. (2015) found 36% and 43% of runners in their studies to have had irregular menstruation, respectively.

In a local context, 50% of elite female athletes in New Zealand (not taking hormonal contraception) have either oligomenorrhea (menstrual cycle >35 days in length) or amenorrhea (>6 months without menstruation) (Heather et al., 2021). Despite its frequency, or maybe as a result of its frequency, less than half of NCAA coaches view lack of menstruation in their athletes as unusual and needing medical intervention (Sherman et al., 2005). It is evident there are a number of negative

health outcomes associated with irregular menstruation, but almost a third of the athletes in Heather et al.'s (2021) study had never been given any specific information about women's health and the impact that irregular or lack of menstruation can have on an individual's health. As a result, current research may suggest that numerous elite female athletes in New Zealand are unaware of their increased risk of developing negative health outcomes associated with lack of menstruation, such as stress fractures (Heather et al., 2021). Sportswomen and coaches might view lack of menstruation as more problematic if they were better educated about the potential consequences.

Bone Mineral Density and Stress Fractures

Abnormal menstruation is correlated with low BMD (Cobb et al., 2003; Tenforde et al., 2015), stress fractures (Heather et al., 2021) and disordered eating behaviours (Barrack et al., 2021; Cobb et al., 2003; Heather et al., 2021). In high school, young women who specialise in running are five times more likely to have low BMD compared to athletes who run alongside participating in a variety of other sports (Rauh et al., 2020). Barrack et al.'s (2014) research suggests that the variables most strongly correlated with developing a bone stress injury are higher training load and low BMD. Similarly, Cobb et al.'s (2003) study found that those athletes with abnormal menstruation were more likely to train greater amounts than those with normal menstruation. Distance runners are at the greatest risk of developing a bone stress injury, accounting for 64.3% of injuries reported during a study on bone stress injuries and the female athlete triad by Barrack et al. (2014). In addition, 32.1% of other bone stress injuries came from athletes who competed in track and field, which likely included runners (Barrack et al., 2014). Out of a total of 11% of participants obtaining bone stress injuries during the study, most of these were likely runners (Barrack et al., 2014). Barrack et al. (2014) suggest that this is 9-10% higher than in the general population. A limitation of Barrack et al.'s (2014) study was that it consisted of 56.8% endurance running or track and field athletes, meaning the sample was not a representation of exercising women as a whole. Regardless, their research

demonstrates a high prevalence of bone stress injuries amongst women runners (Barrack et al., 2014), which can impact a runner's ability to train and compete.

The characteristics of the female athlete triad are disordered eating/energy deficiency/LEA, secondary amenorrhea and low BMD (Kenney et al., 2015), and related risk factors individually correlated are lower BMD, BMI and more time spent exercising (Barrack et al., 2014). As these risk factors accumulate, the risk of developing a bone injury increases (Barrack et al., 2014). When an individual only has one risk factor, their chance of developing a bone injury range from between 6.2% to 30.0%, when they have two factors, their risk ranges from 20.3% to 29.7%, when they have three factors their risk ranges from 29.2% to 50.0% (Barrack et al., 2014).

Eating Disorders and Disordered Eating

Sportswomen in leanness focussed sports are at an increased risk of having eating disorders (Sundgot-Borgen & Torstveit, 2004). Between 40-55% of women competing in collegiate sport are unhappy with their weight, with a vast majority of these women believing they are overweight and as such want to lose weight (Anderson et al., 2012; Greenleaf et al., 2009). Of collegiate sportswomen, over a quarter show symptoms of eating disorders (Greenleaf et al., 2009). Many athletes within a study were found to be using exercise as a means of weight control, even with the Questionnaire for Eating Disorder Diagnosis (QEDD) adjusted to reflect exercise participated in above normal training (Greenleaf et al., 2009). Despite over a quarter of Cobb et al.'s (2003) participants having scores on the Eating Disorder Inventory (EDI) consistent with those in patients with anorexia nervosa, none of them indicated they were purposefully controlling their food intake in order to lose weight. Cobb et al. (2003) suggest that this control instead "represents long-term, chronic restriction" (p. 716). Such results align with the previously mentioned fundamental idea in running culture: that in order to be fast and successful, one must also be thin (Carson et al., 2021). The athletes in this study appeared to be so enculturated by expectations in running that they were not aware of the influence on their

behaviour. The young women in Barrack et al.'s (2021) follow up study who were not classified with disordered eating (using the EDE-Q) at baseline testing received significantly higher scores in the follow-up testing in dietary restraint, weight concern and their global scores. While these scores were still below the threshold to be indicative of disordered eating, the increase in scores over time could suggest the cumulative impact that running culture has over young women (Barrack et al., 2021). However, Barrack et al. (2021) also argued that this increase could be associated with the increase in weight experienced by the participants over the course of the three data collections while they were likely going through puberty. Gaining weight may have made the participants feel as though they no longer fit the thin ideal promoted in running culture and they might have engaged in more disordered eating habits to try to control their weight.

Eating disorders and disordered eating are linked to several other poor health outcomes (Barrack et al., 2021; Cobb et al., 2003). For example, Cobb et al. (2003) found 65% of participants who scored highly on the EDI had abnormal menstruation compared to only 25% of those who scored within the normal range on the EDI. Barrack et al. (2021) conducted a three year follow up study on adolescent female runners and found participants who displayed disordered eating habits at baseline testing were at an increased risk of having irregular menstruation and lower BMD than their counterparts who did not display disorder eating habits.

Athletes may display different disordered patterns related to eating disorders, with a study on athletes and non-athletes who completed the National Eating Disorder online screen in 2018 finding that athletes more frequently participated in excessive exercise than non-athletes (Flatt et al., 2021). These results support Thompson and Sherman's (1999) previously cited theory that traits which are common amongst good athletes can also be seen as risk factors for developing an eating disorder. Current research would suggest that over 50% of sportswomen are at a high risk for developing an eating disorder, with elite level athletes having a slightly higher risk (though this did not reach significance) (Meng et al., 2020).

It is evident that weight is a common concern amongst sportswomen (Anderson et al., 2012; Greenleaf et al., 2009), particularly for those in leanness focused sports like running (Sundgot-Borgen & Torstveit, 2004). Sportswomen often show symptoms of disordered eating (Greenleaf et al., 2009) and many have a high likelihood of developing an eating disorder (Meng et al., 2020). Athletes may present different eating disorder pathology compared to non-athletes (Greenleaf et al., 2009) and not realise that their eating behaviour is disordered because of how accepted such behaviours are within their sporting culture (Cobb et al., 2003). Further, there are a number of poor health outcomes associated with disordered eating which can have long-term impacts on an athlete's wellbeing (Barrack et al., 2021; Cobb et al., 2003).

Looking to the Future

Women athletes generally, and women runners specifically, face several challenges to affirm their belonging in the sport they compete in. The challenge to conform to the body expectations for the purpose of performance enhancement can have negative consequences which may result in worse performance outcomes, like those described above. These negative consequences also pose a great risk to the long-term health of women athletes. Therefore, it is important that interventions are put in place to help sportswomen navigate these challenges, some of which are described below.

HPSNZ Intervention

HPSNZ has put out an information sheet aimed at “promoting a positive performance body culture in sport” (High Performance Sport New Zealand, 2020, p. 1). This document indicates an awareness from HPSNZ that there are issues, which transcend sporting codes, around body expectations. The document recommends 10 areas which support staff within HPSNZ need to improve in order promote positive performance body culture. These recommendations include: support staff (coaches, nutritionists etc.) being careful with what they say and do in relation to athletes' bodies because of the impact this can have and being challenged if necessary (by athletes or

other support staff); promoting means of improving performance that are not based around body weight; involving professional service providers (e.g. nutritionist); promoting the idea that food is a source of fuel and should be enjoyed; body composition only being discussed in relation to health and/or performance enhancement not how the athlete looks; understanding of how/why an athlete has/is controlling their weight; making sure athletes are aware of the risks of body weight fluctuations and signs of developing disordered eating; health issues relating to appropriate fuelling receiving the same support as any physical injury would; and encouraging athletes to be assessed by a doctor/medical professional (High Performance Sport New Zealand, 2020).

These recommendations are a positive progression for HPSNZ and recognition of the importance of this psychological issue for performance, but also for athletes' overall health and wellbeing. The document is indicative of the crucial role that support staff in athlete development, particularly coaches have in supporting athlete physical and mental health (High Performance Sport New Zealand, 2020). However, this is the very same document mentioned at the beginning of the literature review that labels the body ideal that athletes may aim to achieve the i.e., "the performance body" (High Performance Sport New Zealand, 2020). It may be confusing for athletes to receive contradictory messages from the same source. Additionally, the resources used by HPSNZ to create this document were all based on overseas sources, including from the United States of America (USA) and Australia. While these may be relevant to the New Zealand sporting context, it is also possible that athletes in New Zealand face unique challenges and experiences. Unfortunately, there is a lack of local research in New Zealand relating to body ideals and expectations in sport.

Research Around the World

There is limited evidence of interventions in place to challenge body ideals and change expectations in sport. 'Bodies in Motion' is one intervention aimed at creating a more positive relationship for female athletes with their bodies (Voelker et al., 2019). Researchers found that

athletes who went through the programme reported less thin-ideal internalisation compared to the control (Voelker et al., 2019). The framework of the programme is derived from cognitive dissonance theory so involves athletes “actively and experientially challeng[ing] societal appearance norms” related to their sport (Voelker et al., 2019, p. 150). Dissonance interventions involve participants engaging in exercises which challenge common attitudes (Stice et al., 2008), such as the thin ideal promoted in running culture. Challenging these attitudes should “result in psychological discomfort that motivates them to reduce internalization” of those ideals (Stice et al., 2008, p. 329). In addition, throughout the programme athletes are encouraged to reflect on the way they internally respond to ideals and are given tools to do this in a healthier way (Voelker et al., 2019).

During the ‘Bodies in Motion’ programme participants complete an introductory session and four subsequent sessions (Voelker et al., 2019). Voelker et al. (2019) had a high rate of attrition which may explain why, out of the 12 measures taken, only thin-ideal internalisation (10 items from the Sociocultural Attitudes Towards Appearance Questionnaire-4) reached statistical significance. Other measures included sport-specific body pressures, general sociocultural body pressures, body attitudes, eating concerns, mindfulness and self-compassion (Voelker et al., 2019). The high rate of attrition in the study was attributed to unavailability of participants, with many participants citing academic or athletic commitments conflicting with their participation. It is somewhat unsurprising that thin-ideal internalisation was the only measure to reach statistical significance as many of the other measures are outside of the control of the athletes themselves. For example, Voelker et al. (2019) suggested that a measure like body pressures may be difficult to improve without addressing all sources of body pressures in sport (e.g., coaches and friends). Therefore, interventions which focus on the individual may fail to address the root cause of the problem. A similar programme based on cognitive dissonance theory was piloted in a study by Smith and Petrie (2008) with female collegiate athletes identified as being dissatisfied with their bodies in a previous study also showed the intervention to

have limited benefit and even those variables which displayed moderate effect size did not reach statistical significance.

Comparatively, Stice et al.'s (2008) research with adolescent girls with body dissatisfaction explored the impact of "dissonance intervention, healthy weight intervention, expressive-writing control intervention, or assessment-only control" on eating disorder prevention (p. 331). The dissonance intervention has already been described, the healthy weight intervention involved educating and promoting healthy nutrition and exercise, the expressive writing involved writing about topics which were deemed emotionally important by participants, and finally the assessment only group received no intervention and were simply assessed. Participants who received the dissonance intervention and healthy weight intervention had around a 60% reduction in the expected number of "clinically significant eating pathology" after three years compared to the group that received no intervention (Stice et al., 2008, p. 337). These are promising results which would suggest that both interventions could have long-term benefits for participants.

Becker et al.'s (2012) study with female collegiate athletes showed somewhat promising effects and involved the athletes participating in being the Female Athlete Body Project (FABP) where they were then split into either the athlete-modified dissonance prevention (AM-DBP) or the athlete-modified healthy weight intervention (AM-HWI). Teams were kept intact for the intervention with each respective team split in half and each half assigned either AM-DBP or AM-HWI. Both interventions were of similar duration (60-80min) and occurred three times over the course of three weeks. The interventions were led by members of each team who were identified by the athletic department and underwent a six-hour training. AM-DBP followed a dissonance-based prevention style which was tailored towards an athletic population, such as discussing the female athlete triad and sport-specific ideals. Comparatively, those in the AM-HWI were encouraged to eat and exercise in a healthy manner, however this was also adjusted for an athlete population to promote means of improving performance which did not revolve around weight loss. Participants in the AM-HWI were

reported by peer leaders to be more receptive and enjoy participating compared to the AM-DBP peer leaders who faced “more contention and hostility” during sessions (Becker et al., 2012, p. 39). At six months, both interventions resulted in a significant decreases in thin-ideal internalisations, dietary restraint, bulimic pathology, shape concern, weight concern, and negative affect (Becker et al., 2012). At 12 months, the only significant effects to remain were decreases in bulimic pathology, shape concern and negative affect.

One of the biggest benefits to come out of Becker et al.’s (2012) study was a handful of athletes who went to their athletic trainer to report that they believed they had the female athlete triad, indicating a greater degree of education and understanding. Prior to beginning the study, researchers removed those in their study who appeared to meet the criteria for an eating disorder (response to EDE-Q) as their interventions were targeted at preventing, rather than treating eating disorders. This may have impacted the level of success in their study due to those being in the greatest need of improving their body image being excluded.

Participants (professional dancers) in Gorrell et al.’s study (2021) responded well to FABP, with reductions in body dissatisfaction, dietary restraint, eating pathology compared to the control group directly after the intervention and at a six week follow up. Stewart et al. (2019) used FAB (based on FABP) with women collegiate athletes and found their intervention group had decreases subscales of the EDE-Q compared to the control, but dietary restraint was the only subscale to reach statistical significance. In addition, the intervention group also showed a significant decrease in their thin-ideal internalisation compared to the control group. Participants in the study pointed out that those most in need of an intervention were probably the least likely to participate.

Advice from participants in Lauer et al.’s (2018) study to other female athletes, based off the participant’s own thoughts on what impacted their sporting journeys, was not to worry about their body, but to focus on their sport and to embrace their strong, athletic body. However, this advice

appears contradictory and unhelpful, with women athletes being advised to not think about their bodies at the same time as being told to embrace their bodies for what they can do. This is indicative of the complex relationship that sportswomen have with their bodies and the pressures that they face.

Summary

While there is a plethora of research available on the negative consequences of under-fuelling, disordered eating, eating disorders that results in symptoms of RED-S in female athletes, particularly those in leanness focussed sports like middle to long distance running, few studies focus on the mechanisms which promote such behaviours and what to do about them. There is limited research available on body expectations and ideals in sport generally, let alone in running. In addition, much of the literature is focused on the outcomes of the expectations and ideals instead of focusing the experiences of the athletes themselves. To the best of my knowledge, the proposed research in this thesis will be the first to focus on the experiences of women runners and sports-specific ideals in New Zealand. The results will be valuable as they will contribute towards a novel area of research that could be used to guide organisations like Athletics New Zealand, HPSNZ and Women in Sport Aotearoa to better practices around women athletes and their weight and development throughout their sporting journeys.

Chapter 2: Methodology

Participants

Twelve participants consented to being part of this study. One participant did not complete the free-writing and after several follow up emails from the researcher, the participant chose not to progress further with the study. Seven participants identified themselves as New Zealand European, two as European, one as Māori, and one as North American. The participants were all female athletes who had competed (or intended to compete) in at least one National level, middle to long distance running competition in the 2020/21 season. Middle to long distance competition was defined as any track event from 800m to 10,000m, including mountain running and road races. Participants were recruited via social media, through my Instagram account, Facebook profile, and on a New Zealand Distance Running Facebook group. The recruitment flyer used in social media posts can be found in Appendix 1.

Ethical Considerations

This research was reviewed and approved by the Northern Massey University Human Ethics Committee (NOR 21/15; Appendix 2). One of the key ethical considerations was minimisation of harm to participants, researchers, institutions, and groups. This was important to consider as the participants were discussing experiences which they may have found psychologically and/or socially distressing. Information about appropriate support services was made available to participants when they signed up for the research through Qualtrics, an online survey software. Talking about these experiences could also have had a negative impact on myself as the researcher. I was aware of the same support services I could contact and had support from my supervisor, family, and friends. I knew it was likely I would have pre-existing relationships with many of the participants as the New Zealand running community is reasonably small. Therefore, all participants were aware that they

could choose not to participate and withdraw at any time, up until 8 weeks after their interview. This was reiterated on the information sheet, consent form and prior to the start of interviews.

All participants were fully informed of the purpose of the research, the method of data collection and the length of time the research would take through the information sheet (see Appendix 3). The informed consent form was set up through Qualtrics. In addition to written consent, participants were again asked for verbal consent before the start of the interview and reminded that they could stop the interview at any time, choose not to answer any question, and/or withdraw from the study at any time up until 8 weeks after completion of the interview. All participants were asked how they would like to begin the interview process (e.g., mihi, pepeha, whakawhanaungatanga, no introduction), and I was prepared for whichever option they chose. Participants received a koha (\$25 grocery store voucher) for participating; it was made clear to participants that they would receive this regardless of if they completed the interview.

The privacy and confidentiality of the participants was maintained by ensuring no identifying information was transcribed from the audio recordings of the interviews. This included information about where participants had gone to university, which running club they belonged to, which city they lived in and the competitions they have competed in. This information may have provided additional contextual information however, considering how small the New Zealand running community is, it may have exposed the identity of some participants. Their written responses and interviews were saved using a participant identification number, which was assigned based on the order they completed their written response (1-11). All of the data collected was stored in password protected folders on my phone (audio recordings) or on my computer (audio recordings and transcripts) and there were no physical copies of data or consent forms. The interviews occurred in a place the participant felt comfortable: most (9) participants chose Zoom and two took place in person.

Prior to ethical approval, I sought support from Athletics New Zealand for the research, as participants in the research were likely to be members of Athletics New Zealand. Hamish Meacheam, the community manager for Athletics New Zealand, confirmed they would be happy to pass on any information about the research to clubs and/or members if required. A sufficient number (n=11) of participants were recruited via my own social media accounts, so help from Athletics New Zealand was not needed.

Cultural Considerations

Māori were not the primary focus of this research, however any individual who fitted the inclusion criteria was able to participate. It was not expected that Māori participants would be more likely than any other ethnicity to partake in this research. Despite this, it is important for any researcher conducting research in New Zealand to consider the impact their research may have on Māori and to think about the principles of the Treaty of Waitangi. These cultural considerations were reviewed by Dr. Pita King who made some suggestions and encouraged me to think critically about my role in the research.

In my research, this meant working in partnership with participants through asking them how they would like to begin the interview, rather than assuming they would like to begin in a certain way. Examples of different ways participants may have wanted to begin the interview were mihi (greeting), pepeha (introduction), whakawhanaungatanga (process of establishing relationships) or simply getting started with the interview. To be prepared for any of the options, I made sure I was confident with my own pepeha and appropriate mihi. Some participants opted to start the interviews immediately, particularly if they were someone I was already familiar with. However, many chose to start the interviews with an approach most similar to whakawhanaungatanga, where I tried to connect with participants through sharing my own experiences around the issue and the motivation behind the research itself. This appeared to be a beneficial approach to establish a relationship before delving

into what was a personal topic. It also made the research feel more collaborative and like a conversation, rather than a one-sided interview.

The principle of protection was also considered for this study. While Māori were not the primary focus, the results from this research may be relevant as experiences of body expectations and ideals likely transcend sporting codes. The results could be used to guide all types of sporting organisations to better practice around athletes and their bodies.

Procedures

Inspiration for the research design was drawn from McMahon and Barker-Ruchti (2017) research on female swimmers' experiences in Australian Swimming culture. I felt an affinity to McMahon due to her embeddedness within Swimming Australia, similar to my embeddedness within Athletics New Zealand. In their research, McMahon and Barker-Ruchti (2017) completed a four-step process to develop a narrative ethnography for each of their three participants. Narrative is the written or spoken retelling of stories using everyday language, with ethnographic methods aiming to understand a culture from the perspective of people situated within that culture (Camic et al., 2003). The four steps were 1) activity-based task 2) face-to-face meeting 3) co-construction of the swimmers' lived experiences 4) presenting the lived experiences (McMahon & Barker-Ruchti, 2017). McMahon and Barker-Ruchti (2017) identified that this method also allowed for collaborative relationships to form between themselves and their participants, that readers would be able to hear from the participants perspectives, and the participants may have felt a sense of freedom through the telling of their story. In McMahon and Barker-Ruchti's (2017) study, the initial 'activity-based task' involved each participant being given a prompt based on McMahon's own experience in Swimming Australia and writing about any similar experiences they had. Next, the participants each had a face-to-face meeting with one of the researchers where they created their narrative stories. The last two steps of the process used by McMahon and Barker-Ruchti (2017) relate to the construction and presentation of their

participants' stories. This method enabled the researchers to elicit rich and meaningful experiences from their participants to help answer their research question.

Similarly, to McMahon and Barker-Ruchti's (2017) design, this research study began with a free-writing prompt (similar to the activity-based task) which was then followed by an interview. I found having the free writing response from the participant prior to the interview facilitated conversation and allowed for topics to be discussed that may have otherwise not been brought up. This method was particularly helpful when interviewing participants who I was not familiar with or who I did not share similar life experiences with, such as participants who had children. For the free-writing exercise, participants were asked to respond to the prompt 'You don't look like a runner' with any past and/or present experiences they have had which aligned with the statement. The suggested length of the response was one page, however there was no limit to the length of this entry. The free writing responses were between 75 to 913 words, with the average length being 517 words.

Following their free writing response, I conducted a semi-structured, one-on-one interview with each participant. Questions in the semi-structured interview included both pre-determined questions and person-specific questions developed based on the free writing response. The interviews were designed with 9 open-ended questions (see Appendix 4) that encouraged the participants to reflect on their experiences in running, particularly in relation to body weight expectations and ideals. The remainder of the interview comprised of questions stemming from the participant's free writing response (for an example, please see Appendix 5) and spontaneous questions which came up as a result of the participant's answers to questions during the interview. The purpose of the semi-structured interview was to go more in depth into the participant's response to the writing prompt. Interview location was decided with participants, and both online and in person options were available. If the participant lived outside of Auckland, if New Zealand was at heightened alert levels, or if the participant preferred, the interviews were carried out over Zoom (online). Two of the 11 interviews occurred in person, and nine took place via Zoom. The interviews lasted between 26

minutes to 82 minutes, with an average duration of 43 minutes. After the interviews were transcribed, participants were given the opportunity to read over their transcript to ensure it reflected their experience. Only one of the 11 participants opted to read her transcript and she did not request any changes to be made.

Qualitative Data and Analysis

Thematic analysis was used to analyse the free writing responses and the interviews and I followed the six phases of thematic analysis outlined by Braun and Clarke (2006). Thematic analysis in the most basic sense is a method of organising data in a meaningful way so that it can tell us more about a phenomena (Freeman & Sullivan, 2019). Prior to interviews, I read through each participant's free writing to create questions stemming from their response. This was my first step in familiarisation with the data and gave me a condensed introduction to the topics which were likely to be discussed in the interviews. The next step of familiarisation was verbatim transcription of the free writing responses and interviews. After I had transcribed all of the data in full, I re-read the free writing responses and interviews several times to ensure I was fully immersed in the data. I also used this as an opportunity to note down any initial interpretations, keeping track of these in a word document.

After familiarisation, I began generating initial codes for my data, starting with the free writing responses and then moving on to the interview transcriptions. I used NVivo, a qualitative data analysis software, to aid this step in my analysis. This software was useful as it enabled me to keep track of the codes throughout the data. After initial coding, there were over 300 codes from the 11 free-writing responses and interviews. Some of these were duplicates or had very similar meanings and were condensed. Other codes, while important, were not closely related to the research question so were discarded. When a more refined list of codes was finalised, I began to group similar codes together. This was done by going through the codes one by one and grouping them when I could see a connection. When grouping codes, I considered the various and complex ways in which they could be

related and looked for patterns in the data. These groupings were refined and simplified several times until an initial 13 themes were established. Upon further consideration, grouping and re-grouping, these 13 themes were consolidated into 4 main themes. Each of the themes was then labelled in a way which best reflected the corpus of data they represented. The final step in the analysis was presenting the data, which I have done in this thesis.

Theoretical Framework

My theoretical framework plays a critical role in informing how I conduct research. It informs where I search for knowledge, how I interpret that knowledge, and how I present that knowledge. The aim of this research is to look at the multiple realities that women who run face in relation to body shape and weight and their performance. These realities are “fundamentally dependent on the mind” (O'Reilly & Kiyimba, 2015, p. 6), therefore heterogenous and moulded by differing embodied experiences and interactions with the world. From this perspective, all realities are seen as equally valid (Burr, 2003) and ontologically this aligns with a relativist approach. A relativist approach allowed for further exploration of the complexities of the relationship that women runners have with their bodies and how this relationship is mediated by others. Using semi-structured interviews meant these diverging experiences could be captured as each interview was directed by the answers given by the participant during the interview. Further, their individual free-writing responses guided the creation of participant specific questions for the interview guide.

I see my participants' realities as existing within a social world, where their experiences are “mediated linguistically, culturally and historically”, and as a result are fluid and variable (Camic et al., 2003; O'Reilly & Kiyimba, 2015, p. 17). The relationships that people have with those around them help to inform how they view the world (Gergen, 2015). As such, the relationships participants have inform how they see their bodies. Epistemologically, this research aligns with a social constructionist perspective. Willig (2013) uses the simile of a researcher with a social constructionist

epistemology being like an architect looking at a house and what it has been made of. Similarly, as a researcher I am interested in seeing how my participants' experiences have been constructed and what informs these constructions. The free-writing responses and semi-structured interviews mean I am able to deconstruct participants' experiences and start to gain an understanding of how they have embodied the phrase "You don't look like a runner". Embodiment is an important idea guiding this research, which involves considering the "social and cultural ways in which we live our bodies in everyday life" and is particularly relevant in a sport setting (Allen-Collinson, 2011, p. 301). The embodied consequences of the phrase "You don't look like a runner" can be seen in the experiences of participants in this study through their interviews and free-writing responses.

Social comparison theory, proposed by Festinger (1954), plays a key role in how the participants in this research understand their bodies in relation to others'. The theory suggests that people tend to compare themselves to those similar to them (Festinger, 1954). In the context of this research, women runners are likely to compare themselves to other women runners or their idea of what a woman runner is supposed to look like. Others, like coaches, parents and commentators may also make a comparison between what a runner looks like a what they think a runner *should* look like. People may construct expected characteristics they think members of a group should embody, based on a prototype of someone belonging to that group (Gibbons & Gerrard, 1997).

As the research design for this study was inspired by McMahon and Barker-Ruchti's (2017) study, it would be remiss to ignore the theories that guided their research. They understood their participants' experiences through a "Foucauldian perspective, extended by feminist theory" (McMahon & Barker-Ruchti, 2017, p. 160). Like many authors in Carter's (2019) book *Feminist applied sport psychology: From theory to practice*, I have always felt a sense of hesitancy in labelling myself a 'feminist', and when it came to completing research, identifying feminist theories as part of my theoretical framework. I believe this hesitancy originates from the negative connotations surrounding feminism. However, throughout the course of completing this research, I have realised I

have completed a thesis based on feminist theories. Feminist theories align well within research in the sporting realm, as sport has primarily been dominated by men. When participating in sport women's bodies become alienated and seen as objectifiable (Paul, 2015). Running in particular is "defined through a masculine lens" which determines the embodied expectations on individuals who run (Faulkner, 2018, p. 11). This research is focussed on women because I have seen this to be an issue which disproportionately affects women. While I do not think a Foucauldian perspective is fundamental to my theoretical framework, I can see how my research fits within the "knowledge-discourse-power triad" (McMahon & Barker-Ruchti, 2017, p. 161). McMahon and Barker-Ruchti (2017) highlight that Foucault never specifically refers to sport in his work, but that his concepts relating to power and body are applicable within a sporting context.

Reflexivity

As a researcher completing qualitative research, it is important to be aware of the impact I have on my research as I am "the main research instrument" (Sullivan & Forrester, 2019, p. 64). It would be impossible to detach my "social location" from my approach to the research; therefore, it is important to make it explicit (Camic et al., 2003, p. 62). Social location is determined by many aspects of our lives, such as socio-economic status, sexual orientation, education, and religion. My social location has developed over the course of my life, throughout the course of completing this research, and will continue to develop for the remainder of my life.

Running has played a huge part in shaping my social location, it has impacted where I have gone to school, the people I am friends with and many other aspects of my life. I have run for as long as I can remember, and I have always been good at it. Both my parents were runners, my dad holding a New Zealand Secondary Schools record in the 800m and my mum competing for New Zealand on the world stage on several occasions. Running is in my genes and has impacted every facet of my life. I started training around the age of 13; my mum would write training programmes which consisted of

relatively low mileage supplemented by the trainings and games of the other sports I competed in. When I was 14, I made my first New Zealand team to go to the World Secondary Schools Cross Country Championships. This was an extremely exciting experience for me, but also the first time I remember thinking about how I looked and trained compared to the other girls that I was competing against. I distinctly remember getting a pair of shorts as part of our uniform for this trip that fit loosely around all the other girls on the team but hugged my legs and made me feel self-conscious. Similar experiences to these continued to occur throughout my running career in high school. Many of the girls I was competing against had eating disorders or disordered eating habits, and it was difficult not to compare myself to them and I wondered if I did the same things then I would be able to run as fast as them.

In my last years of high school, I developed disordered eating habits, like restricting certain foods out of my diet, in an attempt to conform to the body ideals and expectations I saw associated with good running performances. During this time, I stopped menstruating for a few months, which I saw as a positive outcome as it seemed many of those around me who were running well never got their periods. After high school, I received a running scholarship to the USA, a goal which I had for years. However, going to America only heightened already intense pressures around conforming to weight expectations and ideals as I was surrounded by runners (my teammates) all the time, rather than just at competitions. Fortunately for me, I had a roommate in my second year who reset the way I thought about food and fuelling and made me question the ideals and expectations placed on runners. She encouraged me to think of food as fuel and is the biggest lover of carbohydrates I have ever met, a food group which I had previously tried to avoid. My journey since then has not been smooth, and there are still days when I question my belonging in the sport. However, these days become fewer and fewer and completing this research has helped me to realise more than ever that I am not alone in the battle against expectations to look a certain way in order to be successful as a runner. During my last year of university in America I created a research project on the prescription of birth control to female

runners with amenorrhea as part of a capstone paper for my degree. This project got me thinking about what I could do with my studies to make meaningful changes for runners like myself. From there, the idea for this thesis was constructed.

Prior to beginning the interviews, I asked participants how they would like to start. Many, particularly those I did not know, opted for me to tell them about myself and my journey to starting this research. I believe this helped these participants to better understand why this research was important to me and created a more reciprocal relationship between us from the outset, where the interview became more of a conversation, and they shared in depth information about their experiences in the sport. However, this introduction may have also primed these participants to talk about similar themes to me in their interviews as these would have been at the forefront of their minds.

Completing the interviews also made me realise that there is a wide spectrum of women who may identify with the statement 'You don't look like a runner'. On reflecting upon my perception of my participants, I realised that the way that I was viewing these participants and categorising them demonstrated the impact of my own social location. I had been categorising my participants based on how they looked and making assumptions about their ability.

One of my participants pointed out during the interview that she thought it would be interesting to compare experiences between those older masters competitors (35+) to those younger competitors (18-34). This is an interesting topic that may be of interest to researchers in the future. The age divide amongst my participants was difficult to navigate at times as some of them were considerably older than me and had different life experiences, which I found hard to relate to and talk about during the interviews than those closer to my age.

When asked what made them want to participate in the research, most the participants who knew me indicated they wanted to help me with my research. Another frequent sentiment was the

participants wanted to make change for future generations of female athletes so they did not have to go through similar experiences what they experienced in their running career. Similarly, my goal of conducting this research was to make meaningful change for future athletes.

I was concerned that there would be some bias from knowing some of the participants I interviewed. While it is likely this had an impact on my interviews and subsequent analysis because it meant I had a more intimate understanding of them and their journey, I do not think this had a negative impact as it meant I was able to delve deeper on specific subjects that I knew they had more to talk about. The benefit of the written response meant I had some background on all of my participants. For the participants I did not know, I felt they were able to open up to me and we built up rapport throughout our interaction. I also think some of them felt they could speak freely to me because they did not know me and knew the conversation was confidential.

Throughout the process of researching, interviewing, and analysing, I gained a deeper level of understanding and metacognition of my own journey navigating the phrase 'You don't look like a runner' from when I was a teenager starting to run more seriously through to the present. It also made me think about the ways in which I contribute to the continuation of the stereotype and the things I could do to be a better ally for myself and fellow competitors. Sometimes, participants brought up experiences which invoked memories of similar experiences of my own. Similarly, participants often mentioned during interviews that my introduction reminded them of things that had happened to them. This perfectly represented the collaborative relationship between myself and the participants.

After conducting the interviews, I felt a sense of responsibility to my participants, who had intrusted their stories and experiences with me. Many participants were interested in what I was planning to do with the data I collected and what the goal of the research was. Like myself, they were keen to see meaningful changes made so that younger athletes coming through running in New Zealand did not have the same experiences they did. In addition, when I asked participants if they had

anything else they wanted to talk about or say at the conclusion of the interview, they often expressed gratitude towards me for doing this research and asked for the results from the study once it was completed.

Chapter 3: Analysis

I identified four main themes through conducting a reflexive thematic analysis of the data:

- 1) Those I am Surrounded by Impact how I Feel About my Body
- 2) Running is Part of my Identity
- 3) Weight and Eating Behaviours Have an Impact on/are Impacted by Bunning
- 4) Change is Needed for Future Generations of Women Runners

Each of these four themes is underscored by several subthemes. Each theme will be described in the following section with supporting quotes used to highlight participants' voices.

Theme 1: Those I am Surrounded by Impact how I Feel About my Body	Theme 2: Running is Part of my Identity	Theme 3: Weight and Eating Behaviours Have an Impact on/are Impacted by Running	Theme 4: Change is Needed for Future Generations of Women Runners
<ul style="list-style-type: none"> ○ Comments From External Sources ○ Comparing to Others ○ Fitting Expectations 	<ul style="list-style-type: none"> ○ It is Hard to Balance Running With Life ○ Impact on Health 	<ul style="list-style-type: none"> ○ Eating Disorders/ Disordered Eating are part of Running Culture ○ Running Clothes Impact how I Feel About my Body ○ Emphasis on Weight 	<ul style="list-style-type: none"> ○ Getting Older Puts Things in Perspective ○ Support and Education is Needed ○ I want to be a Part of the Change

Theme 1: Those I am Surrounded by Impact how I Feel About my Body

Throughout the interviews, participants emphasised how many people, in different ways, have influenced the way they feel about their bodies in relation to running. At times, these were explicit

comments, but participants also received more indirect messages that they did not fit the stereotypical body associated with runners. The most common source impacting participants was *Comments From External Sources*, which forms the first sub-theme.

Comments From External Sources

Comments were made by many individuals in participants' lives, ranging from people they knew intimately to complete strangers. The degree of familiarity with an individual did not seem to be a mediating factor when it came to commenting on a participant's body, nor did familiarity seem to mediate the impact comments had on participants. Participant 8 described how a comment from a stranger after a race led her to feel worse about her body than any comments previously made by people she knew.

"I feel like it's always when it comes from people you don't know at all and when they say those things, it tends to stick with you. Sure your friend can say it but then sometimes you just take it as a joke or they just say it so fast that...it kind of goes past you, even though it still kind of registers with you. But when it comes from other people doing the same thing as you [...] It kind of just sticks more in your mind because you realise, oh, this person has said it but this person's always said it and I've never met them, talked to them, they don't know anything about me. Well, if they say it, then it must be true. Because...yeah, what else could there be?"

As this quote illustrates, comments may impact some participants more when they come from strangers. For participant 8, having a stranger comment on her body led her to believe what they were saying must have been true as that was their first impression of her. These comments were less common than those from people participants were familiar with, making them novel and more memorable. This in no way diminishes the impact of comments from those who the participants were

more familiar with; rather, it illustrates the variety of experiences and reactions participants have had to comments from other people in their lives.

Growing up, participant 8's peers teased her for having chubby cheeks and questioned why she ran when it did not look like it came easy to her. A particularly memorable comment came from a peer after a cross-country race and the long-term impact of this comment is described below.

“Unfortunately, this comment of me not looking like a typical athlete or runner who was worthy of competing just at small cross-country competitions spiralled into a 5 year and ongoing (and only recently diagnosed) battle with anorexia nervosa.”

Participant 8 viewed comments from others as playing a major role in the development of her eating disorder over the last five years. These comments made her question her own self-worth and drove her need to change the way she looked to conform to what a typical athlete looked like. She had a belief that if she were able to change how her body looked, then she would be “worthy” of competing in running races. Without being perceived as looking like a runner, her position within the sport was not legitimised by her peers and this impacted her relationship with her body and appears to have been a catalyst for developing an eating disorder. Her experience also illustrates the continued struggle that participants can have with their body image long-term from external comments.

As was the case with participant 8, participants often received comments about their bodies in competition settings or related to competitions in some way. Competitions are a time when athletes' bodies are on display while they are also proving their fitness and ability, making this a vulnerable time. The result from a race represents the culmination of weeks, months, and sometimes years of training. The hard work, time, and effort these women have devoted to competing can be undermined when others conflate athletic performance with physical appearance. Participants noted comments came from coaches, parents, parents of other athletes, peers, commentators, officials, and fellow

athletes. In her written response, participant 5 shared how a parent of another athlete commented on her body after a race:

“I was feeling happy about how the race went. After finishing I heard one of the track mums say, “she runs well for a bigger girl” in regards to my performance, not knowing I was behind her and had heard what she said.”

This example shows how comments from others can completely change a positive racing experience into one that is negative. The parent’s comment demonstrates the dissonance between an individual running well and having a bigger body composition. This parent was so surprised to see someone do well who did not fit what she thought a runner should look like that she commented on it aloud to others. Even if the participant was not the intended audience for this comment, comments like these only serve to reinforce body ideals in sport amongst those who hear them. While participants spoke in depth about their own experiences, many also mentioned comments they had heard made about other athletes. Regardless of who the comments are made about, these comments can impact how an individual feels about their body. For example, when a negative comment is made about someone else’s body and an athlete sees themselves being of a comparable body composition to that person, this may have a similar effect to if the comment was made about them.

Most participants believed that those making comments about them did not do so with malicious intent. Many just saw these as ‘passing comments’ that may have been intended to be taken positively. Participant 1 described her experiences throughout her athletic career where media and those in high performance roles made comments about her body:

“I think in the minds of the people that said those things, it was definitely a compliment, or it was definitely something to be helpful [...] But it’s really interesting that, perhaps I didn’t take those as the way they were intended.”

The reflection by participant 1 demonstrates that even when those commenting might have good intentions, the comments may not be taken in that way. Participant 1's insights, which were not dissimilar to other participants, show how these women think critically about their experiences and the intent of the comments made about them. These comments can have a profound effect on how participants felt about their bodies, regardless of the intent of the person who made the comment.

Comparing to Others

The people athletes train with, compete against, and see in media and social media may influence how they believe they should look to be successful in running. Participants mostly talked about comparisons as having a negative impact on them, particularly because many of the people who are seen as successful (both athletically and in general in society) are very thin. Comparisons to others showed up in various ways in participants' lives and included both sport-specific and general comparisons. Participants shared how those who were topping podiums were always thin, and that meant that for them to be successful, they also had to be thin. Participant 5 talked about this in relation to how she thinks about weight and performance.

*"I've got that philosophy embedded in me sadly, I wish I could get rid of it more easily, but when I see the girls at the top look the way they do, it is so bloody hard. What are you supposed to do when—" *sighs* "you know, all these chicks had a BMI of probably like two points below underweight."*

There is an automatic association formed by athletes, coaches, parents, peers, commentators and spectators between how well a person can run and the way their body looks. Participant 5 identified that this association is ingrained in the way she thinks, despite her wishing it was not. The conflation between body composition and running well is reinforced and hard for participants to ignore when those "at the top" who are performing well are lean. Even when participants had performed well, many indicated that they still thought about what else they could have done to

perform better next time. For example, participant 7 talked about winning a major race and afterwards focussing on what she could have changed about her body to perform better.

*“I vividly remember winning my race [...] by a margin, and thinking soon after something along the lines of, if I were just a tad skinnier like *this girl*, then I would surely have won by more.”*

Even though she won her race by some margin, participant 7’s first thoughts were about how much more she could have won by if had a body composition similar to another athlete. Runners often have perfectionist qualities and look for what they can do to improve performance (Langbein et al., 2021); this may contribute to exceptional performance when viewed through a running lens. However, through a clinical lens, these could be seen as traits typical of someone likely to develop an eating disorder (Thompson & Sherman, 1999). Instead of comparing the way she was training or any other running related variables, participant 7 immediately associated being skinnier with performing better.

Many participants talked about the social side of running and how this influenced them to start running, continue running and/or run more competitively. Having others to run with can provide a sense of accountability to train, but also a source of comparison. In some instances, comparison had a positive influence on participants and in other instances had a negative impact. Participant 9 initially did not join a running club because she did not see herself as fitting the mould that other club members appeared to. However, joining a club made her realise there were a range of members, all with different goals and body sizes.

“It wasn’t until I joined [running club] and saw that the club was full of all sorts of types of runners, from elite speedy runners to your everyday social runners, and all different sizes. Sure, most people are lean and muscular and quite fit, but there are also people who look like

me. And I remember thinking that if they were in a running club and they looked like me, then surely I could belong to a running club and that surely I, too, looked like a runner."

Joining a running club provided participant 9 with a sense of belonging and reaffirmed that she was a runner regardless of how she looked. On one hand, comparison between participant 9 and the 'elite speedy runners' initially put her off joining a club and may have led her to giving up running completely. On the other hand, comparison helped her to realise that there were a variety of body types amongst club members and that she could be a competitive member. This example illustrates the dual nature of comparisons, they can have a positive and negative impact.

Other kinds of comparison were also positive for participants, such as when participants saw other women who looked like them running (in person or on social media). Seeing women like themselves training and competing made participants feel like they belonged as runners as well. Participant 9 talked about when she was featured in a photo, amongst only 20 posted as part of an event's official media release, this legitimised her position in sport and made her feel good.

"I was like, what?! I never make those photos, my photos are always shit and so the fact that I made it in there and they chose to post it.. I was like, okay, this is good. They're showing different people competing."

However, like other participants, she talked about the negative impact photos from races can have. Participant 9 frames this as a personal battle, where she is fighting herself over the way she looks and conscious of how others view her running body.

"I've always battled with myself over my weight and my race photos were consistently horrific. Nearly every photo showed me heavily landing on my feet, shoulders slumped, legs jiggling, and generally looking pretty terrible."

This demonstrates how widely experiences varied, even within participant's own lives. What in some instances was positive and reinforced a feeling of belonging in the sport could also be experienced negatively. Further, this excerpt from participant 9 shows how critical women can be of their own bodies in a running context, illustrating how while sometimes others' comments and appraisals impacted participants, their own self-assessments could also be quite harmful.

The measurability of running plays a big role in how athletes compare themselves to those around them. Participants who competed in trail and track races discussed the differences between the two types of events. In track running, every track must conform to the same measurements; therefore, a race completed on a track anywhere in the world can be compared to any other race. Participants talked about how trail races were more inclusive of all body types and had less of a focus on the exact time being run and more on the achievement of the completing the race itself. Participant 10 summed up the differences in her experiences between trail running and other shorter distance races on road and track.

"I think that trails, for me, has been far more inclusive...far more inclusive across ages, genders, sizes as well. There's a big diversity of sizes in women and men in trails. Um...and maybe that's part of the difference in attitude between trails, we're out there to-to be on the trail, and it just so happens that we're moving fast in order to get across the trail...versus when you're on the track or you're on a shorter distance where every second, um you're shaving off [time] as much as you can everywhere."

Track races, where the time run is more comparable and important to the overall achievement of the race appear to be where participants look for any avenue which might take time off. This may be why participant 10 indicated that trail races are more accepting of a variety of people and body sizes. A greater level of inclusivity in trail running likely results in a wider range of body types competing meaning that runners like participant 10 may feel more like they belong.

Fitting Expectations

The participants in this research had an array of experiences from looking like a runner to not looking like a runner and everything in between. Most participants could identify specific instances when someone had told them they did not look like a runner, but all had felt at some point that they did not belong. Participant 11 described how she questioned if she fit the inclusion criteria for study as she could not recall anyone explicitly telling her she did not look like a runner.

“When I first thought about this statement and how I identify with it, I realised no one has ever actually said those words to me [...] In fact, multiple times random people in the street have come up to me and asked if I am a runner, which always made me feel really good about myself. Yet, when I really started to think deeper about the statement, I realised it doesn't matter that no one has said it to me. Despite the fact that people have identified me as a runner based off my body type, I have felt like I don't look like a runner many, many times.”

This shows even when participants fit what people expect runners to look like and are identified by others as looking like runners, they can still feel that they do not fit the ideal. The pervasiveness of body expectations in running means that even in the absence of explicit comments, participants might still question their belonging. Participant 9's response also shows how comments from others about fitting expectations can reinforce societal and running ideals. Like participant 11, participant 7 could not identify anyone in particular making comments about her not fitting ideals, but instead blames running culture as a whole for influencing how she feels about her body.

“From commentators commenting on a runner's appearance, athletes to one another, coaches to their athletes, or just the lack of diversity seen in pro runner's bodies, the toxic pressure of looking like the ‘ideal’ runner is unavoidable. While I am thankful to have not experienced a toxic coach, or unnecessary, hurtful comments from the mouth of a commentator, I have still not avoided the pressure of looking a certain way in the sport of

running. Running culture has greatly influenced the way I view my body...That is to say, I cannot deny the correlation between my focusing on my running, and the development of my disordered eating habits.”

Participant 7 revealed in her response a relationship commonly cited by participants in this study between their running and disordered eating behaviour. She links running, and the body expectations that running culture promotes to the development of her unhealthy relationship with eating. Participant 7 identified running culture as influencing her expectations of her own body. Participants’ relationships with eating will be discussed in more detail under the theme *Weight and Eating Behaviours Have an Impact on/are Impacted by Running*.

Theme 2: Running is Part of my Identity

Participants indicated that running was a big part of their lives and intertwined with their identity. This is perhaps unsurprising as participants described how being a competitive runner requires a significant amount of dedication and requires training most days, if not every day. It involves more than just the time spent running; runners must think about what they are doing in their free time, how they are recovering, and how this might impact their running performance. As a result, participants noted how running competitively means that running is more than just a sport or something to do to keep fit, but rather a part of who they are. When they do not feel they fit ideals or are told they do not fit ideals by others then this can demean their sense of belonging in the sport and their sense of who they are. Being identified as a runner impacted their subjective and embodied experience.

It is Hard to Balance Running With Life

Running is a time-consuming sport, especially for competitive runners, like many of the participants. This can make it difficult to balance running with other important things in life and can

leave runners with little time to do much other than run, recover from running, and think about running. Participant 5 describes how having to think about what she is eating in addition to all the other things she already does relating to running is too much.

“From trying to control that extra factor, because you’re already going hard in your training, you’re already getting the sleep and recovering um, when you start adding nutrition into it as well...to a point where you’re tracking everything and going hard out with that. That’s a lot of your time in your life.”

Here, participant 5 demonstrates how she had to juggle a number of running related variables that can be time consuming and leave little room for much else. With running occupying so much time, other elements of participants’ health was at risk of deteriorating at times. A handful of participants brought up the multi-dimensional nature of health, with Participant 6 specifically referring to Te Whare Tapa Whā, a Māori model of health created by Sir Mason Durie (1985), in relation to her experience with running and Covid-19 lockdowns.

“everyone talks about Te Whare Tapa Whā [...] And it's so much about that when you realise...you kind of used to think of [lockdown] in short term, but having had that for a whole year. When you lose that social side [...] then you realise that your physical health is hugely declining, because you're so...stressed and your emotions are wack, you realise that running doesn't de-stress you and in fact, probably added pressure, because you could see that your running was not...going well. And you're like, but I have all this time to be running.”

This description shows how running can sometimes contribute towards a more balanced wellbeing but in times of stress, and in this case during a pandemic, running can also contribute towards stress. Te Whare Tapa Whā proposes that there are four dimensions of health which must all be met for a person to be well. These dimensions are: taha tinana (physical wellbeing), taha hinengaro (mental wellbeing), taha wairua (spiritual wellbeing) and taha whānau (family wellbeing). Running

performance can be an indicator of ill-health because performing well is multi-faceted and requires more than just thinking about an athlete's taha tinana. Participant 11 talked about how she had seen success in her running when coached by people who thought about her as more than just an athlete.

"I've seen success with myself with coaches who don't just care about your running. They see you as a person and care about other things that go on in your life and I just think... So many coaches just don't give a shit and that's so bad, because you're not going to have a high performing athlete, if all the other things in their life aren't going well. And I've seen that in myself, I've seen that in other people [...] but I think that the responsibility that you should assume as a coach, you're a life mentor as well."

This participant makes the point that coaches play a significant role in their athletes' lives, a role which surpasses being a person who sets their training regime. Many other participants shared this sentiment and felt that it was important that coaches care about their athletes aside from merely a performance standpoint. Participant 11 also alluded to the fact that there are coaches out there who do not think about their athletes holistically, and this ends up limiting the athlete's ability to perform at a high level. Furthermore, participant 11 deemed it a "responsibility" of coaches to care about more than just their athlete's running.

Participants in this study were at a variety of life stages, with some having just finished high school, some pursuing careers and some with children. All barring one of the participants were not professional runners, so while running was something they took seriously, it was also something which had to work in with other requisite activities (e.g., work). Participant 1 talked about how difficult it was for her to come back to running after having a child and the lack of support for women in sport in New Zealand to do this.

"I had a child [recently]. Obviously when you have a child your body changes, it's not like your stomach grows and everything else stays the same [...] the comments after that were

*quite hard [...] like 'Oh wow I didn't recognise you because you look so much healthier now' [...] my kid is three months old and, like I'm getting no sleep, I'm tryna figure out how to be a mum, I'm tryna figure out how to get back to some kind of training, or fitness and..I'm literally surviving, and I have people talking to me about goals for my skin folds. And I'm like" *laughs* "[...] this is not something we should be looking at right now [...] to me these are people that should have known so much better, and... they just didn't, and I think that part of that is because, in a lot of sports in New Zealand, we don't have that background of like women like doing the sport at a high level, having a child and then coming back to that sport at a high level."*

Participant 1 highlights here the focus in high performance sport on body fat and how a person looks in relation to their ability to perform. Having a child drastically changed the way her body looked and meant others no longer saw her as a runner. Not being seen as a runner in this instance was also associated with “looking healthy”, suggesting that a typical runner’s body type is so lean that it verges on ill-health. Many other participants shared similar thoughts about the association between an unhealthily lean body composition and being a runner. Participant 1’s performance is also seen as the focus, rather than providing the support needed in other areas of her life to allow her to train again now that she is a parent. The impact of becoming a parent was talked about with a couple of participants; like participant 1 they noted how having children made it more difficult to fit running in around the rest of their lives. This illustrates a role conflict and how all-consuming running and trying to look like a runner can be.

Impact on Health

At surface level, and as the participants shared, running may appear to have an abundance of positive impacts on an individual’s health. For example, bones can become stronger and cardiovascular fitness can be increased. Equally, as participants’ accounts demonstrated, running can

have a negative impact on an individual's health. The belief that being lighter will result in running faster can promote unhealthy behaviours, such as disordered eating in an attempt to embody these ideals and disrupt the way athletes see their bodies (Carson et al., 2021). When an athlete is not providing their body with sufficient energy, they may develop symptoms of the female athlete triad or RED-S (Areta et al., 2020). One symptom of RED-S is abnormal menstruation, which several participants discussed.

Lack of menstruation has often paradoxically been seen as a performance enhancer amongst runners and a sign that they are training hard, as participant 2 describes. Participant 2 talked about how she believed not having her period was a good thing and how it took a doctor intervening for her to realise it was a health crisis she needed to address.

"I hadn't had my period for about two years at that stage, which I thought at that point was great, it was just 'cause I was training, didn't have it, didn't have to worry about it, it was awesome. The doctor there basically just said, "What!?! you haven't had your period for two years that's...not good". And he made me feel bad about it, as if it was like some kind of disease I had which, I now know why he was like that."

This experience with menstruation illustrates the lack of education in young sportswomen around the importance of their periods. Participant 2's feelings about not having her period shifted during the interaction with her healthcare provider from thinking it was great not having her period to feeling bad about it. Participant 7 is intimately aware of some of the repercussions of her total lack of menstruation as described through the injuries she has experienced in the last 5 years.

"Nearing five years on from my initial experience of the body pressures of running, with countless injuries, and still, a lack of menstruation (ever), I have my fourth stress fracture [...] this injury has occurred, despite battling the intrusive desire to lose weight for "performance" with the knowledge that adhering to this belief would lead to nothing but poor

health [...] It just goes to show, my current injury is a result of the lasting impact of overwhelmingly toxic sporting culture, and the chronic under-fuelling it encourages [...] Despite what the culture of running encourages, my health is more important to me than any PB.”

The impact of body expectations in running can have long term consequences which has restricted participants from being able to train and compete. Like many participants, participant 7 experienced various interrelated health issues, which she believed stemmed from body pressures. Despite knowing the negative impact of trying to conform to ideals, she constantly feels pulled to lose weight and fall back into disordered eating habits. What stops her from engaging such habits is the knowledge that her health and wellbeing would be at risk, even if that means forgoing new personal bests. Participant 11 summed up how this desire motivated her to not develop habits which could inhibit her ability to run.

“Something that is sad but has also helped me is seeing what destructive habits can do to runners’ careers. They can end them forever. I want to keep running for a long time and worrying about my weight will not be conducive to that, especially if I act on my worries.”

Many in this study expressed the desire to be able to run for the rest of their lives and realised that in order to do so they could not succumb to the pressures to be thin. This tension pervaded participants’ conceptualisations of the relationship between health and running. Comparison plays a role here again, where participant 11 can see what could happen to her if she followed the same path as other runners have. Several other participants talked about the impact “destructive habits” had on their fellow athletes’ lives and how these acted as warnings and deterrents for them. Similar to participant 7, participant 11 highlighted how easy it would be to for her to slip into disordered eating habits, compared to how difficult it is to refrain from them as a woman runner.

Theme 3: Weight and Eating Behaviours Have an Impact on/are Impacted by Running

Weight and eating behaviours were dominant themes throughout participant's interviews and written responses. Embedded deep within running culture is the idea that in order to be successful, you must be thin, encouraging women to restrict what they eat and then to train excessively to reach an idealised/perceived body (Carson et al., 2021). Weight is often seen as the main variable influencing one's ability to run fast and seen as a primary controllable variable for athletes and coaches.

Eating Disorders/Disordered Eating are Part of Running Culture

Disordered eating is common amongst women runners and most participants had personal experience or knew of peers who had displayed these behaviours. Participant 7 highlighted how her disordered eating impacted how she felt about her body and running.

“I do know, that when I did lose that weight, I gained a horrific relationship with my body and the sport of running. My loss of weight meant that I felt weak at training, yet was praised for my protruding abs.”

The relationship between what she eats and her running is symbiotic, where what she eats is both impacted by and impacts on her running. While she experiences some negative feedback from her body, this feedback is drowned out by the positive reinforcement from others through praise/s about the way her body looks. This demonstrates the value placed on others' opinions and how these can reinforce disordered eating behaviours. Participant 5 talked about this in relation to how comments from coaches about nutrition and weight can impact what and how an athlete eats.

“And then they make a comment about...like your food intake or your weight and [...] if I can go lactic and die on the track, I can go home and not eat that cake tonight, like that's easy'.”

Coaches play an influential role in athlete's lives and can impact their eating behaviours, as participant 5 discusses – comments from coaches can have an impact on behaviour. This quote also

illustrates the intensity of the requirements imposed by coaches; she notes modifying her diet and weight as easy compared to the training she is given. This framing shows how the participant is working through conflicting thoughts and feelings about this advice and how to apply it. Training and competing in running events is hard work and participant 5 suggests that when this hard work has already been done in training, making adjustments in nutritional intake does not seem like much of a sacrifice.

More recently, there has been a lot more openness and talking around eating disorders and disordered eating in the running community. Influential runners have opened up on their social media accounts about their personal struggles and in a local context athletes like Rosa Flanagan have talked about the issues they have faced (Ryan, 2018). Participant 11 talked about how she has felt the need to show she does not have an eating disorder because of their prevalence amongst women runners.

“I'm glad that people are talking about eating disorders a lot and like...but also it's getting to the point where it's so in my head, like, I'm so scared of having an eating disorder, that it's like taking over how I'm eating. And I'm always like, well, I need to eat that candy bar, I need to eat, like McDonald's tonight, because then I don't have an eating disorder.”

Participant 11 shows a potential negative side effect of people being more open about their struggles with eating disorders and disordered eating. Like other participants indicated, disordered eating has become almost a requisite part of being a runner. At the same time, it is something that participants do not want because of the negative consequences. In participant 11, this manifests in her feeling pressured to prove to others she does not have an eating disorder through her eating habits, such as eating lollies or fast food. There is intentionality in her behaviour as she wants to reassure herself she has healthy habits and that she wants to show others she is healthy. However, through proving that she is healthy and has a normal relationship with food, participant 11 has developed a disordered relationship with food.

Emphasis on Weight

Many participants talked about the emphasis on “thinner is faster” in running. There is evidence to support that body mass (Sedeaud et al., 2014) and fat mass play a role in performance (Auersperger et al., 2009). However, these are often treated as the only factors in determining performance. In reality, there are many different variables at play when it comes to running fast. Participant 5 recalled her frustration at seeing so many athletes around her losing weight as a means of performance enhancement.

“I know weight impacts performance, no one in our sport is blind to that. At the same time, seeing so many people treat weight loss like it’s the ultimate shortcut to endurance performance is so so frustrating. It ends the same way every time, with girls...burning out early and suffering on the road back to a peak they could only reach when they were deathly underweight.”

Those who lose weight often struggle to ever return to the form they were in when they were a low weight. This may be because they have caused irreversible damage to their body through chronic under-fuelling combined with over-training. However, this might strengthen the belief in the association between weight and performance. Participant 1 talked about how when she has been lower body fat, this has not correlated with better performance.

“I think there is a perception out there that you, you have to look a certain way, and you have to have chiselled abs and a low percentage of body fat to really be successful and, in my career, that hasn’t always been...well it hasn’t been true. Ya know, me being lighter or with less body fat hasn’t actually resulted in better results. It’s actually more likely to result in worse results.”

A number of participants in this study had been, were currently, or were going to study in the USA on athletic scholarships. Getting a scholarship to attend university in the USA is a huge achievement and one that is gained through hard work and high achievement in running during high school. Going over to the USA is an exciting opportunity, but, as participants attested, also one that comes with a great amount of pressure to perform well in order to justify being on a scholarship. When the importance of weight is emphasised as it is in running, it is not surprising that this is magnified in the heightened environment of a college team. Participant 11 talked about how she became focussed on what she looked like and was scared to gain weight.

“I was so worried about gaining weight because of American food and the dining halls. Every night I looked in the mirror at my stomach to check I wasn't getting fat. I went home at Christmas and asked everyone if I still looked the same, and they said I did. Then I went on birth control and I did start gaining weight, and eating a lot more. I didn't feel like a runner at all. That feeling stuck with me all through college and I know it hurt my results in running, because it wasn't true.”

Gaining weight impacted participant 11's feeling of belonging as a runner and ultimately that feeling, as opposed to the weight gain is what stopped her from performing her best. Moving to the USA meant that participant 11 was constantly surrounded by an abundance of food, but as an athlete she was expected to restrain herself as to not gain weight. She was preoccupied with the way she looked and wanted others to reaffirm that she still looked the same and still fit running ideals. Participants commonly conflated weight with performance, but few indicated they experienced performance benefits when they were thinner and none saw performance benefits long-term.

Running Clothes Impact how I Feel About my Body

Participants noted how the clothes worn during competition and training could impact how they felt about their bodies. For instance, they spoke about the tight-fitting uniforms that left them

feeling exposed to speculation from others, which may also invite body weight comparison.

Participant 7 highlighted how what other women wore to competitions made it hard to ignore what their bodies look like in comparison to her own.

“Yeah...yeah, definitely. I think like, when you go to like a...meet there's, you know, like, everyone's in short shorts, and like crop tops are a singlet and you're-you're just like, confronted with all these different...bodies, and it's...pretty hard not to compare yourself.”

As previously mentioned, competitions may be an environment where athletes are particularly vulnerable to the judgement from themselves and others. Even before reaching the start line, women may start to develop doubt in their own ability simply based off how they look compared to their competitors. Participant 6 discussed the impact of wearing a different top racing and how this has changed over her time as a runner.

“I just really used to feel faster wearing a crop [top], but I never used to worry about weight. And as I've got older, it's actually being more and more like, 'Oh shit, can I...pull out the crop? Or would I feel more comfortable in a singlet?', whereas it used to literally be that the crop was more lightweight and faster, and if it got wet, and you had your [centre] singlet on it would be like drenched and heavy. Oh, my God was awful.”

Functionality and practicality are important concepts when it comes to running clothes during competition. Do the clothes serve the purpose they are meant to? It evident the internal battle Participant 6 faces here around what uniform she should don when she races. Should she wear the more revealing uniform that makes her feel faster or the more conservative uniform that makes her feel comfortable? As she has gotten older, she has questioned her ability to pull off wearing the crop top, despite it seeming to be more practical for racing in.

Fortunately, it appears that changes are happening in the realm of running clothes to reflect the diverse nature of bodies which run. Several participants highlighted the importance of

organisations leading the charge when it comes to changing expectations around body ideals in runners and at the forefront of this are sporting brands. The models these brands choose to promote their clothing and the clothing they make can have an influence on if an individual sees themselves as looking like a runner. Participant 9 talked about how she is seeing changes in some brands and how not just showing elite athletes, but everyday runners influence her sense of belonging in the sport.

“there are some brands that are really good about using A) making clothes for other sizes, but B) using models and influencers that are all different shapes and sizes, and all different capabilities and levels, not just the elite athletes.”

This emphasises a key point: that everyday runners of all capabilities are the ones that make up the majority of runners. However, the ones that are portrayed by sporting brands are often only the elite, or people that fit the stereotypical runner’s body. This leads to the promotion of a specific ideal that is not representative of the range of body types who run, which can make it difficult for those who do not feel like they fit these ideals to feel like they are runners.

Theme 4: Change is Needed for Future Generations of Female Runners

The final theme illustrates the importance participants placed on the need for change in the future. Participants expressed a desire for meaningful changes to be made so that the next generation of female runners do not experience the same pressures around body ideals. The participants came up with several ideas which could be implemented, such as *Support and Education is Needed* alongside *Research is Needed*. Many also expressed that they *Want to be a Part of the Change*, and some were already enacting change through challenging those around them who make comments about women’s bodies. They recognised body ideals and expectations were a problem for women in running and they wanted to do whatever they could to help. The first step for many of them was taking part in this research. Most expressed a real interest in the results of the research and asked to be sent a copy of the findings.

Support and Education is Needed

Many participants recognised that for change to happen, support and education for a range of stakeholders is needed. Most prominent among these stakeholders were coaches. Coaches need support and education in order to support and educate their athletes. Several participants recognised that running coaches are frequently older men who maintain old-fashion perspectives about women in running and what their bodies are supposed to look like. Comments made by coaches about athletes' bodies can impact an athletes' perceptions of their own body (Coppola et al., 2014), and ultimately the behaviours they employ to modify their body to meet their coach's expectations (Lauer et al., 2018). When coaches have outdated ideas about how to improve running performance, this can negatively impact athletes.

*“But a lot of coaches, I wanna say are..I don't wanna say the word old..but older men”
laughs “And so, for them to have conversations about long term health, about periods,
about having children, about...all these things that are gonna benefit someone long term...is
real challenge, like they don't know how to do that, because they've never had to do that.”*

Gender of support staff, such as coaches, is a common barrier against open communication about menstruation in a high-performance setting (Heather et al., 2021). As participant 1 pointed out, when coaches are male, they may not have had personal experiences with many of the long-term health effects of under-fuelling and therefore are often not equipped to have conversations on this topic with the women they coach. Several participants talked about this in relation to wanting to coach themselves further down their athletic journey. Participant 7 pointed out that a coach's ability to work through issues related to body ideals is just as important as their ability to work through an injury with their athlete.

*“I think, if a coach can work around an injury and guide an athlete through an injury, then
they should...be able to guide them through body issues [and] body image issues.”*

The importance of coaches has been acknowledged previously in this analysis, but this participant's quote specifically points towards a coach's ability to work through body image issues with their athlete. This highlights the multi-dimensional nature of performance that relies on a number of factors aside from fitness in order to perform. Participants also recognised that athletes (like themselves) are key stakeholders needing to be educated and supported in order to overcome body ideals and expectations in running. Participant 6 identified that education in areas like nutrition would be beneficial for women.

"I think education in areas of nutrition, 'cause there's a lot of body image stuff as well that personality is wrapped into. So, I think that's really interesting if you actually have the tools to go kind of do something actively, then...you wouldn't rely on these people's opinions...and limited experience in something to sway you completely."

Education could also mean that instead of relying on others, who may be promoting misinformation, participants can rely on themselves as a source of information. That way participants will then be able to correctly inform other runners in areas that may help them to have a healthier relationship with their body.

Research is Needed

There is limited research available on physiology and performance with sportswomen and many participants saw this as an area that could be improved upon for future generations. Several participants mentioned Dr. Stacey Sims whose research is focussed on female athletes, in particular her TEDx talk 'Women are not small men'. Participant 4 talked about how she has seen some changes in body types amongst women runners and puts that down to an increase in research with women.

"I think strength training is something like the science behind it is a big thing, it's now recommended and it's shown that it makes improvements. Whereas, before people would've

been like 'I'm not gonna lift a weight because I'm gonna gain weight and it's not gonna be good', but there's so much science and studies behind it now that it's so good for injury prevention and power and it helps with your running. So I think that's one thing that has changed women's body shape also diet, food. Again, there's a lot more research behind like food is fuel etc.... so I think maybe women's diets, or athletes' diets in general are a lot better and the access we have to like nutritionists and resources about that so that's helping people's bodies stay maybe a healthier weight and maybe access for people that do have like any eating disorders to help."

Participant 4 demonstrated how concern about gaining weight is a central thought for many women who run and is very much believed to be associated with overall running performance. It is evident that there is potential for positive impacts that further research with women could have to fight against misinformation and promote healthier practices which would ultimately lead to better performances in women. The fight against misinformation is also aided by professionals, such as nutritionists who can help participants and women runners to better understand what they need to eat in order to fuel their body effectively.

Many participants applauded me for doing research on women runners in New Zealand and used this to highlight the lack of research on women in sport in general. They also highlighted the lack of researchers who really understand the population they are working with. Participant 1 thought my embeddedness within the running community put me in a better position to complete this research.

"I think you're doing some really good stuff and I'm...yeah I'm really excited that, you know, more people who...I guess involved in the sport as well, are getting involved? Like, that's what excites me, because I think sometimes we've had this gap between...I guess the science and the researchers and then like what happens on the ground."

I Want to be a Part of the Change

Some participants were already contributing towards a change in the dialogue around the body ideals in running through challenging those around them. For others, being part of this research was their first step in contributing towards change and many expressed wanting to do more to change body ideals. A number of participants talked about the need for having more positive role models in the sport, with some participants already taking up that position.

“there’s a 15 year old girl that’s on fire right now that trains with me [...] I’m trying to be a really good role model for her. If my coach makes inappropriate comments in practice, I’ve started doing this thing where I’ll be like ‘cool’ and I’ll roll my eyes and we’ll kind of laugh at him. So we’re starting to—I really wanna disassemble the power that he has around talking about girls’ weights.”

Small actions like participant 5 mentions are all it takes to catalyse change in the way people talk and think about weight and body ideals. By questioning her coach’s comments, she not only begins to ‘disassemble the power that he has’ but also provides a positive role model for the younger athlete in her training group to look up to. Similarly, participant 11 questioned people’s preconceived ideas about what they think runners should look.

“I have tried to also make it a point to say that to other people, it’s really uncomfortable, but if someone says, ‘Oh, she doesn’t really look like a runner’, I’ve always now tried to say, ‘hey, that’s not cool. Let’s not say that anymore. Because she’s really, really good’. Or it doesn’t even matter if she’s...not really good. We’re not talking about men like that, so why do we have to comment on every single woman on the starting line’s body it just makes me...really mad.”

It was common among participants to find it uncomfortable to question other’s preconceived ideas about what a runner should look like. However, each of these participants saw it important enough to deal with the social awkwardness associated with challenging someone when they did

express a preconceived ideal of a runner's body. Participant 11 also recognised that an athlete's gender often determines whether or not comments are made about the way they look, even recognising her own predisposition to commenting on other women runners' bodies. Many other participants noticed how women runners seemed more likely to have comments made about their bodies than men.

One of the last questions in the interviews was if participants could think of anything that would have helped them when they started thinking and/or being told they did not look like a runner. Almost all participants struggled to think of anything that could have helped them. This may be indicative of the pervasive nature of body ideals in running that leaves little room for question. It may also be indicative that times have changed, like participant 2 suggests.

"I don't know whether anything, at that point in time, would've done anything. I think now that people are talking about it, if that had've happened back then, I think that would've helped. But our kind of running community or society just wasn't talking about that, at that point. Um so yeah, I think that would've helped. But yeah, like I said, times change."

Participants not being able to think of anything that could have helped them shows how overwhelming the belief that lighter equals faster is in running. Promisingly, like participant 2, many participants suggested that the culture is changing, and they were able to think of how things could be different for future generations of women runners.

Chapter 4: Discussion

This research aimed to explore women runners' experiences of body expectations and ideals using free writing and semi-structured interviews. Both modes of data collection produced rich and meaningful data which helped to shed light on a prevalent issue amongst women runners, which is often overlooked. This research provided a unique opportunity for the participants to talk openly about body ideals in running, whilst maintaining a sense of confidentiality. Participants shared nuanced narratives shaped by their differing life and sporting experiences. These narratives converged through shared experiences of feeling and/or being told 'You don't look like a runner'. Underscoring these shared experiences were themes and subthemes, which I established through reflexive thematic data analysis. Even under the same subtheme participants' experiences differed greatly, illustrating the complexity of the relationship between a sportswoman and her body.

Many participants expressed that being part of this study gave them an opportunity to contribute towards changing the narrative around how women runners are 'supposed' to look, highlighted under the theme *Change is Needed for Future Generations of Female Runners*. However, participants also recognised that for meaningful changes to be made, this effort needed to be supported by others. This is because of the role that others play in perpetuating body ideals in running, illustrated under the theme *Those I am Surrounded by Impact how I Feel About my Body*. Running was more than just a form of physical activity for participants. Therefore, the implications of not fitting ideals transcends further than the sporting sphere of their lives because *Running is Part of my Identity*. *Weight and Eating Behaviours Have an Impact on/are Impacted by Running*, shows how participants embody ideals imposed upon them by running culture.

Embeddedness of Body Ideals

The idea that a runner must be thin in order to be fast is embedded deep within running culture (Carson et al., 2021; Gross, 2020; Tenforde et al., 2015) and many participants expressed how

this fixation on weight negatively impacted their relationship with their body and running.

Participants' stories made evident how weight may be a factor influencing performance (Auersperger et al., 2009; Sedeaud et al., 2014), but it is not the sole determinant or a shortcut to success. There are many other factors, relating to a runner's biomechanics, physiology, psychology and training, that determine if an individual will be successful as a runner (Bale et al., 1985; Cunningham, 1990; Wilber & Pitsiladis, 2012). Participants noted how their fixation on weight and body fat, and the achievement of looking like a runner, did not result in better running performance. For some, focusing on how they looked detracted from their athletic performance (Lauer et al., 2018). This may be related to their performance being inhibited by being in a LEA state (Wasserfurth et al., 2020). However, when participants lost weight and experienced negative performance outcomes, these were mediated by praise from others about how their body looked. This revealed a tension between embodying running ideals and a decreased performance outcome. Wanting to look like a runner was driven by the idea that obtaining this idealised body would result in an increased performance; even when that was not the case for participants, fitting the ideal was still encouraged, signalling that physical appearance may be considered a key element of sporting performance.

When participating in sport, the body is objectified, closely watched, and seen as modifiable (Besiner & Brownell, 2012). As biocultural creatures, sportswomen have the ability to manipulate their bodies to achieve sporting goals (Thorpe et al., 2021). If the way a runner looks is conflated with how fast she can run or her belonging in the sport, this can lead to believing that making changes to her body will result in better performance outcomes. The embodied consequences of such thoughts influenced participants' eating behaviours, with a number of participants talking about how they engaged in disordered eating habits in an attempt to conform to that ideal. Those who did not mention disordered eating habits may have still been engaging in them unknowingly and be displaying "long-term, chronic restriction" (Cobb et al., 2003, p. 716). That several participants had experienced disordered eating is not unexpected given that a majority of elite female athletes in New Zealand feel

pressured to change the way they look to fit sporting ideals, with many developing some form of disordered eating (Heather et al., 2021). Despite being anticipated, the disordered eating behaviour amongst participants is still highly concerning.

Gendered Discourse

Participants shared how gender mediated their experience as a runner. Being a woman runner meant they faced different experiences and challenges to what they saw with men occupying the same space. In particular, participants talked about how announcers, coaches, and spectators commented on their bodies, but they did not see the same comments made about men. This is especially evident in a competition setting, where athletes are under immense pressure to perform and subject to scrutiny (Lauer et al., 2018; Stoyel et al., 2021). A few participants also recognised in themselves a predisposition to comment on other women runners' bodies, despite being aware of the negative impact similar comments had on themselves. This could suggest that commenting on women's bodies is such a normalised part of running culture that athletes themselves partake despite being able to recognise the negative effects of such comments.

Many participants also pointed towards gender of support staff, namely coaches, and the need for more women coaches. This is supported by research which suggests that coaches are a source of body expectations (Carson et al., 2021; Coppola et al., 2014; Kong & Harris, 2015; Lauer et al., 2018). Conversely, coaches can also be a confidant for their athletes, and provide them with support around health issues and gender may factor in here as well. Sportswomen who have women coaches may be more likely to talk about personal topics (Heather et al., 2021; Officer & Rosenfeld, 1985), in addition women coaches may be more aware and open to talking about menstrual irregularities with female athletes (Sherman et al., 2005). Participants talked about how male coaches could be inept at dealing with women's health issues, like menstruation, because they were not problems they had to deal with personally. However, there is a lack of women coaches at the highest level of sport in New

Zealand (McFadden, 2021). This should signal to organisations like Athletics New Zealand that it is important to promote and support more women in to coaching roles. Several participants talked about wanting to be coaches once they were older and creating a pathway that would enable them to do so could have great benefits for future generations of women runners. As a couple of participants pointed out, this is already happening to some extent, with New Zealand runners Esther Keown and Lydia O'Donnell starting a running coaching business called Femmi, which is focused on women coaching women and periodisation of training around menstruation. Their goals are aimed towards empowering and educating women runners to work with their bodies and physiology for performance and long-term health (E. Keown, personal communication, November 17, 2021). Furthermore, this research and literature also indicates a need for those men coaching women to be educated to enable best support of their women athletes.

Vulnerability and Comparison

The competition setting proved to be a pivotal location for others to impact how participants felt about their bodies. Competitions are a vulnerable time for athletes, where they are on display and are trying to show how hard they have worked in training. Athletes will often compare the way their bodies look to their competitors as a means of determining sporting ability (Stoyel et al., 2021), an example of social comparison theory (Festinger, 1954). Tight fitting and often revealing race uniforms were also a source of concern during competition for many participants. Some talked about the tension between the practicality of wearing such uniforms and how wearing tight fitting clothing made them feel like their bodies were on display. This may be because tight fitting uniforms can heighten a runner's ability to compare their body with other runners (Nemeth et al., 2020; Stoyel et al., 2021), even before they reach the starting line. Many participants talked about upward comparison and comparing the way they looked to others who were performing better than them to see what they could do differently, with the most obvious visible differences being related to body composition. Participants also discussed how others, including coaches and other spectators, compared them to

other runners and in one instance, set a 'race weight' that if attained would result in them being faster. Both forms of comparison often lead to a conflation between weight and ability to run fast, with participants not having talked about changing other aspects of their running, such as training, race nutrition, hydration or recovery. Evidently, there are a number of variables which sportswomen must juggle in order to perform at their best and participants found these time consuming and difficult to juggle. A few participants used Te Whare Tapa Whā as a lens to understand how they balanced their life and their running. Te Whare Tapa Whā positions health as multidimensional, where all dimensions must be balanced in order for overall wellbeing to be achieved (Durie, 1985). Similarly, participants recognised that when one of dimension of their health was lacking, they experienced the adverse consequences in their running performance. Participants found that when coaches cared about them as a whole person, rather than just an athlete, they saw the greatest success in their running performance.

In reflecting on her own experience and projecting onto what she imagined other women runners may have experienced, one participant spoke about how easy it was to develop restrictive eating habits as a runner. Athletes who are extremely dedicated to achieving performance goals could be seen as portraying risk factors for developing eating disorders (Thompson & Sherman, 1999). This may help to explain why some participants saw being a runner as almost synonymous with having an eating disorder and/or disordered eating behaviours. The relationship between qualities that make a good athlete and disordered eating practices makes it difficult for participants to navigate their relationship with running and appropriate fuelling.

Almost all participants talked about how they did not think others making comments about their bodies were being malicious or meant their comments to be taken negatively. However, research has shown that comments from coaches can change the way an athlete views her body (Coppola et al., 2014) and can alter her behaviour to try and meet coaches or external perceived expectations (Lauer et al., 2018). Even though participants thought critically about the intention of

comments made about their bodies, they may have still felt bad about the way they looked and become demotivated, upset, and angry as a result (Heather et al., 2021). Comments from others, regardless of intent, were memorable events for participants. Frequently, participants could recall specific dates, races or events associated with a comment even if these occurred years prior to their interview. It is therefore important that other people in women runners' lives are considerate of the impact their comments or suggestions may have and work towards cultivating a body positive culture.

A couple of participants discussed the impact of having children on their running, with one participant identifying that pregnancy changed her body and when trying to return to sport her body became a body for others, meaning it was seen for its "bodily capital" and what it *could* achieve if it were smaller (Gross, 2020). The nutritionist the participant was working with tried to encourage her to modify her body back to the body she had before having a baby, see also (Besiner & Brownell, 2012), aligning with the HPSNZ notion of a "performance body". She was also seen in this context as a biocultural creature (Thorpe et al., 2021) and an example of body for selves (Gross, 2020), with onus put on her to change her body in order for her to come back to high performance sport, in addition to juggling being a new mum. She suggested that there needs to be more support in place for sportswomen who want to be parents to help them navigate an unfamiliar challenge. The gendered dynamics of sport may also play a role here, with women traditionally occupying the role of mother and carer for children and men expected to provide for the family. Therefore, sportsmen would be expected to return to sport after having a child and sportswomen would be expected to look after the child. Women runners may find it particularly difficult to return to sport because of the changes their bodies go through during pregnancy conflicting with the body ideals associated with being a runner.

Embodied Expectations

A couple of participants were not sure they fit the inclusion criteria for the research as they had never had anyone tell them they did not look like runners, one even talked about how strangers

identified her as a runner. Despite this, these participants still chose to take part in the research because they *felt* they did not look like runners. Sportswomen have complicated relationships with their bodies (Carson et al., 2021), with body expectations coming from a whole variety of sources (Carson et al., 2021; Coppola et al., 2014; Kong & Harris, 2015; Lauer et al., 2018; Lunde & Gattario, 2017; Scott et al., 2020; Tenforde et al., 2015; Voelker et al., 2020). Therefore, it may not always be overt comments that have an impact on women runners, but also those less obviously critical interactions. The variety of sources influencing the way women runners feel about their bodies made participants feel as though it was inevitable to give into the pressures of looking like a runner.

Social comparisons played a significant role in how participants' experiences of not feeling like a runner were understood. On one side, they did not see how they fit amongst people who were much thinner than them and on the other side seeing others who looked similar to them occupying the same space so believing they could too. It is important that women with a variety of body types are able to feel they are runners and not feel the need to modify their bodies in ways that could have a damaging impact on their health. Participants pointed out that running organisations need to take a more active role in promoting body diversity amongst women runners. This could have benefits as viewing thin models can lead to lower levels of appearance satisfaction compared to viewing more average-sized models (Mulgrew et al., 2020), so if participants saw more average sized women promoted as runners then they may feel more satisfied with the way they look while running. Some saw this already happening to an extent, through photos of all types of runners being used in race promotions and women of all sizes being used as models for running brands. However, there is still significant room for growth in this area and for further promotion of all the body types who run, not just the prototypical runner who is thin.

Participants' stories demonstrated how they continued to experience dissonance when they thought about weight and performance. While many held onto the belief that lighter would be better, they also knew that acting on those beliefs would only lead to poor health outcomes. It would seem

that without the negative health consequences associated with LEA, participants would decrease their weight, demonstrating how embedded the belief is for women runners (Carson et al., 2021). Beliefs like this are perpetuated through organisations like HPSNZ promoting an ideal body composition for performance, or a “performance body” (High Performance Sport New Zealand, 2020). In running, this “performance body” is thin with little to no body fat (Carson et al., 2021; Gross, 2020), with over half of female runners believing that being thinner will result in running faster (Tenforde et al., 2015).

Being a runner is not only associated with being thin; participants also suggested that being a runner is conflated with being unhealthy and/or disordered eating. This was not the same between running disciplines, with participants who ran both track and trail races finding the trail running community to be more inclusive. Participants suggested this may have been because in track races, athletes are focused on taking every possible second off their personal best. It would appear that body expectations may not be running specific, but running discipline specific, with races that are more measurable and time dependent (e.g., track and road) having more definite body expectations.

Health concerns were common amongst participants in this study, with many talking about RED-S, lack of menstruation, stress fractures, injuries, and eating disorders, echoing other literature in this area (Barrack et al., 2014; Barrack et al., 2021; Cobb et al., 2003; Flatt et al., 2021; Greenleaf et al., 2009; Heather et al., 2021; Hulley et al., 2007; Jesus et al., 2021; Langbein et al., 2021; Meng et al., 2020; Rauh et al., 2020; Rogers et al., 2021; Sundgot-Borgen & Torstveit, 2004; Tenforde et al., 2015). Participants talked about how difficult it was to avoid such outcomes when there was so much pressure to attain a runner’s body. They also talked about how these health concerns could have lifelong impacts on their ability to run, but also their ability to live a normal life. For some, seeing the negatives effects play out in other athletes was enough to deter them from similar behaviours. However, participants highlighted the need for more education about common health concerns and consequences amongst runners, like lack of menstruation (Heather et al., 2021).

Participants shared how they could see disordered eating and/or eating disorders being talked about more amongst women runners. At first pass, this may seem like it could only have a positive impact on women runners with people being more open about their issues and maybe more support services and interventions made available to those at risk. Participants shared how these open conversations with other runners helped them to feel like they were not alone navigating the challenges associated with looking like a runner. However, one participant highlighted the negative impact the frequency of these conversation and prominence of these topics had on her. It meant she had to think about what she was eating to ensure that she too did not develop/have an eating disorder. Paradoxically, this fixation on demonstrating to others and herself that she did not have an eating disorder led to her developing a disordered relationship with food. Social comparison theory (Festinger, 1954) would suggest that because disordered eating is so common, and now publicised, amongst women runners that they may feel like it is almost inevitable that they will develop an eating disorder.

Pragmatic Solutions

Participants proposed that more research is needed with female athletes on sport performance and physiology, as these have historically only focussed on males and the results have been assumed to be generalisable to females (Holtzman & Ackerman, 2021; Sims, 2019). Some participants talked about positive changes already evident from further research with female athletes, such as the promotion of strength training. One participant talked about how runners previously avoided strength training because it was associated with gaining muscle mass, but it is now more popular among runners because it is understood to have benefits for injury prevention and running economy. This demonstrates how pivotal research can be at changing behaviours for better performance outcomes and health. There may be untapped performance potential in women runners that could be explored in future research.

In addition to further research being needed, participants also pointed towards the need to educate athletes so that they are equipped to handle the challenges they may face being a woman runner. Participants specifically pointed towards the need for education for younger runners coming into the sport, but also recognised the importance of continued education throughout an athlete's running career. Their stories highlighted the lack of education around women's health for athletes in New Zealand (Heather et al., 2021) and also shows an opportunity for further development from organisations like Athletics New Zealand, Women in Sport Aotearoa, and HPSNZ. Participants also recognised that if coaches were educated on women's health issues, they may be able to provide better support and coaching for their women athletes.

Participants talked about how they played an active role in disassembling the power that others had over the body expectations of women runners. They did so by questioning people's ideals, calling out those making comments, and generally changing the power balance in conversations. Many talked about how this could be awkward or uncomfortable, but they saw the conversation as worth the risk. These conversations may be difficult because of how embedded ideals are in running culture and the cognitive dissonance associated with challenging the way a person thinks and acts. These acts by participants highlighted the importance to them of changing the discourse around body ideals and expectations in running. However, like many participants pointed out, their actions could only have so much impact and in order for changes to occur systemically organisations need to get behind the change in narrative.

Limitations and Future Directions

While this research presents some valuable findings and is contributing towards novel area of research, it is not without its limitations. However, many of these limitations can be viewed in a positive lens as an opportunity for future research. By only including participants who were currently competing, this study may have excluded those facing the most serious negative health outcomes as a

result of body expectations, a potential survivor bias. Those no longer able to train and/or compete may have been able to provide valuable insight as to why they left the sport or have had to stop. However, it was decided when designing the research that including retired athletes/athletes not currently competing could introduce too much variability in experiences. As one participant indicated, it took her getting severely injured and being removed from running culture for a while to realise how damaging it was to her health and wellbeing. Research with those athletes no longer embedded in running culture could be a useful direction for future research when investigating the chronic effects of body ideals and LEA states in women.

A further limitation is that men were excluded from this research. Transgender and non-binary runners may have also felt they did not fit the inclusion criteria. It would have been interesting to compare and contrast experiences amongst genders. While it is assumed that women have more body expectations placed on them, it may be that genders embody those expectations differently. Exploring these potentially divergent experiences within the same sport may promote new ways of mitigating the ideals and expectations placed on sportspeople. Additionally, future research could look at including a wider range of sports with current research from within New Zealand suggesting that sportswomen from a variety of sporting codes experience pressure to fit sporting body ideals (Heather et al., 2021)

I knew some of the participants well and had never met other participants prior to our interview. This may have impacted how much participants were willing to disclose and may have affected what I talked with them about. Some participants that I knew well I had talked to about my research before they had signed up and we had discussed topics that I later brought up in our interview. However, this was an inevitable consequence of being part of the group I was researching in a reasonably niche and tight-knit community. Being part of this community helped me in many ways, from ease of recruitment to understanding the issues within the sport, so this may not be a limitation to study data collection.

A majority of interviews occurred over Zoom. Originally Zoom was an option as a means of 'Covid proofing' the research, so regardless alert level, I would be able to go ahead with interviews. However, having Zoom as an option made it much easier to schedule interviews around participants' schedules and meant I could engage with participants from all over New Zealand and some based overseas. Having interviews occur in different settings may have influenced what participants were willing to disclose and may have meant I missed certain mannerisms or behaviours that would have been more obvious in person. Internet connection was another variable at play during Zoom interviews and at times meant I missed what participants said. Participants had the opportunity to read over their transcripts to ensure they represented their experience, only one chose to do so and did not make any changes.

I developed as an interviewer throughout the course of the research project. To begin with, I was inexperienced and as a result my interviewing skill and style changed as the research progressed. Therefore, those participants who I interviewed at the beginning of my research likely had different interview experiences than those near the end of interviews. Despite these differing experiences, I likely covered similar content between participants due to the similarity of questions asked. In addition, participants were given the opportunity at the end of their interview to talk about any topics they thought were important that we had not covered.

Some participants went into far greater depth in their free-writing response than others. For example, one participant wrote two lines and others wrote several paragraphs. As a result, I had considerably more information to guide the interview schedule with some participants than I did with others. I found interviews to flow more easily with participants who had written in more detail. I was also able to delve into topics that may not have organically come up in the interview without their free writing. If I were to replicate this research, I would create a more standardised expected length for participant's free-writing.

Implications and Conclusion

This research was designed to explore how women runners in New Zealand experience body expectations and ideals, through a free-writing exercise and semi-structured interview. Overall, participants highlighted the need for changes to be made in the harming body expectations and ideals pervasive in running culture. Running forms an integral part of runners' identities and when they are told and/or do not feel like they look like a runner, this can undermine their sense of belonging in the sport and their sense of identity. If the desire to be seen as a runner is strong enough, runners may engage in behaviours such as disordered eating, which have harmful consequences to their health like being in a state of LEA. These consequences may not be understood and/or may not be seen as important compared to performing well when the athlete is readily competing. However, chronic impacts of these behaviours and health consequences could and can stop athletes from being able to run and have further life-long health consequences such as low BMD.

The findings from this study highlight the impact that external sources, such as coaches, can have on a runner's perception of her body and the role that social comparison plays in informing the image of what a runner is supposed to look like. The findings from this research help to highlight the complexities around body expectations for women runners, and potentially sportswomen in general. By adding to this area of research, it is hoped that there will be a greater awareness amongst women athletes and the various stakeholders which play key roles in their lives.

As biocultural creatures (Thorpe et al., 2021), women runners will continue to idealise thinness in their pursuit of success in running until the conflation between the two is disrupted. Further research with sportswomen as participants, more education about women specific health and performance topics, and an increase in women coaching could be part of the solution. However, such a complex problem and an embedded ideal will take time and buy-in from a number of different stakeholders in order for real change to be made. Organisations, coaches, parents, and people involved

in running should look at the messages they promote around body ideals and take an active role to change the narrative and culture of women's running.

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Appendix 1: Recruitment Flyer



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

You don't look like a runner: female athletes' experiences of body expectations and ideals

I am hoping to explore the experiences of body expectations and ideals in female middle to long distance runners for my Masters thesis research. If you identify or have identified with the statement 'You don't look like a runner' and have competed or intend to compete in middle to long distance races in the 2020 and/or 2021 season at National level, then I would love to hear from you.

If you choose to participate, you will be asked to complete a free writing task and interview which will take approximately 90 minutes. Participants will receive a \$25 New World gift card.



If you are interested in participating or would like more information, please do not hesitate to contact Anneke Grogan at Anneke.Grogan.1@uni.massey.ac.nz or my supervisor, Dr Andrea LaMarre at a.lamarre@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 21/15.

Appendix 2: Ethics Approval



19/04/2021

Dear: Anneke Grogan

Re: Ethics Application - NOR 21/15 - You don't look like a runner: Female athletes' experiences of body expectations and ideals in middle to long distance running.

Thank you for the above application that was considered by the Massey University Human Ethics Committee:

Human Ethics Northern Committee at their meeting held on **Thursday, 25 March 2021**

On behalf of the Committee I am pleased to advise you that the ethics of your application are approved.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely



Professor Craig Johnson
Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand T 06 951 6841; 06 95106840
E humanethics@massey.ac.nz; animalethics@massey.ac.nz; gtc@massey.ac.nz

Appendix 3: Information Sheet



You don't look like a runner: Female athletes' experiences of body expectations and ideals in middle to long distance running

INFORMATION SHEET

Researchers Introduction

Kia ora, my name is Anneke Grogan, and I am a postgraduate student in the School of Psychology at Massey University. I have been a competitive runner for as long as I can remember, and recently returned to New Zealand after finishing my bachelor's degrees in the United States where I competed in NCAA Division I cross country and track and field. My research is supervised by Dr Andrea LaMarre, a lecturer in the School of Psychology at Massey University. This research will contribute towards the fulfilment of a Master of Science in Psychology – Health Psychology degree.

Project Description

For female athletes, there is pressure from many sources to look a particular way. In middle to long distance running, this body expectation and ideal is to be lean and toned, with little to no body fat. Sometimes, in pursuit of these expectations, athletes under-fuel, which can lead to worse performance and health outcomes. In this research, I aim to explore female athletes' experiences of body expectations and ideals in middle to long distance running through free writing and semi-structured interviews. The results could help people and organisations to better support female athletes in their sporting journeys.

Participant Identification and Recruitment

We are looking for 8-12 female athletes over the age of 16 who are proficient in English and have:

- Competed or intended to compete at a national level competition (or equivalent) in the 2020 season, or intend to compete in the 2021 season for one or more of the following events: 800m, 1,500m, mile, 2,000m steeplechase, 3,000m steeplechase, 3,000m, 5,000m, 10,000m, 10km road race, half-marathon, marathon, mountain running

- Grown up in New Zealand (but may currently be living overseas)
- Identified at some point (now or in the past) with the statement 'You don't look like a runner'

Participants will be given a \$25 New World voucher as a thank you for participating in the research, irrespective of if you complete the study.

Project Procedures and Invitation

It is completely up to you whether you would like to participate or not. If you fit the inclusion criteria outlined above and decide to participate in this research, you will be asked to sign a consent form and invited to complete the following:

- A free writing exercise where you will be asked to respond to the prompt 'You don't look like a runner' with any present and/or past experiences you may have had which align with that statement
- A semi-structured interview with the researcher where you will discuss your response to the free-writing and your experiences of body expectations and ideals in middle to long distance running

The free-writing exercise will take approximately 30 minutes to complete and can be completed at any point prior to the interview.

The interview will be conducted at a private and quiet location which is deemed suitable by both the participant and the researcher (e.g. private room at Massey University Albany). If New Zealand is at a heightened alert level, the participant lives outside of Auckland, or the participant prefers, the interviews will be conducted via Zoom. The interviews will last approximately 60 minutes. If you wish, you can review a copy of your transcript after the interview

You may feel some degree of psychological and/or social discomfort from participating in this study due to the nature of the topics discussed. We have provided a list of support services that you can access if you feel distressed. You can choose to stop the interview at any time or to not answer a question. You can withdraw from the research at any time up until 8 weeks after the interview. If you choose to withdraw from the research, you will still be eligible to receive a New World voucher.

Support Services

For any counselling emergencies contact 1737 (free phone or text).

For information about eating disorders and treatment options, call the Eating Disorders New Zealand (EDANZ) helpline 0800 2 EDANZ / 0800 2 33269.

Data Management

The data will be used only for this research. Only the researchers will have access to personal information and this will be kept confidential. Participant's data will be anonymised and they will be

identified solely by their participant number which will be assigned at the start of the research, any identifying information in the free-writing or interviews will not be used.

Upon completion of the study, the list of participants and their participant numbers will be deleted. Free-writing responses and interview recordings will also be deleted upon completion of the study. Any physical copies of consent forms will be kept in Dr Andrea LaMarre's (supervisor) locked filing cabinet in her office on campus and will be disposed of appropriately after 5 years.

Participants will be sent a summary of the project findings via email upon completion of the research.

Participant's Rights

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 from the study (up until 8 weeks after the interview);
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.
- ask for the recorder to be turned off at any time during the interview.

Project Contacts

If you have any questions, please contact either of the following people:

Primary researcher: Anneke Grogan – MSc Psychology (Health Psychology) student

Anneke.Grogan.1@uni.massey.ac.nz

Supervisor: Dr Andrea LaMarre – Lecturer School of Psychology

A.LaMarre@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 21/15. If you have any concerns about the conduct of this research, please contact Dr Fiona Te Momo, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800, x 43347, email humanethicsnorth@massey.ac.nz

Appendix 4: Interview Schedule

You don't look like a runner: Female athletes' experiences of body expectations and ideals

INTERVIEW SCHEDULE

Introductions

Semi-Structured Interview (follow up questions may vary depending on the participant's answers)

1. What made you want to respond to the recruitment flyer?
2. When did you start running competitively? What made you want to start?
3. What are some of your favourite things about running?
4. Is there anything that you don't like about running? What is/are that/those things?
5. You responded to the flyer and writing prompt "you don't look like a runner." What first came to mind when you read that prompt? Questions stemming from their free-writing response to the prompt e.g. when did it start, has it continued, how did/do those comments make you feel? indirectly/directly?
6. How did responding to the prompt make you feel?
7. Looking back to when you started thinking in that way/being told that, is there anything you think could have helped?
8. Looking to the future, what kinds of things do you think might make you and other female runners feel good in your own bodies?
9. Is there anything else you feel we should talk about?

Appendix 5: Interview Schedule – Participant 11

You don't look like a runner: Female athletes' experiences of body expectations and ideals

INTERVIEW SCHEDULE – P11

Introductions

Semi-Structured Interview (follow up questions may vary depending on the participant's answers)

1. What made you want to respond to the recruitment flyer?
 2. When did you start running competitively? What made you want to start?
 3. What are some of your favourite things about running?
 4. Is there anything that you don't like about running? What is/are that/those things?
 5. You responded to the flyer and writing prompt "you don't look like a runner." What first came to mind when you read that prompt? Questions stemming from their free-writing response to the prompt e.g. when did it start, has it continued, how did/do those comments make you feel?
 6. How did responding to the prompt make you feel?
 7. Looking back to when you started thinking in that way/being told that, is there anything you think could have helped?
 8. Looking to the future, what kinds of things do you think might make you and other female runners feel good in your own bodies?
 9. Is there anything else you feel we should talk about?
-
- Why do you think when random people have asked you if you're a runner this made you feel good?
 - You mentioned a body fat percentage test during a training camp, why do you think this memory has stuck with you?
 - You also mentioned a bit of comparison between yourself and the other runners on the camp
 - What role do you think winning a major race that year played in shutting out those negative thoughts about weight?
 - You mention that it planted a seed or discomfort and comparison, could you describe that a little more?
 - What role do you think that played in your fear of gaining weight?
 - Why do you think weight gain made you not feel like a runner?
 - Could you explain how feeling like you didn't look like a runner hurt your results?
 - What role do you think those around you talking about the weight of runners played in your experience?
 - How do you feel about the idea the being healthy means that you don't looking like a runner?
 - What prompted you to make a pact with yourself to stop commenting on runners bodies?
 - You mention social media playing a positive role in your healthy eating and training habits, could you talk a little more about that?