

**"The Lived Experiences of Men at Risk of
Developing Muscle Dysmorphia; an
Interpretative Phenomenological Analysis
Study"**

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Dysmorphia and Disordered Eating**

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Impact Statement

This research utilises Interpretative Phenomenological Analysis (IPA) as a branch of Qualitative Analysis to gain a more meaningful and nuanced understanding of men who suffer from extreme body dissatisfaction, and, therefore, are at risk of having the condition known as Muscle Dysmorphia (MD). This research approach is still in its relative infancy. However, it has great potential in bridging the gap between scientific narratives and everyday human experiences by focusing on bringing up the research participants' stories and placing them at the centre of the scientific discourse. This research and more like it are bringing novel angles to the standardised quantitative approaches that will help revolutionise how research is done and how scientific breakthroughs are made, especially in mental health, by centring the human experience.

This research, therefore, will aid in bettering our understanding of the phenomena that constitute MD and will help the medical and research communities in demystifying the lore behind it by getting straight accounts from individuals suffering from it, with one of the main aims of this research being to inform the future creation of screening and diagnostic tools that better cover the nuanced manifestations of MD. Therefore, aiding the medical professionals in not only understanding their patients better but also equipping them with the tools to diagnose better and subsequently treat these men who come to them for help. This shall shift the scope of how we deal with mental health issues in men by normalising body image issues amongst them instead of relying on an archaic gendered understanding of mental health issues and especially body image issues as women's issues. This is an attitude that is reflected in body image screening tools that focus mainly on classically "feminine" metrics such as thinness and waist-to-hip ratio. This work aims to challenge that notion head-on and proves that men, much as women do, suffer to a great extent from compulsions about their bodies that are primarily influenced by their place in society and how they are viewed.

The project also calls for raising public awareness of the gym and fitness culture and their culpability in creating toxic environments that leave vulnerable people exposed to the dangers of developing a disordered relationship with their bodies and diets. This research challenges the lackadaisical approach to granting minors access to the gym and introduces the notion of making the gym an adult space where minors should be monitored.

This work also will play a role in recontextualising the diagnosis methodology of mental health conditions by arguing for a more transdiagnostic approach instead of a strict categorical approach to diagnosis, leading to a more comprehensive and patient-centric attitude towards mental health diagnosis.

Abstract

Muscle Dysmorphia (MD) is a condition where individuals develop a pathological preoccupation with muscle definition to the point of functional, professional, social and physical impediment. It has been classified under Body Dysmorphic Disorders according to the DSM-5. It affects both men and women, but research shows that men are more likely to be afflicted due to the societal pressure on them to maintain a muscular look. However, a great deal of debate still exists regarding its nature, classification, the nuances of its presentation, modes of diagnosis and treatment.

In this study, these questions were addressed by interviewing eight men about their experiences living with muscle dysmorphia. Interpretative phenomenological analysis (IPA) was used to glean a deep, nuanced understanding of these men's daily behaviours regarding dieting, exercise, grooming, relationships with family, sports, loved ones, therapy, their bodies, and themselves.

The study suggests that the root causes of MD stem from childhoods marred by emotional and physical parental neglect, school bullying, pressure to compete in scholastic athletics, and overwhelming media influence. These men then grow up insecure about themselves and emotionally dependent on external approval to construct a sense of self-belief. This fuels their need to exercise regularly to maintain an idealised image.

I, Omar Aga, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Significant Abbreviation Table

AAS: Anabolic/Androgenic Steroids
AN: Anorexia Nervosa
APA: American Psychological Association
ATP: Athletic training for physique
BB: Body Builders
BCS: body comparison scale
BMAS: Bergen Social Media Addiction Scale
BN: Bulimia Nervosa
BD Body Dysmorphia
BDD: Body Dysmorphic Disorder
BMI: Body Mass Index
Camir-R: Cartes-Modèles Individuels de Relations-Reduced
CBT: Cognitive Behavioural Therapy
DCQ: Dysmorphia Concern Questionnaire
DES-II: Dissociative Experience Scale – II
DFM: Drive for Muscularity
DMS: Drive for Muscularity Scale
DSM-4: Diagnostic and Statistical Manual of Mental Disorders 4th edition
DSM-5: Diagnostic and Statistical Manual of Mental Disorders 5th edition
EA: Exercise Addiction
EAT-26 Eating Attitudes Test-26
ED: Eating Disorders
EDI: Eating Disorder Inventory
EDEQ: Eating Disorders Examination Questionnaire
EDEQ-S: Eating Disorder Examination Questionnaire Short
EMD: Emotional Dependency
FP: Fitness Practitioners
GEP: Group Experiential Statements
IPA: Interpretative Phenomenological Analysis
MBAS: Male Body Attitude Scale
MD: Muscle Dysmorphia
MDDI: Muscle Dysmorphia Disorder Inventory
MDI: Muscle Disorder Inventory
MDSQ: the Muscle Dysmorphia Symptom Questionnaire
NBB: Competitive Natural Body Builders
NNBB: Competitive non-natural bodybuilders
OCD: Obsessive Compulsive Disorder
PET: Personal Experiential Statement
PIL: Participant Information Leaflet
SA: Strength Trainers
SPA: Social Physique Anxiety
SCL-90-R: Spectrum Checklist-90 Revised
SRI: Serotonin Reuptake Inhibitors
SSRI: Selective Serotonin Reuptake Inhibitors
SQIP: Society for Qualitative Inquiry in Psychology
WEIRD: western, educated, industrialised, rich, democratic
WTP: Weight Training for Physique

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Introduction

Introduction

“Wilde in Love”, “When a Scott ties the knot”, “Want to start a scandal”. These were the top three “Romance Book Covers” titles on Google’s search engine. Three covers featuring bare-chested, chiselled “Greek gods” as cover models. Three covers representing standardised body image ideals advertised in romance literature. But we live in a world where pop culture influence far extends beyond those covers, especially when it comes to creating impressions in people regarding what they should look like. You have the Marvel heroes, the “Chris Cabal”. If it is not Captain America, then it is Starlord, or if neither, then Thor – except when the latter was so “hilariously” out of shape in Avengers Endgame, with his “fat” beer gut not only serving as a comic relief but also to highlight his mental decay because fat means sad (Sharf, 2022). These movie stars often talk in their interviews about the extreme diets and exercise regimens they must endure to achieve their characters’ physical appearances, highlighting the unattainability of their image. Still, however, the presence of this impossible image and its effect on the general public cannot be escaped. A study conducted on 593 “celebrity worshippers” in China to examine the role parasocial attachments to celebrities have on body dissatisfaction found a significant association between muscularity-oriented body dissatisfaction and celebrity worship in men (Lin *et al.*, 2023). And if traditional media is not enough, then there are Instagram influencers and Love Island contestants (‘Home - Lifted Entertainment’, 2023). Celebrity image culture has invaded every aspect of daily life, and wherever a man turns his head, he is told what body type is accepted as desirable and manly. Not even action figures have escaped this evolving and increasingly demanding standard, but more on that later. Against this increasingly toxic backdrop, we introduce the subject matter of this project, “Muscle Dysmorphia”.

Muscle Dysmorphia (MD) is a condition where the sufferers are preoccupied with the thought of gaining muscular definition, which then manifests itself in extreme dieting and exercise, social and professional dysfunction, anxiety, and supplement abuse, leading to possible physical injury and even depression leading to suicidality, making the condition a possibly lethal one (Anderson, 2021). It has been classified with a fair share of controversy as a subtype of body dysmorphic disorder (American Psychiatric

Association, 2013). The condition is still a scientific enigma without much certainty about it. More work is needed to establish how much it affects society. Prevalence rates have been shown to vary from 1%-54% depending on the study (Cranswick *et al.*, 2016). This discrepancy is often attributed to the lack of a standardised method to examine the presence of MD. However, it has been suggested that up to 1 in 10 gym-going men in the UK could be suffering from MD (*BBC News*, 2015); that is coupled with the fact that more than 15% of the UK's Population (10.3 million) held an active gym membership in 2021(*The Changing Demographics of Gym Members*, 2021). It is unclear statistically what percentage of gym memberships are held by men; however, it is estimated that the split is 46%-54% male to female (ukactive, 2021). With those numbers in mind, we could be looking at roughly 474000 (1.4% of the male population) men who could be affected by MD and all of its potentially life-threatening consequences here in the UK. This number is close to the estimation of 427,000 males affected by MD, as posited by Tod et al. in their 2016 review (Tod, Edwards and Cranswick, 2016a). In comparison, it is estimated that 266,300 and 443,800 people suffer from anorexia nervosa and bulimia nervosa, respectively (MacKey, 2021). This suggests that MD could be as pervasive as these two conditions in society; however, it remains misunderstood and misdiagnosed. More attention needs to be paid.

Background and Early Research

In a 1993 study by Pope, Katz and Hudson, 8.3% of a 108 male bodybuilders sample were described to exhibit signs of a body image disorder characterised by the belief that they were “weaker and smaller” despite being “large and muscular”, and the term “reverse anorexia” was used to mark this new condition due to its characteristic preoccupation with “bigness” as opposed to “thinness”. This was one of the earliest descriptions of the condition we now know as muscle dysmorphia. The authors of the study noticed that, unlike anorexia, where patients are preoccupied with the desire to look thinner, muscle dysmorphia was characterised by the desire to appear larger (Pope, Katz and Hudson). It was the apparent opposing nature of the two conditions that inspired them to coin their new disorder as a reversed form of anorexia. In the study, Pope et al. suggested a link between anorexia and reverse anorexia and a potential increased risk of developing reverse anorexia in male bodybuilders. They also reported increased use of steroids in patients with reverse anorexia (Pope, Katz and Hudson, 1993). “Muscle Dysmorphia” was coined in a subsequent 1997 study by Pope et al.

(Pope *et al.*, 1997) and is a subtype of body dysmorphic disorder that affects both men and women. In this study, the rising prevalence of the disorder was linked to an increased interest in weightlifting and body sculpting in society, and it was suggested that reversing the prevalent and fashionable bodybuilding trends could lead to a drop in the number of muscle dysmorphia cases (Pope *et al.*, 1997). Co-morbidities such as steroid use and elevated stress levels were also highlighted. The diagnostic criteria developed in this study, which is still used to this day, are shown in Table 1. In 2000, the first controlled muscle dysmorphia study was conducted by Olivardia, Pope and Hudson, where they canvassed and screened individuals from several gymnasiums. They separated their participants into a muscle dysmorphia group of twenty-four men and a second group of thirty men with “normal” weightlifting habits. They found that the men in the muscle dysmorphia group exhibited higher degrees of “body dissatisfaction; eating attitudes; prevalence of anabolic steroid use; and lifetime prevalence of DSM-IV mood, anxiety, and eating disorders” (Olivardia, Pope and Hudson, 2000). In this study, the authors also suggested that there was a direct link between muscle dysmorphia and eating disorders, highlighting the similarity of the phenomenology between their participants from the muscle dysmorphia group and college-aged men with eating disorders, going as far as suggesting that the “reverse anorexia” term might be apt due to the similar nature of the two disorders (Olivardia, Pope and Hudson, 2000).

Furthermore, in a 2002 study using the same sample, Choi, Pope, and Olivardia examined the participants to compare the differences in body image perception. It was noted that the muscle dysmorphia groups had significantly higher levels of body dissatisfaction, confirming previous results. However, they also uncovered other aspects, such as a belief among the muscle dysmorphia group that they were less healthy and a preoccupation with not gaining fat (Choi, Pope and Olivardia, 2002). These new findings raised more health concerns regarding individuals suffering from muscle dysmorphia and necessitated further research at the time. In 2004, in a study looking at college-aged men, it was shown that men sought an “ideal” body type that had, on average, 25 pounds (11.3 kg) more muscle and 8 pounds (3.6 kg) less fat than their measurements (Olivardia *et al.*, 2004). These results indicate the separation between reality and the ideal regarding body preference. Setting the ground for muscle-seeking behaviour leads to the development of muscle dysmorphia in susceptible individuals.

Table 1 - Muscle Dysmorphia diagnostic criteria adapted from a study by Pope et al. 1997. Individuals need to satisfy all the criteria to be diagnosed

1-	The preoccupation with the idea that one's body is not as lean or as muscular as desired, coupled with prolonged weight lifting and strict dieting
2-	The preoccupation negatively impacts the individual's life in two out of the following four options
2a-	forgoing social, recreational and occupational activities to maintain their diet and workout regimen
2b-	the avoidance of situations that would call upon exposing their body and only indulging with marked signs of distress and discomfort
2c-	the presence of clinically significant levels of distress in social, recreational and occupational functioning due to the preoccupation with body size.
2d-	the continual partaking in dieting, exercising and substance abuse despite knowing their adverse physical and psychological effects
3-	The preoccupation is primarily linked with the idea of being too small and not being muscular enough

Table 1 MD diagnostic criteria as highlighted by Pope et al. 1997

Recognition and Challenges

Since this early work, muscle dysmorphia and the preoccupation with muscular definition have become a hot topic of research, especially in the last 10 years (Tod, Edwards and Cranswick, 2016b), leading to the addition of muscle dysmorphia to the fifth edition of the *Diagnostic and Statistical Manual for Mental Disorders* (DSM-5) (American Psychiatric Association, 2013). In it, muscle dysmorphia is characterised as a subset of body dysmorphic disorder. However, muscle dysmorphia was not recognised in the 11th edition of the International Statistical Classification of Disease and Related Health Problems (World Health Organisation, 2018). That indicates that despite the uptake in research, there still exists a continuous struggle to correctly classify the disease due to a perceived shortage in research relative to other recognised conditions. In a 2015 study, Santos Filho et al. conducted a systematic search of the literature dedicated to the study of muscle dysmorphia. They concluded that not enough work had been done to ensure the “validity, clinical utility, nosological classification and inclusion of muscle dysmorphia as a new disorder in classificatory systems of

mental disorders” (dos Santos Filho *et al.*, 2016). However, it could be that including muscle dysmorphia as a recognised disorder would potentially incentivise more research to be conducted to identify the characteristic features of the disorder correctly. Another issue is that while clinicians are encountering more patients with this disorder, little work has been done with individuals who have been clinically diagnosed with the disorder to glean from them what their experiences have been like (Anderson, Murray and Kaye, 2017). It is imperative that this work is done to understand better the nuanced behavioural and emotional aspects of this condition, which would then help guide the development of diagnostic criteria and treatment plans explicitly catered to the needs of muscle dysmorphia patients. To this day, only one study we could find has been conducted to examine the diagnostic criteria established by Pope *et al.* in 1997 (shown in Table 1) (Hitzeroth *et al.*, 2001), which used structured diagnostic interviews and analysed a sample of twenty-eight amateur bodybuilders in Western Cape in South Africa, to examine if they satisfied the proposed diagnostic criteria. They found a prevalence of 53.6% prevalence of muscle dysmorphia in their sample, as well as a 33% body dysmorphic disorder co-morbidity (Hitzeroth *et al.*, 2001).

Muscle Dysmorphia Prevalence

Muscle Dysmorphia is generally more prevalent in males, who exhibit a greater desire to achieve an ideal muscular definition and, therefore, partake in strength and resistance exercises regularly (Longobardi *et al.*, 2017). In their study, Compete, Sepulveda and Torrente set out to examine the prevalence of the drive for muscularity (DFM) in a sample of male university students in Buenos Aires. They found that of the 472 participants (aged 18-28), 6.99% (n=33) were identified by the Drive for Muscularity scale (DMS) as possibly having MD (Compete, Sepulveda and Torrente, 2015; McCreary and Sasse, 2000). It is worth noting that DFM is not the same as MD. However, a study by Robert *et al.* showed that the presence of the former predicted the latter in 69% of the cases in men compared to 45% of the cases in women (Robert, Munroe-Chandler and Gammage, 2009). Meanwhile, another study looking at the prevalence rate of MD among personal trainers using a range of demographic questionnaires and screening tools such as the Muscle Dysmorphia Inventory (MDI) (Rhea, Lantz and Cornelius, 2004), the Drive for Muscularity Scale (DMS) (McCreary and Sasse, 2000) and Body Comparison Scale (BCS) (Fisher, Dunn and Thompson,

2002), found an MD prevalence rate of 23% (Male = 135, Female = 105), and a DFM prevalence of 28% (Male=158, Female= 130) (Diehl and Baghurst, 2016). These results point out the physical trainer sample as a higher risk population of exhibiting signs of MD when compared to the general population; also worth noting is the similarity in numbers between the male and female cases among the personal trainer participants, which is used in the study to suggest a similar distribution of MD between genders among personal trainers. However, it is also worth noting that of the 1039 participants in that study, more than two-thirds were female (Male = 34 %, Female = 66%). Therefore, it is clear that the male participants exhibited a much higher ratio of positive MD cases (36%) compared to the female participants (15%), thus negating the conclusion that both samples had similar presence of MD. Another at-risk group, according to the study carried out by Campagna and Bowsher, seems to be the individuals serving in the military. In this study, a total of 1150 participants from Fort Sam army post in Houston, Texas, completed the Muscle Dysmorphia Symptom Questionnaire (MDSQ) (Olivardia, Pope and Hudson, 2000) to assess their MD as well as the Dysmorphia Concern Questionnaire (DCQ) to investigate the prevalence of Body Dysmorphia (BDD) among the participants (Oosthuizen, Lambert and Castle, 1998; Campagna and Bowsher, 2016). Of the participants in the study, 62.8% were male, and 37.2% were female, and the results showed a higher prevalence of Body Dysmorphic Disorder among the women compared to the men (Male = 13%, female 27.1%) However MD was more prevalent in males than females (Male = 12.7%, Female=4.2%), with the study concluding that service personnel showed higher than average prevalence for both BDD and MD indicating them as at-risk groups (Campagna and Bowsher, 2016). Another study looking at the prevalence of MD was carried out in Australia among adolescents, with the data of this study coming from a 2017 baseline population study in Australia looking at body satisfaction and eating disorders, with MD diagnostic criteria developed by Pope et al. (Table 3) being applied to determine MD prevalence rates (Mitchison *et al.*, 2021; Pope *et al.*, 1997). Of the 3618 participants who completed the survey (Male= 50.3%, Female= 49.7), MD prevalence was 2.2% in males compared to 1.4% in females, with no significant difference in gender ($V=0.031$). However, it was indicated that boys with MD were more likely to show severe preoccupation with gaining muscles ($V=0.259$) and involvement in weightlifting exercise routines ($V=0.286$) (Mitchison *et al.*, 2021). Furthermore, A study carried out in Karachi looked at the prevalence of MD among male medical

school students, with a cohort of 246 answering a self-administered survey that examined the participants using the DSM-5 criteria for examining BDD (Table 4), along with additional questions investigating other MD behaviours such as duration and frequency of physical exercise, dieting and steroid use, with the indicating prevalence rate of 25% among the participants (Sarfraz *et al.*, 2020).

The featured studies in this review show varied estimations of the prevalence of MD among different population groups; this observation is supported by the conclusions made by Tod, Edward and Cranwick in their 2016 review, where they feature estimations ranging from 1% to 54% and comment on the futility of trying to carry descriptive statistics on such results due to the varied methodologies often applied by the various studies, the frequently small sample numbers and their inability to be reliably used to make conclusions about the larger population, and the varied and usually unjustified cut off scores employed by each study (Tod, Edwards and Cranswick, 2016). Generally speaking. However, the figure cited the most is one by Pope et al. in their 2017 study, where they estimated that 2.2% of the male American population had BDD, and of those 2.2%, 9-25% exhibited signs of MD (Pope, Khalsa and Bhasin, 2017). Meanwhile, it has been estimated that 7% of the United Kingdom's men suffer from MD (*BBC News*, 2015). However, it is clear from observing recent literature that the prevalence of MD in men is increasing, indicating, potentially, increased awareness of the conditions and more vigorous efforts to detect the disorder. Moreover, further qualitative studies are needed to better understand the nuances of MD among individuals suffering from it and to improve our ability to diagnose it and establish accurate prevalence rates reliably.

Muscle Dysmorphia Symptomology

Predisposition

Body dissatisfaction denotes the tendency to have a negative perception of one's body compared to a preferred body type (Keeton, Cash and Brown, 1990). Generally speaking, regarding ideal bodies, women tend to desire a thinner image, and men tend to desire muscular definition. Moreover, it appears that men are starting to exhibit increased levels of body dissatisfaction (Olivardia *et al.*, 2004). The preoccupation with the differences between one's own body and a perceived ideal could lead to the

development of a distorted body image. Olivardia et al. point out in their 2001 study that men tend to have a distorted body image where they perceive themselves to be smaller than they are (Olivardia, 2001). The development of MD in men appears to be linked to the development of this form of body distortion (Grieve, 2007). Interestingly, a similar distorted body view seems to influence the development of eating disorders such as Anorexia Nervosa, in which case patients perceive themselves to be larger than they are (American Psychiatric Association, 2013).

Media is one of the main contributors to delivering the standards of what is deemed as the ideal body, with visual media such as television, cinema, and magazines taking a leading role in this effort (Groesz, Levine and Murnen, 2002). However, as of late, it cannot be escaped that social media seems to be the overwhelmingly driving force in practising and enforcing social pressures, with a direct link existing between social media addiction and the development of MD symptoms (Imperator *et al.*, 2021). Social media seems to acknowledge and embrace its role in influencing its subscribers, with titles such as “influencers” being used to define particularly popular users with legions of followers. The media often celebrates impossible body types as the absolute ideal (Pope *et al.*, 2001). It seems that exposure to such messages predisposes men to develop a more significant disparity between their own perceived muscularity and the level of muscularity they desire, which occurs due to the internalisation of the cultural ideal presented by the media as a goal to be attained (Leit, Gray and Pope, 2002). Other studies echo the same conclusions regarding the decrease in body satisfaction upon exposure to examples of muscular ideals as advertised by mass media (Baird and Grieve, 2006; Lorenzen, Grieve and Thomas, 2004).

Additionally, sports participation seems to be involved in predisposing men to developing MD. As pointed out in the last section, several studies focusing on weightlifters and strength-exercisers recorded a higher-than-expected prevalence of MD. While many sports that require a certain level of muscularity, such as football, weight lifting, fitness, and training, can create the pressure to try and achieve the desired body goal in order to participate, studies show that elite bodybuilders exhibit the greatest risk at a significantly higher rate to develop signs and symptoms of MD (Cerea *et al.*, 2018; Baghurst and Lirgg, 2009; Lantz, Rhea and Cornelius, 2002). The influence of sports participation can be shown through dieting and steroid use, where individuals

involved in sports feel more pressure to adhere to strict dieting regimens and moderate their engagements with steroids depending on the requirement of their sport of choice. This review will look into both of those elements in relation to developing MD in separate sections. Other factors, such as low self-esteem and perfectionism, seem to have a role in MD development as well (Johnson, Williamson and Wade, 2020; Grieve, 2007). Finally, some studies show that childhood trauma could lead to the development of MD, with direct effects established between childhood victimisation and MD (Boyda and Shevlin, 2011a), and other studies showing a direct link between childhood emotional neglect and abuse and functional impairment, appearance intolerance and MD development (Tingaz, 2020).

Symptomatology

Muscle dysmorphia (MD) is associated with a perceived lack of muscular definition and the pursuit of attaining an ideal mesomorphic image. As mentioned in the previous section, sports participation, particularly bodybuilding, seems to put individuals at a greater risk of developing the condition. Several studies have been conducted to look at the characteristics of MD among bodybuilding, weightlifting and resistance training populations. In a study conducted in 2015, Nieuwoudt et al. looked for the presence of MD symptoms among a group of weightlifters in Australia. Six hundred and forty-eight men with an average age of 29.5 years were surveyed using the Muscle Appearance Satisfaction Scale (MASS) (Mayville *et al.*, 2002), and the results showed that 17% (n=110) were at risk of developing MD. (Nieuwoudt *et al.*, 2015). The paper highlighted long hours of exercise and a preoccupation with muscle composition as defining features of MD symptomology. It is also worth noting that 60 participants (9.3%) exhibited an overlap between their MD and ED symptoms, while 36 participants (5.6%) showed an overlap between their MD and BDD symptoms (Nieuwoudt *et al.*, 2015). The link between MD and EDs will be revisited in further detail in the next section of this review. Mitchell et al. (2017) set out to examine the “pathological pursuit of muscularity and leanness through eating and exercising practices in a group of natural male bodybuilders” (Mitchell, Stuart B. Murray, *et al.*, 2017). They recruited 60 individuals (29.6 +/- 7.1 years) with a recent history of participation in drug-tested competitions who completed a survey assessing their exercising, supplementation, and dieting habits along with MD and ED symptom screening surveys, Muscle Dysmorphia

disorder Inventory (MDDI) (Hildebrandt, Langenbucher and Schlundt, 2004) and Eat-26 (Garner *et al.*, 1982) respectively. This study found a direct correlation between MD symptoms and weight loss practices, with bodybuilders with the highest MDDI scores electing to lose a significant amount of weight before the competition, and the possible reason behind that being that individuals with MD might want to shorten the period they spend at a lower weight to relieve the stress associated with their perceived diminished muscularity (Mitchell, Stuart B. Murray, *et al.*, 2017). Moreover, the study showed an inverse association between competition experience and MD symptoms, with more seasoned competitors having lower MDDI scores and the rationalisation that individuals with MD might be partaking in bodybuilding competitions to appease their stresses and concerns regarding their body, but they are ending their engagements early due to their inability to cope cognitively and behaviourally with the demands placed on them in regards to weight management. Moreover, the study posits that a longer association with bodybuilding competitions could ease up MD symptoms (Mitchell, Stuart B. Murray, *et al.*, 2017). Cerea *et al.* looked at the behavioural patterns and symptoms associated with MD in three groups of recreational athletes, Bodybuilders (BB, n=42), Strength Athletes (SA, n= 61) and Fitness Practitioners (FP, n=22), who were asked to fill out surveys that were then used for analysis (Cerea *et al.*, 2018). This study found higher rates of MD-associated behaviour, such as steroid use, among the BB group in comparison with the SA and FP groups, as well as a higher percentage of MD symptoms, such as excessive exercising, stress regarding adherence to exercising, obsessive dieting, among BB and SA groups in comparison with FP group (Cerea *et al.*, 2018). Perfectionism, low self-esteem and orthorexia (obsessive healthy eating) did not show any differences between the three groups, with the authors hypothesising that these traits might be linked at a higher rate with competitive bodybuilders as opposed to recreational bodybuilders. The study by Lantz *et al.* (2002) seems to confirm the conclusions drawn by Cerea *et al.* regarding recreational vs competitive athletes. In their study, Lantz *et al.* looked at the comparison between elite competitive male bodybuilders (n=100) and powerlifters (n=68), who were requested to complete the Muscle Dysmorphic Disorder Inventory (MDDI), and the results showed significantly increased likelihood among the bodybuilder group to show concern over body size and symmetry, physique protection, dietary behaviours and pharmacological use (Lantz, Rhea and Cornelius, 2002). These results further illustrate the belief that bodybuilders are more likely than other athletic populations to exhibit signs of MD. Similarly, in their

study, Baghurst and Lirgg compared the symptomology of MD among a group of athletes ranging from football players (ATN, n=66), weight trainers for physique (WTP, n=115), competitive natural bodybuilders (drug tested) (NBB, n=47) and competitive non-natural bodybuilders (NNBB, n=65) (Baghurst and Lirgg, 2009). The results of this study were obtained from a set of demographic and exercise-specific questionnaires alongside the MDDI, and they showed that the only significant difference between the NBB and the NNBB group was in the pharmacological use subscale, where the NNBB group scored significantly higher on the MDDI than all the other groups, which makes sense given that the NBB group are regularly drug tested and therefore won't have access to pharmacological agents (Baghurst and Lirgg, 2009). Meanwhile, both NNBB and NBB groups scored significantly higher in relation to dietary behaviour and supplement use subscales compared to the WTP group, while the three groups had similar body size and symmetry subscale scores, indicating that while all three groups paid equal attention to body shape, the NBB and NNBB were more concerned with dietary choices and supplement usage which could be explained due to the requirements of competitive bodybuilding compared to weightlifting for physique, and it is also worth noting that the WTP group recorded fewer days of exercise per week on average compared to NNBB and NBB (Baghurst and Lirgg, 2009). Finally, the ATN group consisting predominately of American football players scored significantly lower subscales except for the physique protection subscale, and the authors posit that there might be a cultural reason for this result given that the majority of the participants from that group were Black Americans, thus indicating the need to further research. Meanwhile, another possibility for physique protection among this group could be their high level of exposure, which could elicit the need to be wary of public opinion regarding their bodies. Also, it is worth noting that the ATN group had a high pharmacological substance use subscale compared to the NBB and WTP groups, indicating the need for further education regarding the use of steroids and laxatives among athletes (Baghurst and Lirgg, 2009).

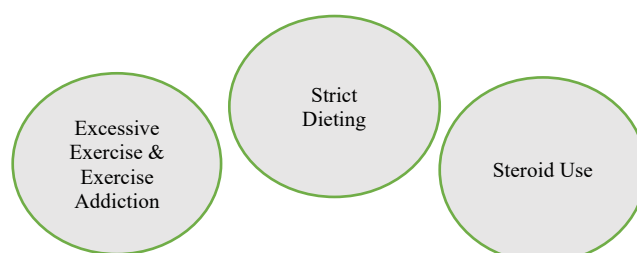




Figure 1: Muscle Dysmorphia Symptoms

Individuals with MD can also present with a range of psychopathologies. Exercise Addiction (EA) is a type of behavioural addiction disorder characterised by compulsive engagement in exercising due to dysregulated emotional responses, with the individuals chasing the positive effects of exercise and suffering from withdrawal symptoms when ceasing to engage in it (Freimuth, Moniz and Kim, 2011). Exercise addiction is rooted in a measure of body dissatisfaction, which in turn is associated with the development of MD, as stated above. Therefore, it stands within reason that the presence of EA and MD are linked. In fact, in their paper, Corazza et al. (2019.) showcase the direct link between EA and MD (Corazza *et al.*, 2019). However, more interestingly is Olave et al. (2021.) paper relating EA and MD to the presence of emotional dependency (EMD). EMD is defined as a behavioural addiction characterised by the intense need for affection from one's partner (González-Jiménez and Hernández-Romera, 2014). Individuals suffering from this condition are more likely to have an intense fear of loneliness and separation anxiety and, therefore, be more likely to modify plans and disrupt social engagements to spend more time with their partner (Olave *et al.*, 2021). In their work, Olave et al. established a significant link between MD and EMD in males, highlighting that the link is due to both conditions exhibiting signs of low self-esteem and negative regard for oneself, which in turn leads to body dissatisfaction and compulsive exercise (Olave *et al.*, 2021). Furthermore, MD and EMD have been linked to several attachment dimensions on the CaMir-R questionnaire, assessing the attachments and conceptions of family functioning (Pierrehumbert *et al.*, 1996; Balluerka *et al.*, 2011). Individuals with MD and EMD showed significant disturbance in the “regard for authority”, “resentment towards parents”, and “self-sufficiency”.

Moreover, individuals with EMD showed a significant link with the “childhood trauma” attachment dimension, suggesting a link between childhood trauma and the development of EMD (Olave *et al.*, 2021). This relates back to the link between childhood trauma and the development of MD mentioned earlier in this review, indicating that both these conditions are possibly linked at their conception. More work is needed to cement the links between MD, EA and EMD, which could lead to a better and more integrated approach to screening, diagnosis and treatment.

The link between MD and Obsessive-Compulsive Disorder is long-established. Chandler *et al.* (2009) reported a positive link between symptoms of positive physique anxiety and MD symptoms with OCD and trait anxiety symptoms (Chandler *et al.*, 2009). Furthermore, MD can be linked to a wide array of emotional disturbances, including interpersonal sensitivities and difficulty with interpersonal relationships, characterised by mistrust of others in the relationship (Longobardi *et al.*, 2017). Moreover, Longobardi *et al.* established a positive link between MD and developing dissociative symptoms by assessing their participants’ scores in the Dissociative Experience Scale – II (DES-II) (Carlson *et al.*, 1993) and comparing those to their MDDI score (Longobardi *et al.*, 2017). The authors argue the need to involve this association in the conversation regarding the development, symptomology and treatment of MD. MD patients are also more likely to have negative body-orientated biases in relation to their own bodies compared to their internalised version of the hypermuscular ideal (Waldorf *et al.*, 2019). In their study, the authors compared both the reflective and external male gaze of a group of 24 MD patients with two groups of twenty-four non-clinical weightlifters and non-clinical non-weightlifters and found that individuals with MD were more likely to hyper-focus on negatively perceived areas in their own body while paying more attention to “positive” aspects of what was presented to them as an example of the ideal hypermuscular body type, while the non-clinical weightlifters -unlike the MD group- were significantly more likely to focus on areas of improvement in their own bodies brought on by their training, and finally, non-clinical non-weightlifters did report higher rates of negatively orientated biases, but the authors rationalised that by highlighting the recorded rates of body dissatisfaction among general population (Waldorf *et al.*, 2019). The findings in this study highlight the harsh critical stance individuals with MD diagnoses take regarding what they subjectively identify as flaws in their physique in comparison to what they have internalised as the

ideal muscular body. This makes these individuals more susceptible to the influences exerted and the messages disseminated by the different facets of mass media, which were discussed in the previous section. As shown, MD symptoms are not limited to excessive exercising, diet behaviour and steroid use. A variety of psychopathologies are also indicated among individuals with MD. Pope et al. (2005) compared the histories of 14 MD patients with 49 BDD patients and found that individuals with MD were more likely to have suicidal ideation, poorer quality of life, and higher likelihood for substance abuse, steroid abuse, and they similarly concluded that MD was associated with higher degree of psychopathology (Pope *et al.*, 2005). MD has several symptomatic features that have been used to fashion the diagnostic criteria (Pope *et al.*, 1997). However, it is important to note that not every individual will exhibit all of the symptoms associated with the disorder. In his account of his personal experience with MD, Timothy Baghurst (2012) highlights that despite suffering from MD, he had never entertained the notion of using steroids, nor did he feel the need to engage in physique protection at all times, and he made the argument that having certain behaviours be so firmly associated with MD despite the fact they are not always exhibited could impede the efforts to accurately diagnose the disorder (Baghurst, 2012). More studies looking directly at the lived experiences of individuals with MD could aid in gaining a better understanding of the scope of personal manifestations of the disorder in order to answer the challenge to the established diagnostic criteria as proposed by Pope et al. (1997).

The diagnostic criteria for MD, as first proposed by Pope et al. (1997) (Pope *et al.*, 1997) are shown in Table 3. It has been argued that these specific criteria manage to extend beyond the criteria set by the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.) (DSM, American Psychiatric Association, 2013) (Table 4) for the purposes of diagnosing MD, as they encompass the DSM-5 criteria and add specific MD related elements as well to increase diagnostic accuracy (Mitchison *et al.*, 2021). The DSM-5 criteria highlight the repetitive nature of behaviour in individuals suffering from BDD (mirror checking, grooming, self-weighing), Excessive and repetitive exercise (i.e., the need to do several sets of push-ups, pull-ups or sit-ups repeatedly throughout the day) would fall within the scope of such repetitive behaviour. Both diagnostic criteria highlight the presence of social and occupational avoidance in individuals suffering from MD under the umbrella of BDD. According to Pope et al.'s criteria, these individuals will create reasons to avoid attending social and professional

functions for fear of disturbing their exercise and diet regimen (Pope *et al.*, 1997). It is worth noting that the Pope *et al.* criteria make a specific reference to dieting restriction among individuals with MD, while the DSM-5 clearly stipulates that excluding the presence of eating disorders is imperative to satisfy its criteria. Taking that into account, the question then becomes, how do the DSM-5 criteria account for the presence of restricted and disordered eating among MD (BDD) patients? And where does the line get drawn when it comes to disordered eating is either an integral part of MD's pathology or a symptom of an eating disorder comorbidity? The DSM-5 does, however, include a measure of reflective insight in its criteria with specifiers such as good insight, which indicates an awareness of the body dysmorphic beliefs being wrong or inaccurate; poor insight, where the individuals think that body dysmorphic beliefs are probably true; and no insight, where the individual exhibits full conviction that the body dysmorphic beliefs are true. These specifiers help in the assessment process to estimate the level of disordered and negatively skewed outlook in the patients to better classify the severity of their condition.

Individuals with muscle dysmorphia often have well-defined physiques; they, however, view themselves as smaller than they are or should be (Olivardia, 2001). Therefore, it is important to conduct a thorough assessment looking at individual levels of body dissatisfaction in order to successfully detect the presence of MD. Patient's biometric information is taken, including weight and height, and they are assessed in relation to their exercising and dieting attitudes and goals, with attention being paid to paranoid and obsessive-compulsive black-and-white beliefs such as (If I have one bad meal, skip one workout, then I will lose all of my progress) (Grieve, 2007). Investigating the current physical status of an individual compared to their ideal physique can provide a measure of body dissatisfaction, which can then be further looked into in relation to muscle definition, specifically to differentiate muscle dysmorphia from general body dissatisfaction or other conditions marked by body dissatisfaction. Additionally, supplement use, both legal and illegal, is investigated, so are disturbances to social and professional engagements due to diet and exercise commitments, and other comorbidities such as eating disorders and anxiety disorders are also assessed. (Grieve, 2007)

Several tools have been devised to assess the presence of muscle dysmorphia by examining the individuals based on the outlined diagnostic criteria; in other words, these assessment tools reflect the current MD diagnostic criteria. The Muscle Dysmorphia Inventory (MDI) (Rhea, Lantz and Cornelius, 2004) is a self-reporting tool derived from the research that was conducted on MD up to that point, which includes 40 self-report items and six sub-scales: body size–symmetry, physique protection, exercise dependence, supplement use, dietary behaviour, and pharmacological use (Rhea, Lantz and Cornelius, 2004; Maria Rubio-Aparicio *et al.*, 2019).

The Muscle Dysmorphia Disorder Inventory (Hildebrandt, Langenbucher and Schlundt, 2004). The MDDI was derived from the MDI to better incorporate the functional impairment associated with MD (Rubio-Aparicio *et al.*, 2019). The Original MDDI consisted of 21 self-reporting items scored on a 5-point Likert scale across three subscales, including drive for size, appearance intolerance and functional impairment (Hildebrandt, Langenbucher and Schlundt, 2004). However, a more modern version of the MDDI consists of 13 items across the same three subscales (Zeeck *et al.*, 2018). Other assessment tools include the Adonis Complex questionnaire (Riccobono *et al.*, 2020), the Muscle Dysmorphia Symptoms questionnaire (Olivardia, Pope and Hudson, 2000), and the Muscle Appearance Satisfaction Scale (Mayville *et al.*, 2002).

Table 2 - Pope et al. (1997) Criteria

- 1.** The person has a preoccupation with the idea that one's body is not sufficiently lean and muscular. Characteristic associated behaviours include long hours of lifting weights and excessive attention to diet.
- 2.** The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning, as demonstrated by at least two of the following four criteria:
 - a-** The individual frequently gives up important social, occupational, or recreational activities because of a compulsive need to maintain his or her workout and diet schedule;
 - b-** the individual avoids situations where his or her body is exposed to others or endures such situations only with marked distress or intense anxiety;
 - c-** the preoccupation about the inadequacy of body size or musculature causes clinically significant distress or impairment in social, occupational or other important areas of functioning;
 - d-** the individual continues to work out, diet, or use ergogenic (performance-enhancing) substances despite knowledge of adverse physical or psychological consequences.

3. The primary focus of the preoccupation and behaviours is on being too small or inadequately muscular, as distinguished from fear of being fat, as in anorexia nervosa, or a primary preoccupation only with other aspects of appearance, as in other forms of BOD.

Table 2 Muscle Dysmorphia diagnostic criteria as proposed by Pope et al., 1997

Table 3 - DSM-5 BDD diagnostic criteria

Disorder Class: Obsessive-Compulsive and Related Disorders

A. Preoccupation with one or more perceived defects or flaws in physical appearance that are not observable or appear slight to others.

B. At some point during the course of the disorder, the individual has performed repetitive behaviours (e.g., mirror checking, excessive grooming, skin picking, reassurance seeking) or mental acts (e.g., comparing his or her appearance with that of others) in response to the appearance concerns.

C. The preoccupation causes clinically significant distress or impairment in social, occupational or other areas of functioning.

D. The appearance preoccupation is not better explained by concerns with body fat or weight in an individual whose symptoms meet diagnostic criteria for an eating disorder.

Specify if:

- With muscle dysmorphia: The individual is preoccupied with the idea that his or her body build is too small or insufficiently muscular. This specifier is used even if the individual is preoccupied with other body areas, which is often the case.

Specify if:

Indicate the degree of insight regarding body dysmorphic disorder beliefs (e.g., “I look ugly” or “I look deformed”).

- With good or fair insight: The individual recognises that the body dysmorphic disorder beliefs are definitely or probably not true or that they may or may not be true.
- With poor insight: The individual thinks that the body dysmorphic beliefs are probably true.
- With absent insight/delusional beliefs: The individual is completely convinced that the body dysmorphic beliefs are true.

Table 3 Body Dysmorphic Disorder diagnostic criteria as proposed by the DSM-5

Treatment

Muscle Dysmorphia treatment depends on creating a safe environment between the therapist and the individual disclosing their symptoms (Olivardia, 2007). The struggle with treating muscle dysmorphia stems from the difficulty for individuals suffering from it to recognise their symptoms, and since they appear to present a normal social phenotype, it is unlikely that others will pick up on their pathological behaviours in a similar way to anorexia nervosa for example, in fact, most people with MD present to clinicians with accompanying symptoms such as anxiety or depression. (Olivardia, 2007). One way to combat that is to spread awareness about the condition and discuss all the ways it manifests itself in group and team settings while also discussing elements of body image distortion (Leone, Sedory and Gray, 2005). Cognitive Behavioural Therapy (CBT) in concert with serotonin reuptake inhibitors (SRI) or selective serotonin reuptake inhibitors (SSRI), such as fluoxetine, are indicated as treatment options for more severe cases of MD (Olivardia, 2007, Leone, Sedory and Gray, 2005, Tod, Edwards and Cranswick, 2016). However, the literature indicates that there have

not yet been any controlled trials in regard to how these medications might affect the presentation of MD (Grieve, Truba and Bowersox, 2009). Therapists will engage in identifying the disordered cognition the individuals have in regard to their body shape and will challenge the patients to monitor and eliminate troubling and exacerbating behaviours such as mirror checking and assurance seeking (Grieve, Truba and Bowersox, 2009). Moreover, the role of athletic trainers and coaches is also highlighted, especially in cases where MD might not be presenting with any debilitating symptoms. It is important to train the training personnel to spot signs of the disorder and make the proper recommendation (Leone, Sedory and Gray, 2005). However, it seems that no definite treatment regimen has yet been designed to specifically tackle MD symptoms and that the recommended routes stem from what is being used to treat other associated conditions; for instance, the literature suggests that serotonin reuptake inhibitors (SSRIs) and selective serotonin reuptake inhibitors (SSRIs) are indicated for use due to their role in treating BDD (Tod, Edwards and Cranswick, 2016a). Further research into understanding the nuances of the elements leading to MD development and its subsequent presentation will help provide a clearer idea of how to proceed with a detailed treatment plan for the condition.

Scoping Literature Review

Introduction

Muscle dysmorphia (MD) is categorised as body dysmorphic disorder (BDD) within the somatoform disorders (American Psychiatric Association, 2013). However, there exists a continuous debate regarding how MD is conceptualised and how it is classified, with detractors of the current classification highlighting the similarities between MD and anorexia nervosa (AN) and other eating disorders. One major area of contention centres around the argument that, unlike other body dysmorphic disorders, MD exhibits an obsessive-compulsive preoccupation with exercise and diet, which is similar to anorexia nervosa (Chung, 2001). Contrary to previously held beliefs, meticulous and strict dieting is not a secondary feature but a primary and fixed feature in the development and sustenance of MD (Murray, Rieger and Touyz, 2011), with individuals with MD reporting a heightened sense of anxiety in regard to diet disturbances (Pope *et al.*, 1997). This strict adherence to dieting further links MD to the eating disorder spectrum in a way that is not matched by any other body dysmorphic disorder. Inversely, the role of exercise has been shown to be integral to the development of AN, especially amongst males (Touyz, Kopec-Schrader and Beumont, 1993), thus showcasing that both excessive exercise and strict diets are integral in the development of both MD and AN. Moreover, it is argued that, unlike most body dysmorphic disorders, MD shows a polarised gender ratio similar to how AN has a skewed -if reversed- gender distribution (Grieve, Truba and Bowersox, 2009 Phillips, Menard and Fay, 2006).

Furthermore, sceptics argue that eating disorder assessment tools are often catered towards traditional feminine body concerns, such as hip and buttock measurements, while neglecting body concerns that could pertain more closely to the male population, rendering the entire diagnostic process a skewed one (Murray *et al.*, 2010). These factors seem to drive the conclusion that MD needs to be reconceptualised as an eating disorder rather than a body dysmorphic disorder. Alternatively, Chung *et al.* argue that both MD and AN are marked by the presence of certain obsessive-compulsive tendencies regarding body shape, weight, exercise, and dietary practices. Therefore, it would potentially be beneficial to include MD as an obsessive-compulsive disorder to better address these aspects of disordered behaviour rather than focusing on the body

dissatisfaction elements (Chung, 2001). However, if both AN and MD exhibit obsessive-compulsive tendencies, the question then is, should they both be classified as obsessive-compulsive disorders? Or should they be conceptualised as eating disorders with obsessive-compulsive tendencies? What is clear in either case is that they are inextricably linked.

It is evident from the accounts mentioned above that the classification of MD remains a disputed topic. Two separate systematic reviews conducted in 2012 and 2020, respectively, concluded that research in MD still has multiple areas to cover to better understand the true nature of the illness. Recommendations have ranged from keeping MD on the BDD spectrum, reclassifying MD as an ED, reclassifying MD as an obsessive-compulsive disorder or even categorising MD as its own distinct disorder under the ‘Feeding and Eating Disorders’ category (Cooper *et al.*, 2020, Nieuwoudt *et al.*, 2012). Furthermore, a study by Foster *et al.* suggested reclassifying MD as an ‘addiction to body image’ based on the notions that individuals maintain long-lasting harmful practices due to their addictive tendencies towards attaining and sustaining a “perfect body type” (Foster, Shorter and Griffiths, 2015). It is worth mentioning that the lack of detailed research seems to be a recurrent theme that is a limitation in furthering the classification debate. More studies need to look at the true nature of MD among people who identify with its symptomatology to provide an accurate depiction of the lived-in experiences of these individuals, as it is possible that many critical nuances of this disorder are yet to be identified and discovered. This accurate understanding of the disorder’s manifestations on an intimate level will further help in designing comprehensive, large-scale studies to then accurately solidify the parameters of MD and properly place it where it belongs categorically. It is also possible that MD transcends both BDD and ED and is, therefore, worthy of its independent classification. These questions remain to be answered by future research.

Purpose of Review

This study aims to answer some of the problems posed above regarding the research gap when it comes to the lived experiences of men who identify with having muscle dysmorphia. However, to do so, it is imperative to conduct a review of the work that has been done so far concerning the lived experiences and personal accounts of men who suffer from MD. This review aims to find out what has been uncovered so far in the literature about the emotional, social, psychological and logical consequences of dealing

with the signs and symptoms of muscle dysmorphia. This existing knowledge will then help guide the aims and interpretations of our study as we complement other work, find our place in the larger context of MD literature, and potentially point out areas that have not been covered by other work, expanding in the process our mosaic understanding of muscle dysmorphia.

Why a Scoping Literature Review?

Scoping literature reviews first emerged in the field of social sciences, where it was deemed that systematic reviews would be too prescriptive to answer the broader questions, such as the one of this review relating to the overarching lived experiences of individuals suffering from MD (Thomas et al. 2017). The suitability of this methodology in addressing the research question, in addition to the paucity of empirical work done qualitatively in this field, brought forward the scoping review as a desirable candidate. Scoping reviews are concerned with exposing the gaps in the current state of knowledge, as well as drawing a map of the existing knowledge from different sources (Thomas et al. 2017). This aligns with our objective of wanting to find out work that parallels ours that has been conducted with individuals suffering from MD, and it also helps us to point out any areas of further research that might be needed later in the thesis. Furthermore, as mentioned, the small number of studies conducted in this emerging field and the heterogeneous nature of the literature uncovered, as well as the open nature of our research question, all lend themselves to using this methodology to conduct our review (Peters et al. 2020)

Methodology

Inclusion and exclusion criteria: For this review, we wanted to focus on qualitative work and case studies that have been done with men who have a history of muscle dysmorphia. The aim is to find studies that examine the real-life manifestation and lived experiences of these men concerning their attachment to muscle building and gaining size through musculature. This work relates directly to the intended direction of this project and will, therefore, offer an optimal avenue for comparing our work with what is already provided in the literature. We therefore decided to exclude any work that does not offer this angle. Quantitative studies relying on extracting information through survey questionnaires, for instance, were not included because the nature of their findings will not be similar to the nature of the findings in our study, since they utilised

different methods. We also decided to include singular case studies featuring muscle dysmorphia in the review. Even though these case reports do not offer the scope of large qualitative studies, they still function to give a clinical understanding of the lived experience of men suffering from muscle dysmorphia, and they were needed to complement the small number of qualitative studies found in the search. Muscle Dysmorphia is a relatively newly studied condition, and little has been done in terms of looking at the lived experiences of men suffering from it. Therefore, we did not limit the time frame for the studies. We also decided to dismiss all studies that were not published in English to avoid language barriers. Additionally, we decided to exclude work that has been done with non-clinical samples. The aim is to compare our non-clinical sample with the results of studies of clinical samples and see how our participants measure up (irrespective of clearing the diagnostic criteria) in their manifestations to individuals who have been officially diagnosed with MD, and comment on the similarities and differences between them, aiming to understand where do our participants fall on the spectrum of MD, and what can be done to better identify individuals at risk of developing the condition. Therefore, we only included studies where the participants were screened through a structured clinical interview to verify their status as individuals suffering from MD. And finally, all non-peer-reviewed studies were also excluded as per the advice given by my supervisors.

Search engines and databases: Pubmed was the first database used for conducting a wide search. This database was used to fine-tune the search terms and finalise the search strategy. Once that was done, other databases were used, such as Web of Science, Ovid, and Google Scholar. Google Scholar was used as the final engine.

Search and Screening Strategy: The first step in initiating the search process was finalising the review question. It was decided to use the same question as the main study's question to make sure that the papers found were related in scope to the work being done in this project. This question is, "What are the psychological, emotional, and social consequences on the daily lived experiences of men suffering from muscle dysmorphia?". Following that, the question was dissected into several categories, including:

- **Muscle Dysmorphia**
- **Psychological Consequences**

- **Emotional Consequences**
- **Social Consequences**
- **Men**
- **Daily Lived Experiences.**

Within each category, several search terms were introduced as follows:

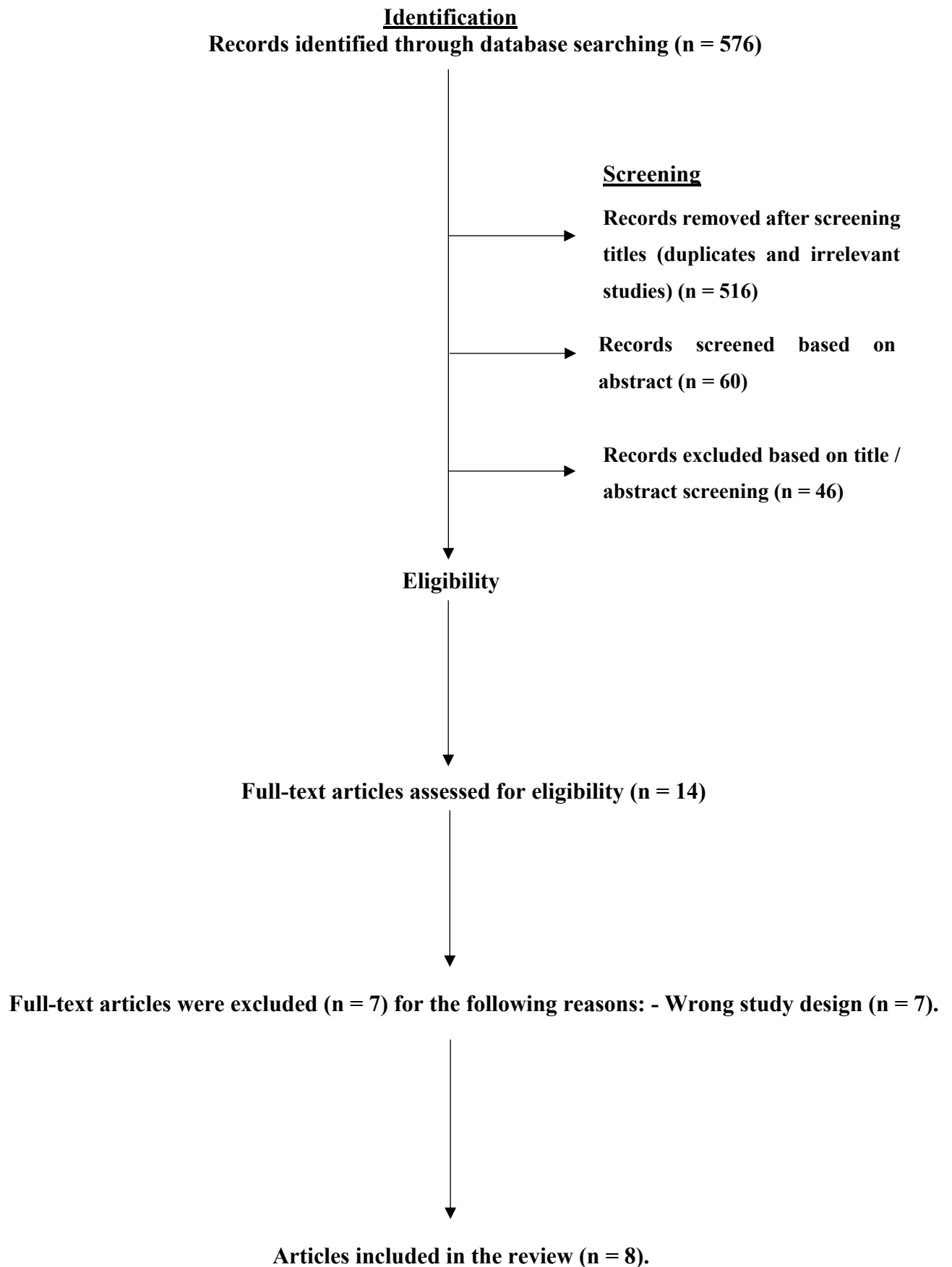
- **Muscle Dysmorphia:**
 - Muscle dysmorphia
 - Muscularity obsession
 - Bodybuilding obsession
 - Muscle-focused behaviour
- **Psychological Consequences**
 - Mental health
 - Psychological effects
 - Cognitive impact
 - Psychological outcomes
- **Emotional Consequences**
 - Emotional impact
 - Affective responses
 - Emotional effects
 - Emotional outcomes
- **Social Consequences**
 - Social impact
 - Social effects
 - Social outcomes
 - Social interaction
- **Men**
 - Males
 - Men's experiences
 - Male participants
- **Daily Lived Experiences**
 - Daily life
 - Everyday experiences
 - Daily activities
 - Lived experiences

These terms became the basis of the search process. Boolean operations were utilised to maximise the search process by bringing these different terms together. “Muscle Dysmorphia” and its derivatives became the root term and were used in different

combinations with the other terms. An example of that would be (Muscle Dysmorphia or Muscular Obsession) and (Mental Health or Psychological effects).

Several searches were conducted across all the different search engines until a point was reached where no new relevant papers were being introduced by combining the search terms. A total of 576 papers were generated as search results. The first screening included reading the titles and abstracts of all the papers from each search result, eliminating any papers that did not specifically address the lived experiences of men living with muscle dysmorphia or a severe attachment to muscularity. For example, papers on the mental health consequences of suffering from muscle dystrophy were disregarded. The abstracts were then read to glean the nature of the study and its methodology. Papers that utilised the excluded methodologies highlighted earlier in this section were subsequently excluded, and only qualitative studies looking at the nature of the participants' lived experiences were included. This resulted in 14 papers making it to the final screening round. Upon reading all the papers, any studies where the participants were not screened through a diagnostic interview were eliminated. This resulted in the inclusion of three papers from two studies and five individual case studies as the final selection for this review. All of these papers look at personal accounts of men who have been verified to display the symptoms of muscle dysmorphia as defined by the DSM-5 and Pope et al. in their seminal study. These papers were fully read and approved in terms of their methodology. Subsequently, they were finalised as the choices for the review. All the included papers and reports are peer-reviewed. The flowchart on the following page summarises the search and screening process for this review.

No protocol was registered; as this scoping review was undertaken as part of a PhD thesis. However, the review followed established scoping review guidelines to ensure methodological rigour.



Results

Qualitative Research Studies into Muscle Dysmorphia

Table 4- Summarising the two studies (three papers) included in this review.

Citation	Title	Aim of study	Sample size and population	Methodology	Themes	Findings
Martenstyn et al. (2022)	A qualitative investigation of the phenomenology of Muscle Dysmorphia: Part 1	Exploring the lived experiences of individuals living with Muscle Dysmorphia	29 participants (28 men and one woman) diagnosed with MD	Qualitative Analysis into the phenomenology of lived experiences	Four of the five themes of the study are included in these papers, and they are: <ol style="list-style-type: none"> 1. Drive for muscularity and leanness 2. Core beliefs and other cognitive factors 3. Avoidance and compulsive checking behaviours 4. Diet and supplement routine 	Participants viewed their physique goals of muscularity and leanness as moving goal posts (never to be fully reached). They exhibited differences in drive for muscularity and leanness. They also had low self-esteem, suffered from social comparison which fuelled their MD, referred to MD as their identity, and minimised the effects of MD in their lives. They also reported obsessive mirror checking and body exposure avoidance. They reported calories counting and highlighted the gaining control over their lives through diet and the fear of eventual steroid consumption.
Martenstyn et al. (2022)	A qualitative investigation of the phenomenology of Muscle Dysmorphia: Part 2	Exploring the lived experiences of individuals living with Muscle Dysmorphia	29 participants (28 men and one woman) diagnosed with MD	Qualitative Analysis into the phenomenology of lived experiences	The fifth theme of the study is presented in this paper <ol style="list-style-type: none"> 5. Compulsive exercise 	The Participants highlighted progress as the main workout motivator, they indicated preferring intense workouts, fear of losing progress by missing workouts and bad temper following bad workouts. They also resent rest days and have a complex relation with enforced rest during times of injury or illness. They define exercise as their identity and minimise its negative effects on their lives because it aligns with their goals in life. They use exercise to regulate their emotions, define it as a fun activity, use it to structure their days and gain control.

Çınaroglu et al. (2024)	Efficacy of cognitive-behavioral therapy in reducing muscle dysmorphia symptoms among Turkish gym goers: A pilot study	looking at the benefits of using Cognitive Behavioural Therapy (CBT) in reducing MD symptoms among a cohort of participants	7 men aged 35-55 years old) who were recruited through personal networks in gyms in Istanbul.	Qualitative Analysis of the information from seven case studies following cognitive behavioural therapy sessions.	Themes identified in this study's participants <ol style="list-style-type: none"> 1. Perpetual state of body dissatisfaction due to lack of muscularity 2. Social avoidance due to fear of judgement 3. Steroid use 4. Low self-esteem in relation to appearance 5. Intense attachment exercise to gain control over life 	The results of this study showed the benefits of CBT on compulsive exercise habits, anxiety regarding missing workouts, mirror checking, social exposure anxiety and avoidance, low self-esteem, and strict adherence to diet and exercise. This study concluded that CBT was instrumental in breaking some of the behaviours the participants had developed in relation to their MD
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Table 4: Summarising the articles included in this scoping review

The first study reviewed was conducted in 2022 by Marterstyn, Maguire and Griffiths. It was one of the very first studies looking at the lived experiences of individuals living with diagnosed MD. All of the participants were assessed by multiple clinical sources specialised in muscle dysmorphia for the presence of MD. This study had a sample of 29 participants (28 men and one woman). After reflection, it was decided to include this study despite not having an all-men participant pool because of its significance to the area of research and the overwhelming presence of men in the study's sample. The results of this study were split into five themes and published over two papers. (Martenstyn et al. 2022). The second paper reviewed was from a 2024 pilot study conducted in Turkey looking at the benefits of using Cognitive Behavioural Therapy (CBT) in reducing MD symptoms among a cohort of participants (7 men aged 35-55 years old) who were recruited through personal networks in gyms in Istanbul. All the participants in this study were officially diagnosed with Body Dysmorphic Disorder (of which MD is a specifier according to the DSM-5) and had at least a 5-year history of steroid use and a 10-year history of attending the gym at least 5 times a week. (Çınaroglu et al. 2024).

In their paper, Marterstyn et al. identified five central themes to categorise the experiences of their participants. The first theme was centred around the concept of the

drive of muscularity and leanness. The researchers noted that the participants with MD in the study rarely felt satisfied with their physical appearance and constantly “moved the goal post” when it came to their satisfaction with their results, often expressing dissatisfaction even with the presence of actual objective progress. This perpetual dissatisfaction separated them from the non-clinical population. Additionally, they prioritised pursuing their physical goals to the detriment of their social and romantic relationships and general health, often choosing to carry on with their exercise routine in the face of jeopardising their health. The participants also experienced increased bouts of body dissatisfaction during the “pump and cutting” phases. Moreover, it seems that the participants differed in the degree to which they valued muscularity and leanness, with participants either preferring a more muscular, bigger appearance or preferring an appearance that struck a balance between muscularity and leanness.

The second theme in the paper revolved around the core beliefs and cognitive factors that led the participants to develop and maintain MD. Low self-esteem and the need for reassurance in participants who were not happy with the state of their lives and were, therefore, in search of a higher goal (building muscle) seemed to predispose them to develop MD. The participants declared that, in their view, having a more muscular disposition would make them more desirable regardless of their other “intangible qualities”, such as kindness and intelligence. However, it seems that the participants paradoxically struggled to internalise and accept praise for their bodies. Some of the participants seemed to realise the possible presence of deeper psychological roots of their low self-esteem and how that could then manifest itself in their relationship with their bodies. The participants also exhibited signs of having a distorted perception of their own image, often viewing themselves as smaller than they objectively were. They reported not being able to see a true picture of reality. The paper also reports the increased tendencies for social comparison, especially on social media, as the participants reported that they spend a significant amount of time looking at individuals they perceive to be bigger and stronger than themselves. Moreover, the participants indicated that MD for them is a core, integral aspect of their personalities. They related its presence to their childhood and the pressure they felt to maintain high standards in non-MD-related settings, and they believe that their current attachment to their exercise and diet routines is a natural extension of those experiences. Finally, the participants seemed to still rationalise their MD status as a net positive aspect of their lives. They

seemed to place value in their rigid exercise and diet behaviours and rationalise that by comparing themselves with individuals who have substance abuse or obesity and other conditions they perceived to be more harmful.

The third theme is related to avoidance and mirror-checking behaviours. The participants consistently indicated that they avoid exposing their bodies in public due to the constant fear of being judged as inadequate physically or because their muscularity did not reflect their level of training. The participants felt that they were more comfortable exposing their bodies to close friends and intimate partners, with one participant indicating that they would refuse to go on trips where they would be expected to show parts of their bodies unclothed. Additionally, almost all of the participants disclosed that they engage with extensive mirror checking at least a couple of times a day, and even more in the case of a substantial minority group of them. In these checks, the participants would examine the details of their muscle growth while mostly focusing on the areas they were dissatisfied with rather than the areas they deemed satisfactory. This would lead to mood impairment among the participants and exacerbate the need for aggressive exercise and dieting.

The fourth theme in the paper centred around the dieting routine of the participants. Almost all participants indicated a habit of tracking their calorie intake, especially protein intake, to control their body composition and subsequently positively influence the development of their muscles. This habit fluctuated in accuracy, with tendencies to be less accurate during the “bulking” phase and more accurate during the “cutting” phase. Failure to maintain the target calorie intake would, therefore, result in a significant amount of mental distress among the participants. As mentioned before, protein intake was reported as the most important factor of the participants’ diet, with some of them indicating the social stress they feel when eating out of not meeting their protein quota and their willingness, therefore, to exceed their designated calorie count for the day only to make sure they have had enough protein. Inversely, fats seemed to be of minor importance to them, and carbohydrates were deemed important to reduce fat intake in the cutting phase but not very important in the bulking phase. With that in mind, the participants reported reluctance to eat takeout or eat at unfamiliar restaurants. They stuck to home-made meals with little variation. It seems that they exerted a sense of control through regulating their diets and found a sense of comfort in the routine.

They indicated that food was not a thing of pleasure but rather a means to achieving their desired physicality. Finally, all but one of the participants indicated that they did not engage in steroid use. Most of them, however, engaged in ingesting protein shakes, creatinine, and pre-workout stimulants to aid them in building muscles. Their reasons for shunning steroids were an acute awareness of their harmful side effects, as well as a desire to achieve their goal in a natural way and without any overt intervention. However, they did disclose spending a significant amount of time contemplating using steroids and expressed concern that if they were to continue down the path they are currently on, they would end up potentially using steroids.

Finally, the fifth theme of this study concerned itself with the participants' exercise habits. The participants mostly worked consistently, splitting their workouts between strength and cardio components. And, whereas the participants all valued the importance of strength-related exercises, their commitment to cardio components seemed to vary. It seems that none of the participants particularly enjoyed cardio, but they varied from avoiding it at all costs to regarding it as an optional companion to their resistance training to a "necessary evil" to be engaged with regularly because of its importance in achieving "caloric deficit" (when total calories burnt exceeds total calories consumed). This was especially the case during cutting phases when it was important to lose total body fat and be in a state of caloric deficit. The participants also indicated that they feel a constant need to improve in their exercise efforts, which leads them to favour high-intensity workouts where improvement can be measured easily, and subsequently, they feel a great deal of anxiety when skipping a workout due to not being able to work towards making the progress they desperately desire. Similarly, "poor workouts" elicit bad moods among the participants due to viewing a bad workout as a slippery slope towards consistent bad performances and deteriorated progress. Moreover, the participants seemed to have a complicated relationship with rest days. There seems to exist a paradox in which they engage in scheduled rest days because they recognise resting as part of the orthodoxy of building muscles despite feeling uneasy about the idea of not working out. However, when it came to rest due to illness or injury, there seemed to be a variety of approaches. Most participants planned carefully to cater their exercises to avoid injury and also catering to any existent injuries by altering their exercises, with the aim of preventing long-term injuries that would keep them out of the gym for too long. However, a handful of the participants seemed

to engage in compulsive, strenuous, unaltered exercise despite being injured or in pain. This often led to more serious injuries.

The study also reports how gaining structure and control through exercise was a dominant theme among many of the participants. The participants used exercises as a cornerstone to organise their days around and often felt a sense of aimlessness when they had to skip a scheduled workout. Similar to dieting, exercise was viewed by them as an integral component of gaining a measure of control over themselves through being able to control their body composition. They feel that exercise is the equaliser and that they can add a sense of worth to themselves that transcends their socio-economic status by being successful at the gym. Interestingly, it seems that a perceived lack of control in life precipitated the development of MD, with one participant indicating that they developed MD during the COVID-19 pandemic because they felt that they had lost control and that they wanted to gain a measure of it back through exercises.

The participants also identified exercise as an essential aspect of their personality, with several participants highlighting the use of exercise to overcome past traumas to the point of it becoming their main coping mechanism. Moreover, the participants strongly believed that, on the whole, exercise was a healthy behaviour to have, and they were unable to think of any negative outcomes associated with exercise.

Finally, participants in this study highlighted the role of exercise in emotional regulation for them and how they use their workouts to stabilise their emotions. This, in turn, explained the deterioration in their emotional state upon missing a scheduled workout owing to their dependency upon exercise to achieve a stabilised emotional equilibrium. Therefore, to many of the participants, exercise, despite being linked to a degree of chronic body dissatisfaction, was seen as a great mood elevator and, therefore, an altogether enjoyable activity.

In their work, Cinarog ̇lu et al. worked on seven separate cases to determine the benefits of introducing CBT to combat MD. The results of this study showed the benefits of CBT on compulsive exercise habits, anxiety regarding missing workouts, mirror checking, social exposure anxiety and avoidance, low self-esteem, and strict adherence to diet and exercise. This study concluded that CBT was instrumental in breaking some of the behaviours the participants had developed in relation to their MD. They

mentioned the power of allowing self-reflection to break the compulsory habits of exercise and diet that had become part of the participants' identities to be questioned and challenged and for incremental positive changes to be subsequently introduced into the participants' lives. Similarly, the same patterns of improvement were observed in aspects of anxiety and social avoidance, steroid and substance use, and body image distortion. Finally, the study highlights that despite the improvements observed among the participants, setbacks were to be expected occasionally and therefore, constant, ongoing support was needed in order to maximise the benefits gained from CBT.

Supplementary Case Studies

In addition to the two studies, five case reports detailing the presentation of MD in each individual were also included in this review. They are summarised below:

Muscle Dysmorphia Symptomatology During a Period of Religious Fasting: A Case Report (Murray, Rieger and Touyz, 2011)	
Participant Background	Physical Characteristics
A 32-year-old single man of Lebanese descent residing in Australia – Muslim and observes religious dietary requirements, including fasting during the holy month of Ramadan	1.86 m in height, 108 kg in weight, BMI of 33. Body fat percentage of 12%, and a Fat-Free Mass Index of 28, placing his upper limit of natural muscularity
Case Presentation	
<ul style="list-style-type: none"> - Preoccupation with not being muscular enough - Intense and compulsive daily working routines designed to build muscles. Accompanied by designated cardiovascular activity geared towards burning fat - Using muscle-enhancing substances such as anabolic steroids and human growth hormones. - Prioritising workout activity over all other social activities. - Rigorous protein-focused diet and daily weighing to make sure he is hitting his targets - Suffering from anxiety regarding disrupting his routine during Ramadan and resorting to compensatory measures such as waking up twice before sunset to consume protein shakes and not cutting his workout regime despite wanting to. 	

“Adolescent muscle dysmorphia and family-based treatment: A case report” (Murray and Griffiths, 2015)	
Participant Background	Physical Characteristics

A 15-year-old student attending an all-boy boarding school while visiting family on weekends and school holidays	-
Case Presentation	
<ul style="list-style-type: none"> - Focusing on protein intake while at school, cutting fat from his food, and adhering to a schedule of eating every three hours to “feed his muscles.” - intense exercise routine split between resistance training and cardio in order to increase muscularity and lower fat. - enrolment in a rugby team and using the training and playing as means to further enhance his physique - Chronic body dissatisfaction in relation to degree of muscularity, - Anxiety regarding body exposure and avoiding situations when he is called upon to show off his body while also engaging in compensatory measures such as using makeup to attempt to improve the appearance of his muscles. - attributing the onset of these behaviours to the presence of bullying in an all-boy environment characterised by different bodies at different stages of development. This left him feeling at the bottom of the totem pole socially - He also related his symptoms to feeling isolated from his family and missing his father particularly. - Treatment was focused on involving the family and parents, specifically in drafting a healthier approach towards dieting and exercise for the participant, followed by a slow and monitored transition towards him taking control over his behavioural habits. 	

“The Emotional Regulatory Features of Bulimic Episodes and Compulsive Exercise in Muscle Dysmorphia: A Case Report” (Murray <i>et al.</i> , 2012)	
Participant Background	Physical Characteristics
A 20-year-old Australian man of aboriginal and white descent presenting for treatment for an eating disorder (Bulimia Nervosa)	History of childhood obesity, 1.76 m in height, 73 kg in weight, BMI of 23.5, and Fat-Free Mass Index (FFMI) of 20.5, indicating a well-developed lean muscularity
Case Presentation	
<ul style="list-style-type: none"> -History of adolescent obesity, reaching a weight of 120kg and 45% body fat. A subsequent restrictive diet regimen and intense aerobic exercise led to a drop in weight to 64kg and 9% body fat -Adherence to an intense exercise regimen directed towards increasing body muscle while dropping body fat 	

- Body exposure avoidance by going to the gym at night and wearing baggy clothes while also engaging in body-checking behaviours by flexing in front of the mirror to check the size of his muscles.
- significant time dedicated to their preoccupation with their perceived lack of muscularity, affecting other aspects of their life.
- Using muscularity as a defence mechanism against potentially being hurt in life
- sticking to a very strict diet regimen and counting all of his ingested macronutrients outside of his binge episodes
- Binges linked with periods of not adhering to going to the gym and having good workouts

“The drive for muscle leanness: A complex case with features of muscle dysmorphia and eating disorder not otherwise specified” (Cafri, Blevins and Thompson, 2006)	
Participant Background	Physical Characteristics
20-year-old Hispanic male (sophomore at college) with a history of clinical preoccupation with body	1.83 m in height 74.8 kg in weight. BMI of 22.4.
Case Presentation	
<p>-The height of the symptoms appeared from the ages of 16-19</p> <p>-Weighed 113.4 Kg at the age of 16 with a BMI of 33.9. Despite his BMI meeting the obesity criteria, he characterised himself as “muscular.”</p> <p>-lifted weights 4 hours a day and ate specific diets in order to gain muscle</p> <p>-Thereafter, he became fixated on losing body fat and describes that his preoccupation became more focused on “leanness” rather than muscularity or thinness.</p> <p>-He placed himself on a strict exercise regime and started abusing dieting pills containing ephedra (16 pills a day)</p> <p>-Eventually was hospitalised with Crohn’s disease due to ephedra abuse. After this, he continued with restricted dieting and exercise and lost 45 Kg in two years.</p> <p>-He also reports usage of two forms of testosterone precursors (Sterabol and 1-AD). As well as other drugs used, such as cocaine and cannabis</p> <p>-He appears to have experienced a major depressive episode while a senior in high school</p>	

-He met the criteria for alcohol and cannabis abuse as well as panic disorder at the time of the report

“Bigorexia: Body Building and Muscle Dysmorphia” (Mosley, 2009)

Participant Background	Physical Characteristics
A 27-year-old bodybuilder with a history of depression and bulimia nervosa. Both were diagnosed and treated by a psychiatrist with a combination of fluoxetine and cognitive behavioural therapy.	The participant has a FFMI of 28. For the record, a FFMI of 23 would describe a man who is noticeably muscular. The authors of this report believe it is impossible to achieve a FFMI of 26 without using anabolic steroids

Case Presentation

-Describes being scrawny and feeling envious of bigger kids in the rugby team, which led him to lift weights at the age of 14 at his school’s multi-gym during lunch hour.

-Feeling satisfaction for being larger (having larger arms) than his mates, which he used to impress girls

-Going on a strict diet to lose weight as per his boxing coach’s recommendation (from 70 kg to 57 kg), all while maintaining a strict exercise routine, which led to dietary stress. And despite the pressure of dieting and his realising that he was losing weight fast and in an unhealthy way, he was still proud of it because it indicated the hard work he was doing

-Influenced by bodybuilding magazines and watching bodybuilders train. And getting diet advice from dietary magazines

-Very serious about pushing himself at the gym; otherwise, he feels he has wasted time. He is also very serious about the regimen at the gym and is diligent about tracking his exercises and his progress

- High protein and carb during bulking and low carb during cutting phases, and he is very strict with his dietary intake and tries to control his diet programmes to the best of his ability

-Does not view steroids as cheating because everyone else uses them, and he still has to work for results while on them. Moreover, he does not care about the future side effects of using them because he is more concerned with feeling good now by looking good, despite knowing that they are harmful

-Downplaying the medical field’s knowledge of steroids and putting more emphasis on the knowledge he has independently acquired and put to use to minimise the risks of using steroids

- Mentions an episode of depression and suicidality after coming off his last cycle, but he still intends to use anabolic steroids regardless because he thinks they are “magic.”
- Avoiding eating outside or at friends’ homes due to the fear of messing up his diet
- The presence of a financial strain due to the contentious purchase of protein powders and fat-burning pills to the point where he cannot go out drinking
- Difficulty in maintaining professional standards due to preoccupation with exercise. Arriving late and leaving early to exercise. He also spends all his time at work thinking about food and the gym
- Self-loathing and questioning his life due to the level of intensity he puts into his exercise only to know that he is bigger than other men but still feels inadequate.
- Mirror avoidance, avoiding undressing in front of a partner (body protection) and not enjoying sex due to worrying about his body image.

Discussion

Lack of Research

This review investigates the psychological, emotional, and social consequences of the daily lived experiences of men suffering from muscle dysmorphia. It illustrates the lack of research looking into the phenomenology of MD among clinical samples. This point is driven home by the difficulty in finding published articles that tackle MD phenomenologically on a clinical level. This further drives the point made by Martenstyn et al. in their paper that more work is needed to look at the life experiences of individuals and, for the purposes of this thesis, men who suffer from MD (Martenstyn, Maguire and Griffiths, 2022). In investigating this lag in research, we found that one of the potential reasons is the doubts within the scientific community as to the legitimacy of MD as a medical condition (Vandereycken, 2011). In their study, Vandereycken investigated the beliefs held by the scientific community towards newly identified disorders in the DSM-5, among which MD was one. The general consensus was that MD was a creation of popular media rather than a legitimate disorder and reported a rarity in observing it in daily practice. This lack of belief in MD seemed to

stem from a mistrust of the internet as the source from which MD first came to their attention (Vandereycken, 2011). Additionally, there seems to be an apparent lack of awareness among the general student body regarding MD and its manifestations (Griffiths *et al.*, 2015). This could explain why professionals do not seem to have many cases of MD reporting to their clinics. This combination of lack of awareness in the general public and sceptical disinterest among the professional body has led to MD being referred to as a silent crisis of mental health among men by several online outlets (Brother in Arms, 2023 ; Dazed, 2023).

Muscularity vs Leanness

One of the major takeaways from the review is MD's focus on the pursuit of both muscularity and leanness. This contrasts with the publicly held belief that MD is particularly centred around the drive for muscularity and increased muscle size (Martenstyn, Maguire and Griffiths, 2022). Lean muscularity is differentiated from pure mass pursuit because it also focuses on cutting fat percentage down. According to Martenstyn *et al.*, the younger the participants are, the more likely they are to desire pure size and not care much about the fat percentage. This attitude also seems to correlate with training experiences and general education in that field (Martenstyn, Maguire and Griffiths, 2022). Boys are inundated from a young age with imagery that celebrates muscularity as a cornerstone of masculinity, whether from Marvel action stars or social media accounts catered personally to their interests (Salamon, 2023). They then invest a lot of time and energy to achieve the same level of muscularity they observe all around them. This manifests itself in excessive exercise and controlled dieting. Participants from the reviewed studies and case studies indicated high levels of exercise and a diet high in protein dedicated to achieving the muscularity they are seeking. Many men go to the gym, and that in itself is not necessarily a red flag; however, it is important to recognise when exercise and diet step away from being a healthy habit and into becoming a pathological self-harming coping mechanism (*Why some young men are pushing themselves to their limits*, 2017). Pathological overtraining is characterised by less sleep, decreased appetite and depression, increasing risk of physical injury, and indulging in it despite an awareness of these side effects could only be constituted as self-harm. (Kreher and Schwartz, 2012; *Evans*, 2017).

Self-Harm

The concept of self-harm extends beyond the actions of exercising and dieting and reaches the notion of masculinity itself. The western societal understanding of masculinity has associations with increased suicidality, with suicide being a leading cause of death amongst men ('Men's Suicide Stats | Understanding Higher Rates Among Men', 2022). Moreover, studies show that close association with masculine norms increases the chances of inflicting non-suicidal self-injury (NSSI), such as negative emotionality and deficit in emotional skills (Green *et al.*, 2018). Participants in the studies reviewed declared how they engage in exercise to the detriment of their emotional and physical health. Therefore, they seem to fit into the self-harm narrative suggested by research. This necessitates research into MD as a condition that could lead to potential lasting physical and emotional injury. MD is characterised by a chronic sense of dissatisfaction with appearance stemming from the pursuit of an ideal "perfect" body as advertised by the media (Strobel *et al.*, 2020). This attitude was echoed by the participants in the reviews who indicated a "moving goal post" that is never met. There is always something to perfect and make better. It is this bottomless need for perfection that fuels the incessant need for exercising and dieting that, therefore, opens the door to chronic self-harming injuries among individuals who suffer from MD.

Muscle Dysmorphia and Vanity

Individuals suffering from MD are often accused of being vain and self-centred (Cerea *et al.*, 2018). However, research shows that it is, in fact, a deep sense of self-doubt and lack of self-esteem that drives their need for muscularity (Cerea *et al.*, 2018). There are also indications of a deeper-seated internalised sense of shame in individuals suffering from muscle dysmorphia (Wilson, 2010). The participants in the reviewed studies indicated that exercising is an integral part of their personalities, and they linked it to the pressures they felt in their childhood to maintain high standards. Exercise, dieting and muscular perfection for them are measures by which to compensate for the internalised low sense of self and self-shame they have carried from a childhood defined by not living up to the expectations placed on them (Martenstyn, Maguire and Griffiths, 2022). That could also explain the relentless pursuit of exercise amongst them as they are constantly trying to use it to overcome past trauma that is still unresolved from their

childhood. Another manifestation of their low sense of self is the constant body protection and mirror-avoiding measures. Interestingly, body dysmorphic disorder (BDD), of which MD is a subtype, is characterised by constant and obsessive body examination in the mirror (Veale and Riley, 2001). There seems to be an interplay between examining the body in the mirror and avoiding it altogether, with the latter being linked to times when body dissatisfaction rates are higher than usual. There also seems to be a cyclical nature to the phenomenon of mirror gazing, where individuals would engage in it, leading to increased distress over their bodies, and that, in turn, leads to attempts to avoid body checking in the mirror for a time only for the compulsion to win out, in the end, resetting the pattern (Veale and Riley, 2001). Moreover, there seems to be a reluctance to show the body to other people due to fear of judgement, but there is more willingness to share with loved ones and individuals who gain the participants' trust. (Foster, Shorter and Griffiths, 2015). Individuals with BDD and MD tend to be guarded and protective of themselves. Many have experienced bullying and teasing in the past and feel that they need to build muscle in order “not to be messed with” (Martenstyn, Maguire and Griffiths, 2022). It is, therefore, integral to breach their walls of mistrust in order to reach a place where they can open up about their struggles. It was mentioned earlier in this section that a combination of mistrust of MD as a legitimate condition among the professional bodies and a lack of awareness in the general public has contributed to low efforts in MD research. However, it begs questioning how much the general sense of mistrust within the population of individuals suffering from the condition affects their ability to open up and make their struggles known and, therefore, lift the veil on the mystery surrounding muscle dysmorphia.

Muscle Dysmorphia and Control

Control over dieting and exercise is central to the manifestations of MD. It seems that for the participants, pleasure in the activity itself comes second to their need to control these aspects of their lives to achieve the desired result, i.e., desired muscular definition. To further understand this, we must highlight that feelings of anxiety are also linked to the development of MD. Individuals with MD are often preoccupied with anxious feelings about their bodies (Mitchell, Stuart B Murray, *et al.*, 2017). Individuals with MD are often preoccupied with anxious feelings about their body image and how far off the “societal pedestal of muscular perfection” they are in the way they present

aesthetically. Moreover, as mentioned above, there are lingering feelings of unsafety stemming from past trauma in the form of bullying, low self-esteem and an internalised sense of self-shame. It is no wonder that these individuals seek to remedy some of these feelings by trying to exert control over their exercise and diet habits. They also glean a sense of emotional comfort, achievement, and recognition from momentarily living up to the high standards they set for themselves (Martenstyn, Maguire and Griffiths, 2022, 2023). This is also highlighted by their severe discomfort when missing a workout or a meal. For them, as mentioned above, exercise and diet serve as a coping mechanism.

Steroids Abuse

The subject of steroids is particularly interesting. There seems to be a split in the cases and studies reviewed between individuals who seemed to take an interest in using anabolic steroids and those who have elected not to use them (Mosley, 2009; Murray, Rieger and Touyz, 2011; Martenstyn, Maguire and Griffiths, 2023), and it seems to come down to the level of awareness of the side effects of steroids and the willingness to accept these side effects. First of all, education is a key factor in protecting against the abuse of steroids. Parents and schools alike are tasked with raising young boys' awareness against steroid use (Elkins *et al.*, 2017). Moreover, with how prevalent steroid use is in this day and age and how available it is (*Why is steroid use rising among male bodybuilders?*, no date), it is imperative that this education is extended beyond the athletic cohort at school to all the children involved in physical education classes. It is invaluable to present a well-rounded, standardised physical education to the children at school to fully prepare them for a world increasingly obsessed with appearance and fast-tracking reaching those peak physical goals (Sariscsany, 1995). Interestingly, participants who declared that they would not take steroids still engaged with other enhancing substances such as creatinine, protein shakes and amino acids (Martenstyn, Maguire and Griffiths, 2023). This begs the question: why does it appear that steroids alone have achieved enough notoriety to dissuade these participants from taking them? It could be possible that steroids have much more severe side effects than other substances or that the participants' awareness of steroids outweighs their awareness of the other substances they are using. Either way, they are more likely to engage in those substances. As for the cases of the individuals who justify using steroids, there seems to be a measure of mental flexing, cynicism directed at the

available medical knowledge and rationalising that certain modes of engagement with steroids (dosage control) mitigate the dangers of it (Mosley, 2009; Murray, Rieger and Touyz, 2011). This links back to the notion that individuals with BDD can often suffer from poor insight and are likely to be delusional regarding their own situation (Phillips *et al.*, 2007). This further explains the lack of willingness to come forward about their condition if they are less likely to be insightful about it and aware of it themselves. However, it is not very black and white, as it is often not in these cases, with several of the participants in the study declaring that they are aware of their reliance on exercise for emotional regulation and the links to their past trauma and resulting low self-esteem.

Treatment Avenues

To this day, MD treatment has been repurposed from other treatments used for BDD. This includes cognitive behavioural therapy (CBT) and selective serotonin reuptake inhibitors (SSRI) (Tod, Edwards and Cranswick, 2016b). However, it is of interest that family therapy was indicated as a successful avenue in a 2015 case study by Murray *et al.* (Murray and Griffiths, 2015). This directly links back to the breaking down of the mistrust and guardedness within these individuals and allowing them to open up to their loved ones while simultaneously giving the family the tools needed to recognise and handle the symptoms as they arise in their family member suffering from MD. That appears to be a sound model for tackling this condition. Moreover, the second study reviewed tackled the issue of CBT as a mode of treatment (Çınaroğlu *et al.*, 2024). It appears that CBT helps to navigate and alleviate the symptoms of MD by allowing the introduction of a measured self-introspection. This would be beneficial when put against the fact that people with BDD and MD appear to have poor insight, as mentioned earlier. Also, CBT works by providing another source for alleviating anxiety and low self-esteem. So, it stands within reason that individuals become less attached to exercise and diet to achieve these goals now that CBT is taking care of them and giving them a more positive outlook on their lives.

Conclusions

A scoping review was conducted to look at the map of available research, looking at the phenomenology of the emotional, psychological, and social experiences of men living with muscle dysmorphia. This approach was deemed proper due to the general

nature of the review question and the little research done from a qualitative angle, looking at the lived experiences of MD. This review highlighted the lack of research on muscle dysmorphia and the need for more attention to be paid to this condition. There exists a cynical approach from disbelieving medical professionals towards the condition, coupled with a lack of awareness and reluctance from the individuals at risk of developing MD, that is keeping the condition from being truly recognised and looked into. Individuals with muscle dysmorphia are suffering a great deal of anxiety and self-doubt, self-loathing and low self-esteem as they engage in emotionally and physically self-harming behaviour via exercising and dieting religiously and rigorously. They seek to exert a sense of control over their lives through exercise and diet and gain some measure of emotional regulation by doing so. Therefore, for them, exercise and its results are no longer a healthy habit but rather a coping mechanism on which they pathologically depend. They need exercise to give them a metric of success they can measure themselves against and feel accomplished and safe through. This explains the great levels of discomfort and anxiety they feel when they fail to attain their set standards, leading to the development of potential suicidal ideation. Education lies at the heart of tackling this condition, with awareness among individuals suffering from it and their loved ones both at the centre of providing an effective course of treatment.

Methodology and Procedures

Methodology

Qualitative Analysis

In 2013, the American Psychological Association (APA) recognised the Society for Qualitative Inquiry in Psychology (SQIP) as an official part of the APA division. This was the first example of the academic embrace of qualitative research after years of it being deployed successfully in market research to develop new products and test services (Bailey, 2014). This was a milestone in the long history of qualitative analysis, where it was finally recognised as a primary contributor to the scientific method.

In the 1960s, the political landscape was pulsating with the ripples of anti-war, civil rights, and feminism movements. That atmosphere helped rekindle the need to critically re-examine the agreed-upon traditional status quo (Gergen, Josselson and Freeman, 2015). This proved a fertile ground for the renewed push to advance qualitative methods in research in the 1970s and 1980s. The word "qualitative" became part of the scientific language to describe psychological research in the latter decade but only became a regular feature in published journals in the 1990s (Rennie, Watson and Monteiro, 2002).

However, the history of qualitative analysis itself is hard to trace back to one source of genesis that led to the multivariant field that we have inherited in the modern day. Fredrick J. Wertz highlights the ancient roots of the discipline going back to the days of Aristotle and comments on the complicated nature of its development as he puts it best in his paper "Qualitative Inquiry in the History of Psychology."

"It is misleading to speak of "the" history of qualitative inquiry in light of the diversity and complexity of the field, which is virtually coextensive with psychology itself. The genealogy of qualitative research is not well represented by a tree with roots denoting precursors, a single trunk depicting a great inventor/pioneer, and many large and smaller branches extending in directions, signifying the progress of followers to their most recently budding contributions. Rather, qualitative methods in psychology are better represented as an expansive forest with many trees of various ages and distances from each

other, some growing symbiotically, some competing for sunlight and others ascending in isolation as they rise from subterranean root systems that intermingle in an invisible community from common and different kinds of nourishing soil." (Wertz, 2014)

Qualitative analysis has since become a main feature in scientific journals and an integral part of the scientific method going hand in hand with quantitative analysis to provide a more nuanced understanding of the human phenomenon and the experiences of lived life. However, there still remain questions about its philosophies and validity among the sceptics and uninformed within the scientific and psychological community (Wertz, 2014). So, the question to be answered there is, what does qualitative research do, and how does it help validate collected data and provide context for the information gleaned from experiments?

Qualitative analysis is the method by which non-numeric data are collected from participants (via interviews, focus groups, recorded footage, etc.) that are then analysed to bring forward patterns of behaviour, providing further context to elaborate upon the statistical data normally collected from quantitative research (Morse, 2012). It is important for qualitative analysis, therefore, to gather data from relevant participants with pertinent insight into the subject at hand, and in order to achieve that, purposive sampling is deployed where researchers actively search for participants who are deemed relevant to the study's subject. (Butler *et al.*, 2021). However, the criteria for a good qualitative analysis remain more elusive to pin down accurately in comparison with quantitative analysis, which operates within rigid margins to ensure that good quality research has been achieved (Yadav, 2022). This possibly has to do with the fluid nature of qualitative analysis. Unlike quantitative analysis, which deals with the cold and comforting world of numbers and statistical rules, qualitative work concerns itself with the undoubtedly messier realm of human experience. Therefore, it is to be argued that, at its core, qualitative analysis cannot lend itself to a neat, precise methodology because that would be the antithesis of what it is trying to capture. In fact, that would possibly lead to the failure of qualitative analysis to achieve its own set goals of capturing the essence of the human experience, which by nature is not ordered. However, with this being said, it would be a fallacy to assume then that qualitative analysis is devoid of structure just because it does not adhere to the strict rules of numbers as represented by

quantitative analysis. Qualitative analysis does indeed follow a set of rules that ensure the validity of the process and the generated results (Yadav, 2022).

Once it is decided that qualitative methodology is the best fit for the research at hand, the analyst is then confronted with choosing their method of data collection. Qualitative analysis can be done from data collected via a variety of methods. Examples of data collection methods include document study, observations, semi-structured interviews and focus groups (Busetto, Wick and Gumbinger, 2020). Document studies entail taking into account the written notes of professionals, audio and video footage, diaries, archive documents, and letters. Observation entails observing the target behaviour in a certain setting and gaining an understanding of the direct nature of the observed behaviour as it occurs naturally. Focus groups involve interviews with a group of people to attain an understanding of the participants' experiences and opinions while exploring their expertise and gaining an understanding of the patterns that govern the phenomenon being studied (Busetto, Wick and Gumbinger, 2020)

Interviews in qualitative analysis are defined as *"an exchange with an informal character, a conversation with a goal"* (Hijmans and Kuyper, 2007). The purpose of an interview is to gain an insight into the world of the participant and glean from them what their experiences have been. (Busetto, Wick and Gumbinger, 2020). Interviews can vary according to their structural design. They can either be non-structured, free-flowing conversations where the participants are free to talk about whatever they want in relation to the research topic without having to refer back to any guide (Busetto, Wick and Gumbinger, 2020). The semi-structured interview takes advantage of the presence of a topic guide that helps to steer and shape the interview flow (Busetto, Wick and Gumbinger, 2020). However, topic guides are suggestive and not prescriptive in nature, and good qualitative researchers must be able to weave their interview around their topic guide with the freedom of jumping back and forth and even straying away when the need arises during the interview and new and interesting information is revealed by the participant. It is good practice to be well informed of the topic guide to be able to navigate it expertly when needed, making sure that you are allowing the data collection process to breathe while making sure that the line of dialogue does not veer too far off what is relevant to the study.

Choosing the "right way" to collect data in qualitative analysis depends on the type of research being conducted and what is deemed to be the best fit in order to yield the most potent results. Another tenet of qualitative analysis is the way sample sizes are determined. Unlike quantitative analysis, which employs power studies in order to decide upon a proper number to target, qualitative analysis employs the concept of saturation. Saturation is a subjective approach through which a researcher decides to stop recruiting more participants once they deem that data saturation has been achieved. That is to say that no new data is being yielded from the questions being asked (Butler *et al.*, 2021). This is a tricky skill to acquire, and it takes time and confidence for researchers to get comfortable knowing when to stop collecting. However, other branches of qualitative work feel more comfortable assigning a range of sample sizes that best fit their methodology. For example, Interpretative phenomenological analysis (IPA) experts strongly recommend that PhD students do not exceed 8-10 interviews during their project (Smith, 2022). This is due to the arduous nature of IPA analysis, where in order to be able to give each interview, the time needed to dive deep enough and get worthy results, you cannot drown yourself with too many interviews. Sampling in qualitative analysis is not as prescribed as in quantitative analysis simply because it is assumed in the former that not enough is known about the subject of the study to be able to determine what sample size is sufficient to get meaningful results (Butler *et al.*, 2021). Even the IPA example is more prescriptive about sample size mainly because it is trying to cater to its own methodology rather than making assumptions about the sample size itself. However, qualitative analysis is often conducted in smaller groups of people compared to quantitative work (Butler *et al.*, 2021). The results of qualitative analysis do not offer results that can then be applied to larger populations, but they do, however, offer nuance and depth of understanding of certain phenomena that can be utilised to enhance further quantitative work conducted on larger scales.

Analysis of qualitative work largely depends on the type of methodology being employed by the researcher. The analysis is done by following the steps in a strictly standardised method of approaching the data, often involving detailed examination of the collected data (e.g., interview transcripts, field notes, etc.), looking for themes that benefit and raise interest in relation to the main research question and area of interest which is then presented in an ordered format that summarises the takeaway points from

each participant's account. A detailed account of the analysis employed for this research project will be presented in the analysis section of this chapter.

Learning about qualitative analysis involves lots of inevitable comparisons with quantitative analysis. And upon first inspection, it may seem that the two of them have nothing in common. However, it was apparent that the two, in fact, serve to complement each other. "The Research Sandwich" (Morgan, 2017) is a term used to describe the two-pronged sequential mixed method approach to conducting research. Researchers first set out with qualitative methodology to do a preliminary investigation on a small number of participants in order to finetune their understanding of the phenomena they are trying to investigate, gaining the context and nuance under which they then move on to do quantitative work on a larger scale in order to investigate the results from their small group in a larger cohort and be able to make conclusive remarks that fit larger populations. An example of that would be a questionnaire sent out to a large population, with its contents being finetuned through a set of interviews done prior to its conception. The final component of the sandwich is another qualitative study that examines the results from the quantitative results and gains further context and understanding of the human conditions under which they occurred. Alternatively, researchers can conduct both approaches simultaneously in what is known as a convergent mixed method study, or they can do a sequential study where they begin with quantitative analysis and follow that with qualitative work. It all depends on the study design and the conclusions the researchers are seeking. (Busetto, Wick and Gumbinger, 2020). One way to understand the difference between the two approaches is via the analogy of a large body of water. Quantitative analysis covers a large surface area (a large number of participants); however, it stays closer to the surface. Qualitative work, by contrast, focuses on a small surface area (smaller number of participants), but it dives deep below the surface of the lake to understand the deep connections and the nuances of its samples' experiences. Therefore, we can see that the two approaches, in fact, complement and inform each other. The only way to get a three-dimensional understanding of the lake is to deploy both methods, one to get the deeper meanings of the experiences and the other to test the extent of its presence within society.

Interpretative Phenomenological Analysis

Interpretative Phenomenological Analysis (IPA) is a branch of qualitative analysis concerned with the details of significant lived experiences as understood by the participants (Smith, 2022). IPA focuses on the experiences in their own terms as they unfold naturally; however, these experiences need to be significant in the individual's life, and there needs to be active awareness of said "experience". Once the experience transcends the unselfconscious immersion of everyday life and becomes an event of certain significance, then it becomes, at that point, a building block of IPA analysis (Peat, Rodriguez and Smith, 2019; Smith, 2022). For instance, in the context of this project, normal everyday events such as going to the gym and dieting transcend the mundanity of their usual occurrences because of how they relate to the participants' struggle with Muscle Dysmorphia (MD). That link gives these experiences significance in their lives, and therefore, they become of value to the research as it is likely that the participant has spent a significant amount of time reflecting on these experiences and deciphering their meaning in their lives, and this gained understanding is what the research is seeking to attain from the volunteers. With that in mind, IPA studies normally have a small sample size; in fact, for a PhD research study, it is advised not to go beyond 8-10 interviews (Smith, 2022). This is mainly because IPA concerns itself with a deep dive analysis into each individual experience, trying to untangle its minute details, and this means that IPA analysis tends to be an arduous and time-consuming endeavour. It would do the research quality a disservice to oversaturate the study and not have the proper time in order to give each account the proper time it deserves. In other words, IPA is not concerned with accumulating a large number of results but rather nuanced quality results that offer a deeper understanding of the phenomena in question (Clarke, 2009). Therefore, due to its smaller sample size, IPA analysis, similar to other methods of qualitative research, does not serve to make large-scale assumptions about the patterns within the entire population. However, it concerns itself with its own sample size and how the participants' experiences converge and diverge from each other (Horrigan-Kelly, Millar and Dowling, 2016). In other words, IPA cannot offer exclusive populational conclusions; rather, this method of study offers a deeper understanding of its own sample's experiences that could possibly inform further studies looking at larger representative sample sizes. Furthermore, the results of an IPA research can be extended beyond the tested sample using analytical generalizability (Halkier, 2011), where theoretical concepts based on professional and experiential

knowledge are used to transfer the data from the set sample onto a more generalised realm (Halkier, 2011; Smith, 2022).

The History and Significance of IPA

IPA has its roots in health psychology, where it was utilised to allow patients to share their own experiences as they understand them (Smith and Osborn, 2008). This, in turn, served to educate occupational therapists and health care providers about the ongoings in the lives of their patients and their loved ones and allow for the possibility of improving the standards of care provided for these individuals (Clarke, 2009). In their book, Smith, Flowers, and Larkin argue that psychology has always been both experimental and experiential, and they advocate for the role of the experiential element in developing an intellectual, psychological approach to the human experience (Smith, 2022). Since it first appeared on the scene in a 1996 article in the *British Journal of Health and Psychology* (Smith and Osborn, 2015), IPA has become more and more entrenched and widespread in different areas of research and academic disciplines beyond psychology (Tuffour, 2017). The success of IPA as a research approach can be shown in the fact that the original 1996 article by Smith et al. that first used IPA to look at the personal experience of benign lower back pain was republished in 2015 in the *British Journal of Pain*, with the authors of the original article commenting on the lasting resonance of IPA as a research approach to investigate topics of complex emotional nature and elusive, and misunderstood psychological effects that could be difficult to articulate (Smith and Osborn, 2015). The same can be said about this very study. MD is an emotionally charged condition, and there is a cloud of mystery and misunderstanding surrounding it, not to mention the role of gender politics and the struggle to equate masculinity with emotional availability, which renders MD a very emotionally complex and psychologically elusive topic of conversation for which IPA would serve as an ideal approach. IPA, therefore, and despite its origins in the field of psychology, is an approach that can be of use to every discipline as long as the researcher is concerned with understanding the in-depth meaning of the human predicament as exemplified by the experiences of their participants.

The Theoretical Tenets of Interpretative Phenomenological Analysis

According to Smith et al. IPA has three main theoretical underpinnings: phenomenology, hermeneutics, and ideology (Noon, 2018). Phenomenology concerns

itself with acquiring an account of the lived experiences of the participants independent from any pre-existing theoretical preconceptions (Smith and Osborn, 2015). This means that the analyst needs to approach the experience as told to them, on its own merit, without bringing any of their background knowledge into it and trying to use that to view the experience in a larger theoretical context. IPA is interested in knowing the essence of the individual's experience. What it meant for them to go through it, and how they express it in the context of their own world, using language culture as tools to relate their own unique experiences to their own world. It is focused and centred on the individual (Smith, 2022). The second theoretical tenet of IPA is hermeneutics, which entails the sense-making exercise that the researchers practice with the experiential account that is relayed to them (Smith and Osborn, 2015). In other words, if phenomenology is the practice of acquiring the participants' interpretation of their own experiences, then hermeneutics concerns itself with the researcher's interpretation of the collected data. This process of interpreting each participant's interpretation of their experiences is referred to as double hermeneutics (Montague *et al.*, 2020; Smith, 2022). It is at this step, normally during the analysis stage, that the analyst brings forward their own knowledge, world understanding and position in order to make sense of each participant's individual experience. Hermeneutics is, therefore, important because it links the studied phenomenon to the larger context of the world within which it exists and how it relates to it. This allows an in-depth understanding of the true effect the phenomenon has and how it influences the world as we know it. The hermeneutic circle is one of the most important tenets of the hermeneutic theory, and it relates to the relationship between the whole and the sum of its parts (Smith, 2022). It states that the whole cannot be understood without understanding the sum of its parts, while at the same time, each part needs the full context of the whole within which it exists to fully make sense (Montague *et al.*, 2020). So, in other words, a word in a sentence 'part' does not make sense without the context of the full sentence, and the entire sentence 'whole' will need all of its separate words to come together to give it meaning. Or, this new phenomenon 'part' needs to be brought forward in relation to the world 'whole' within which it exists in order to be contextualised and made sense of, but at the same time, the whole world is a mere sum of all of the phenomena that come together to construct it, and it is they that give it sense and meaning. Finally, Ideography in IPA relates to the pursuit of studying each case individually and based on its own merits before moving to a more generalised approach regarding the data (Smith and Osborn, 2015).

As mentioned before, IPA concerns itself with the particular account of each individual participant. This leads to an in-depth analysis with a sharp focus on each individual case's minute details. This justifies the approach's aim to target a smaller, carefully selected sample to study (Smith, 2022). That does not mean that IPA is completely divorced from seeking generalised results despite its focus on the particular. As in IPA analysis, the cases do eventually come together, establishing points of convergence and divergence to make a statement about the collective sample and yield results that can be used to suggest ideas for wider-scale research down the line. This relationship between small-scale research and wider-scale research was highlighted earlier in this chapter.

Quality markers for IPA analysis

Nizza et al. highlight the steps needed to achieve excellence in conducting IPA analysis, and those are summarised in the following table from their paper (Nizza, Farr and Smith, 2021)

Table 5 - Showing the quality markers of a good IPA analysis

Quality indicator	Brief description
1. Constructing a compelling, unfolding narrative	The analysis tells a persuasive and coherent story. The narrative is built cumulatively through an unfolding analytic dialogue between carefully selected and interpreted participant extracts.
2. Developing a vigorous experiential and/or existential account	Focus on the important experiential and/or existential meaning of participants' accounts gives depth to the analysis.
3. Close analytic reading of participants' words	Thorough analysis and interpretation of quoted material within the narrative helps give meaning to the data and the experience it describes.
4. Attending to convergence and divergence	Idiographic depth and systematic comparison between participants create a dynamic interweaving of patterns of similarity and individual idiosyncrasy.

Table 5 Quality markers for good IPA analysis (Nizza, Farr and Smith, 2021)

IPA analysis attempts to tell the participant's story on its terms. It is, therefore, important to establish a coherent narrative that flows between the events of their lives

as related to the experience being examined. My supervisors (personal communications) stressed that I needed to establish a sense of continuity within each story while fully illustrating how the participants responded to these events as they came together to weave the essence of their experience. Further down in the chapter, I will introduce the concept of "narrative accounts". These accounts were the analytical tools I used to construct a narrative for my participants, which in turn further helped me in weaving a coherent account of their experience in my themes. Furthermore, to develop these accounts, I had to pay close attention to what mattered to my participants. It would have been fruitless to try and construct their narrative without making them the central figures in it. That includes bringing forward their experiential statements; their narratives were mainly informed by the things that were of major significance to them. The narrative accounts in my analysis included my interpretation of the participants' accounts. They were not a mere reproduction of what had been said, but rather, I allowed myself at that stage of analysis to start introducing my meaning-making strategies. Naturally, that required an in-depth analysis of the quotes, trying to link them together to draw meaning while also trying to bring forward my knowledge of the world and my position in it to satisfy the double hermeneutic standard set for good IPA analysis, and finally bringing my analyses together was the final step of the process (as mentioned later in the chapter) and that included bringing the accounts together to find the points of convergence and divergence and highlight the similarities between my participants, while also commenting on the peculiarities of each account and what aspects make each case stand on its own.

The rationale why IPA fits this study

As mentioned earlier, Muscle Dysmorphia (MD) is a misunderstood, understudied and potentially grossly underdiagnosed condition. Our understanding of the condition is muddled by our sociocultural glorification of muscularity. Setting out to do the study, I had initially wanted to target the classification of MD under the umbrella of the Body Dysmorphic Disorder (BDD) spectrum. As mentioned in the first chapter, there has been a lot of debate about whether MD should be classified as a BDD or an eating disorder (ED), with each camp providing arguments and evidence for their case. This was my goal when I first imagined this project, and it was the focus of my proposal. However, I spent the majority of my first year in discussion with my Thesis Committee

regarding the aim of my project. The Thesis Committee is an assembled group of experts who are brought together to offer advice and guidance regarding the project. I was required to consult with my thesis committee on a regular basis, especially during the early stages of mapping my project. During this time, I was continuously challenged to refine my approach, edit my aims, and find exactly what the core principle of my research was. Ultimately, I was asked the question, "What do you want to be the takeaway from your research?" I answered that I would want to have a better understanding of MD. That was a changing point for my research; I finally understood the core desire and the main objective for it. It was imperative that we gain a root-level understanding of the condition. Then, I was shocked to find out that there had been no significant studies looking at the lived experiences of people who have suffered from MD symptomology. So, then the question became, how do we claim to have an in-depth understanding of a condition if we have not tried to gain an insight into what it feels like for the people who have to live through it? How can we have discussions about classification when a huge missing piece of the puzzle is not acquired? I brought these questions to my committee and supervisors, who agreed that this would be a good approach for the project. Trying to understand the nuanced lived experiences of men who have MD symptoms. Trying to get their perspective not only as to what they are going through but also how and why they got to where they are now. A member of my thesis committee then suggested Interpretative Phenomenological Analysis (IPA) as a recommended methodology. IPA, as mentioned earlier, concerns itself fully with the participant's interpretation of their own lived experiences. It is the approach that allows the researcher to truly dive deep into the lived experience of the people. It serves to directly answer the questions posed above. I have found in my work that it truly allowed me to gain access to the information I was seeking to find. Not only in the way that IPA is conducted but also the analysis process allows the researcher to dive deep and use their own interpretative skills to glean truths about their participants. IPA is the strongest methodology to tackle the question at hand for this project, which is 'How do men with MD make sense of their own condition?'. In answering that question and including the voices of the experts by experience, we will be able to unlock a big part of the MD puzzle and bring much-needed clarity to our clinical understanding of the disease.

Reflexivity

Qualitative research is defined by a degree of subjectivity. As mentioned above, IPA specifically employs the concept of double hermeneutics, which, in other words, means that the analysis is essentially driven by the researcher's own interpretation of the participant's interpretation of their lived experiences (Smith, 2022). Therefore, it is imperative that the researcher's own research worldview, biases, position and assumptions be clearly articulated. (Austin and Sutton, 2014). Since complete objectivity is impossible to attain due to this existing human element, therefore the analyst is required to bring forward all the ways their own stances in relation to the phenomena in question have influenced the moulding and shaping of the research, and it is outcomes (Willig, 2001). Moreover, the researchers themselves are often changed and shaped by the research they are conducting, and it is important to be able to be conscious of how the work is changing you as well because that can also be reflected in the final product that gets produced (Palaganas *et al.*, 2017)

Two types of reflexivity that are highlighted by Carla Willig in her 2001 book "Introducing Qualitative Research in Psychology – Adventures in Theory and Method" are personal reflexivity, and it pertains to the researcher's own opinions, biases, experiences, beliefs and how they may have influenced the direction of the research (Willig, 2001). Then there is the concept of epistemological reflexivity, which concerns itself with the researcher's assumptions about knowledge and the world (Willig, 2001); so in other words, it relates to how one's understanding of reality links itself to one's knowledge of their own understanding (Morawski, 2014)

I have, throughout the entire process of data collection and analysis, been aware of my own position in relation to my own research. In writing this thesis, I have included reflexive elements of the work within the text of the data collection section and analysis, as well as the results and discussion chapters down the line. I have also included an entire reflexivity section in the discussion chapter where I go into detail about how my own stances, past experiences, and understanding of the world and the conditions I am studying influenced my approach. However, despite having this dedicated section to reflexivity, I thought it was important that the reflexive elements were still present throughout the thesis and not isolated in one single section. That is why I have made a

point of bringing my own voice into each step, where my own presence was influential in shaping the work.

In addition to practising reflexivity regarding my own role in conducting the research (data collection and analysis), I have, in the previous section, reflected upon the process of choosing IPA as the methodological approach for this study and highlighted the journey it took to arrive to it and decide upon using it. This methodological reflexivity (Whitaker and Atkinson, 2021) is also important to be included as it is part of the story of how this project was constructed and how it came together to represent the phenomena in question.

Procedure

Research Design

This study aims to conduct a qualitative interpretative phenomenological analysis of the lived experiences of individuals with a history of MD to gain a deeper and more nuanced understanding of the nature of the condition and how it manifests. It hopes to examine some of the existing theories mentioned in the earlier chapters, potentially unearthing new possible patterns and symptoms, and provide a well-rounded understanding of the emotional journey experienced by men who suffer from MD.

It is our belief that this work is necessary to gain a nuanced understanding of MD. We aim to investigate men's history with

- muscle dysmorphia,
- exercise addiction,
- supplements and drug use,
- propensity for violence,
- exhibitionism,
- physique protection,
- emotional dependency,
- self-awareness,
- emotional accessibility/inaccessibility,
- experience with diagnosis.

The personal anecdotes and introspective interpretations delivered by the participants will help shed light on the true experience of suffering from MD and what that reveals about the nature of the disorder.

Tools

Screening tools: Several tools have been devised to assess the presence of muscle dysmorphia by examining the individuals based on the outlined diagnostic criteria. The Muscle Dysmorphia Inventory (MDI) (Rhea, Lantz and Cornelius, 2004) is a self-reporting tool derived from the research that was conducted on MD up to 2004. It includes 40 self-report items and six sub-scales: body size–symmetry, physique protection, exercise dependence, supplement use, dietary behaviour, and pharmacological use (Rhea, Lantz and Cornelius, 2004; Maria Rubio-Aparicio *et al.*, 2019).

The Muscle Dysmorphia Disorder Inventory (MDDI) (Hildebrandt, Langenbucher and Schlundt, 2004). The MDDI was derived from the MDI to better incorporate the functional impairment associated with MD (Rubio-Aparicio *et al.*, 2019). The Original MDDI consisted of 21 self-reporting items scored on a 5-point Likert scale across three subscales, including drive for size, appearance intolerance and functional impairment (Hildebrandt, Langenbucher and Schlundt, 2004). However, a more modern version of the MDDI consists of 13 items across the same three subscales (Zeeck *et al.*, 2018). Other assessment tools include the Adonis Complex questionnaire (Riccobono *et al.*, 2020), the Muscle Dysmorphia Symptoms questionnaire (Olivardia, Pope and Hudson, 2000) and the Muscle Appearance Satisfaction Scale (Mayville *et al.*, 2002).

Recruitment: Figures 4&5 show AD poster samples for this research. Moreover, members of the thesis committee indicated that they could help by providing recruitment resources to send the ads directly.



Figure 2 Facebook Advertisement poster



Figure 3 Facebook Advertisement Poster

Topic Guide: A topic guide is a document used by the researcher to break down the components of the interview. It serves as the skeletal backbone and structural construct of the researcher–participants interaction and should cover all the areas the researcher is hoping to cover during the interview.

For this study, the main components of the topic guide are shown in Table 5.

Table 6 – Topic Guide main sections

1- Introduction

Introducing the researcher and research aims and goals, reminding the participants to sign the consent form and the presence of the information sheet, explaining the participant's right to withdraw and their right to stop at any time, addressing any lingering concerns they might have, explaining the interview process

2- Interview

The Interview will cover the following area

- General history and experience with Muscle Dysmorphia
- Exercise
- Diet
- Supplements and Drugs used
- The link between Muscle Dysmorphia and social behaviour
- The link between Muscle Dysmorphia and intimate relationships
- Awareness of the condition and willingness to share
- Diagnosis experience

3- Conclusion

Offer thanks for participation, remind the participants of the measures taken to protect their information, clarify any non-identifying information that might be included in the research, provide ways to get in touch with the research team, answer any lingering questions and confirm with them the expected timeline for receiving their compensation.

Table 6 Shows the general breakdown of the main topic guide sections, with a list of areas indicated to be covered in each section of the research-participant session.

Ethical consideration

The research covers a wide variety of very sensitive and personal topics, from one's relationship with one's own body to eating disorders and potentially suicidal ideation. The main risk is that participants could become distressed while discussing their symptoms. If this were to occur, the participant would have been given the option to interrupt the interview and decide whether to make a further appointment, and they would have been advised to contact their GP to consider a referral for a specialist assessment. The interview may have been the first time the participants had talked about their condition in depth, and the researcher would have been sensitive to this. Any expression of concern or distress by the participant would have been conveyed after the interview to Prof. R. (Consultant Psychiatrist and project supervisor), who would have offered to see the participant (Microsoft Teams) to counsel them and possibly recommend referral via the GP to a specialist. The participant would have also been given access to the BEAT helpline. Should the participant's distress during the interview have been considered significant and requiring immediate action by the researcher, the researcher would have contacted Prof R, who, if possible, would have joined the call right away. If he had not been available immediately, an appointment on Microsoft Teams with Prof R. would have been set up as soon as possible. In an extreme

situation, the participant might have been advised to seek treatment in a local Emergency Department. Prof R. was to be available at all times to provide any required assessment and support and would have attempted to help as soon as possible. Should the participant have revealed possible criminal activity, guidance issued by UCL would have been followed, and the researcher would, in that case, have discussed the issue with Professor R. in order to decide on further action. Should the participant have revealed self-harming or suicidal behaviour or intent, the researcher would follow the below protocol.

The majority of what is mentioned above would have been carried out and facilitated by me as the researcher and data collector (interviewer). I am an established young man with a bachelor's degree in Biomedical Sciences from the University of Ottawa, an MSc in Clinical Microbiology from Queen Mary University and an MSc in Clinical and Public Health Nutrition from UCL. I have completed all models and done well in examinations. I have had continuous interview training as part of his academic journey. I have also partaken in role-play training sessions with medical professionals, where I was tasked to handle tough and sensitive topics such as HIV diagnosis. However, given my limited experience with actual individual patients, I would not have been expected to manage alone a situation in which a participant became very distressed, revealing self-harm or suicidal intent. All interviews were conducted at a time when Prof. R. or a qualified colleague was available to consult within a short time.

Protocol if a participant reveals self-harm or suicidal intent:

1. The researcher will discuss the acts or thoughts with the participant.
2. The researcher will then contact Prof. R. or a qualified colleague to discuss the situation and obtain advice about how to proceed.
3. One outcome would be for Prof. R. or a colleague to join the call and speak with the participant.
4. If the participant does not wish Prof. R. to join the call, the researcher will ask the participant if he wishes to see Prof R. (within 2 days), his GP, A and E or mental health services to discuss the matter. If the participant agrees to one or more of these, the researcher will terminate the interview and make the necessary arrangements after

requesting the participant's phone number and email address and asking the participant to contact a trusted supporter with whom to stay. Immediately after the interview, the researcher will contact Prof. R., who, if appropriate and if the participant wishes, will contact him to make an assessment and decide on management

5. If self-harm seems imminent, the researcher will ask the participant for his address and call an ambulance to attend the participant's home for the staff to determine whether transport to A and E is appropriate.

I was trained intensively by Prof R. (Consultant psychiatrist and project supervisor) in these responses before the first interview. This training was structured as follows:

1. Providing information to the student on why MD might be associated with suicidal and self-harm thoughts and behaviours.
2. Information on triggers
3. Information on how to manage different types of crises
4. Role plays in which the student manages crises enacted by Prof. R. concerning distress manifested by a participant with suicidal ideation. During these role plays, Prof R. will judge whether the student had handled the situation appropriately.
5. Training would be followed by a multiple-choice examination in which the student has to choose one best course of action in different scenarios
6. If, following the role plays, Prof. R. is not satisfied that the student can manage potential crises safely, the project will be interrupted until the student's training is deemed satisfactory.

Ethical Approval

Ethical approval for the project 21687/001: The Lived Experiences of Men with Muscle Dysmorphia; an Interpretative Phenomenological Analysis Study was granted on August 19th 2022. It was signed off on by Professor Lynn Ang, the joint chair of the UCL Research Ethics Committee.

Recruitment

Following the attainment of ethical approval and clearing risk assessment measures to guarantee both participant and researcher safety. The study was advertised on Facebook through its Ad. Manager platform, making use of its targeted approach to make sure that the advertisement reaches the appropriate audience. (i.e., Men who fit the inclusion criteria). Moreover, social media platforms such as Instagram were used to get in touch with fitness instructors and influencers to spread the word about the study amongst their clientele and followers, and posters were finally hung in fitness centres advertising the study. 30-35 men reached out and expressed interest in the study; of those, eight men succeeded in completing the screening stage and fit the inclusion/exclusion criteria (Table 6). They were then asked to take part in a semi-structured interview.

Table 7 - Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
18–40-year-old Man (able to provide informed consent)	Female
Participants must score 39 points or higher on the Muscle Dysmorphia Disorder Inventory (MDDI) questionnaire.	Men under the age of 18 and above the age of 40
Participants must not be presently in treatment for Muscle Dysmorphia in a clinical setting	Scoring below 39 on the Muscle Dysmorphia Disorder Inventory
	Currently in treatment for Muscle Dysmorphia in the Clinical Setting
	Lack of capacity to provide informed consent

Table 7 shows the inclusion and exclusion criteria

The screening stage of recruitment entailed sending a pre-interview screening participant information leaflet (PIL) to the interested potential participant via email explaining the research project and the screening protocol. Following that, potential participants were contacted by the researcher using email in order to set up a Microsoft Teams call (not recorded). During the call, the potential participants were given the

chance to ask any lingering questions about the project, and their involvement and ability to provide informed consent were assessed by the researcher. The researcher was trained by their supervisor to assess informed consent, which was one of the tenets of attaining ethical approval for the study. Following the meeting, the potential participants were sent a link to a consent form by email. This form requested that the potential participants read its contents and place a mark to indicate agreement. The participants had the option to download and keep the filled consent form. Once consent was signed, a basic demographic form was opened to enter the participants' information (3-5 mins), and the Muscle Dysmorphia Disorder Inventory (MDDI) was completed as part of the entry criteria. These forms were then sent back to the researcher to assess, and if the information was deemed satisfactory and entry criteria were cleared, then another link was sent out containing the interview stage's PIL detailing the interview process and what is to be expected of the participant. Once that was read, a second consent form was made available for them to sign, indicating their agreement to partake in the interview.

Interview

There was a total of 10 interviews conducted (2 practice and 8 study). The practice interviews were conducted with two volunteers. The purpose of having these interviews was to practice the flow of the questions in the topic guide (Appendix A), making any necessary changes in the order of questions and the language used when/if necessary. It was almost important for the interviewer (myself) to be able to practice the interviewing techniques that I had learnt from my practice sessions in an environment that simulated the actual interviews. So, it was a wise step to take to be ready for when the actual interviews took place. The two interviewees did not have personal identification with the condition; therefore, none of their answers provided any insights into the subject, nor were they of any scientific value. The transcripts generated were used for purposes of practice, and eventually, they were discarded after they served their purpose.

The actual interviews commenced shortly after ethical approval was granted in August 2022. The interviews were slated to take place on Microsoft Teams, with both video

and audio recordings to be saved for transcription and analysis. In total, eight interviews were conducted in accordance with the tenets of Interpretive Phenomenological Analysis (IPA) (Smith, 2022). The interviewees were advised to set aside one hour and a half in a well-connected and private space in order to be comfortable enough to open up and share some of the sensitive and private topics that might have come up. The interview date and time were set via email, and a follow-up email was sent closer to the time of the interview in order to confirm attendance.

At the beginning of each interview, I spent 10-20 minutes building rapport with my participants, which was before starting the recording. I felt it was important to disarm them immediately and make them feel at ease. I needed to translate clearly that this was not an evaluation or assessment. I stressed that this was a conversation and that I was there to listen and learn from their experiences. They were the experts on their lived experiences, and I was just trying to understand their stories in their own words. I introduced the subject, reminded them of the tenants of the project, and confirmed receipt of the signed consent form. I also stressed the importance of confidentiality and the measures taken to ensure it. I reminded them that the interview would proceed only according to their consent and that they had the right to stop at any point. All of this was done to ensure their comfort as they were about to delve into their own past and talk about some sensitive and potentially emotionally aggravating topics.

The interview followed a funnel structure; that is, I started with some general (ice-breaking) questions. I had figured out and found out that the majority of my participants were willing and eager to talk about exercise and its meaning in their lives; therefore, I made sure to always open with the question, “What has exercise meant to you in your life?”. I found that they mostly felt comfortable answering that question, and it aided them in loosening up and getting more receptive as we delved deeper. The question became trickier and more personal.

Despite the care placed in fashioning the interview topic guide, including the sequence of the questions. True to the teachings of IPA, the interview was led by the recollections and interpretations of the participants (Smith, 2022). That meant that the subsequent questions following the opener were asked in the order that best fit each individual interview. If a participant was more inclined to talk about their family, then I followed

that thread even if that question was not set until later in the interview, and if they wanted to talk about diet, then that is where we went. It was my job to be present and ready to follow the participant as they weaved their way through their narrative while keeping the focus on the topic of the research. In that vein, it was not necessary that all the questions were asked; for instance, some of my interviewees did not experiment with steroids or any other substances, and therefore, that section of my topic guide was not touched upon with them.

The majority of the interviews lasted one hour and a half. On the occasion that they went a bit beyond that due to the participant still having things to say, it was cleared with them to see if they had extra time. Once they were done and the interview was about to come to a close, I always ended it by asking them about where they see themselves now and what are their hopes for the future. This was done because I did not think it was appropriate to end the interview on an emotionally charged note. This question ensured that despite dredging painful memories and anecdotes for the sake of the research, that participant and I parted ways on a positive note looking towards the hopeful future. After the conclusion of the interview, I normally congratulated them on their courage in sharing their stories, offered some personal encouragement and showcased my gratitude. I felt it was pertinent now that the interview was done that I not only related to them as a researcher but also as a fellow human being and that their stories held value not just for their contribution to my research but also for me personally. I then thanked them and inquired about any further questions they might have had at the time. I made myself available to them via email in case anything came up for them at a later date. I also reminded them that they would be receiving their £20 Amazon voucher shortly as a sign of gratitude.

Transcription

Transcripts of the interviews were generated on Microsoft Teams and were made accessible following the conclusion of the interview. These transcripts were then cleaned and edited by the interviewer (myself) using the recorded video footage of the interview to correct any typos and mistakes made in the auto-transcript. This was a lengthy process as the transcripts were not very accurate, and a great deal of attention had to be paid to make sure that the transcript represented what was said during the interview. Moreover, some superfluous identifying information such as gym names,

city names, actual job titles or names of individuals were edited out in order to protect the privacy of the participants.

Analysis Procedure

As mentioned above, this study utilised Interpretative Phenomenological Analysis (IPA) as the method of analysis. The tenets of IPA analysis, as described by Dr. Jonathan Smith, Paul Flowers and Michael Larkin in their book ‘Interpretative Phenomenological Analysis Theory, Method and Research’ (Smith, 2022), consist of the following steps in order

Table 8 - Showing the IPA analysis steps as highlighted by Smith et al.

IPA Analysis	Explanation
The Process of Reading and Re-reading	The first step of analysis consists of reading and re-reading the generated interview transcript in order to familiarise yourself with the gathered data.
Exploratory Notes	Textual and conceptual highlighting process to bring out the most glaring areas of interest in the participants’ account of their experience.
Constructing Experiential Statements	The process of combining the exploratory notes into statements that both summarise the data while maintaining its complexity and the important features of the exploratory notes
Constructing Personal Experiential Themes (PET)	Connecting experiential statements into clusters based on common links shared between them and arranging those into distinct PETs that serve as the final analytic unit for each interview.
Group Experiential Statements	Combining the PETs across the interviews to generate a set of themes that summarise the results obtained from the study sample

Table 8 IPA Analysis as demonstrated by Smith et al. 2022

Reading and re-reading the transcripts and giving yourself the time to sit with the participant’s account serves to intentionally slow down the tendency to read and analyse at a fast pace and, therefore, lose the essence of the participant’s experience. Allowing

yourself to sit with the data centres the participant and allows them to become the focal point of analysis by giving you more time to think about what they said and what it meant (Smith, 2022). This places the researcher on the first step of applying IPA's double hermeneutics principles of interpreting the participants' interpretations of their own lived experiences. I employed this step religiously in my analysis. I would read my transcript, consult my notes and then go for long walks to allow myself the time to flip the data in my head. This allowed me to dive beyond my first impression of the data and find deeper connections in what the participants chose to share with me. IPA concerns itself with diving deeper into the meaning of the spoken words. This practice of deliberately slowing down the very first step of analysis sets the course for you to drive past your initial interpretation and find that elusive deeper connection.

The second step in IPA analysis is Exploratory note taking. This step is informed by trying to highlight the semantic content of the interview and trying to keep an open mind to note anything of interest (Smith, 2022). The analyst at this step focuses on the standout expressions, words, analogies and examples used by the participants to talk about their experiences. It is important to keep the participant still at the centre of analysis in this step. It is important to try to understand how the participant views and thinks about their own experience, and trying to unlock the language they use is a major key to gaining an understanding of their own interpretation of their lived experiences. Exploratory notes can be fairly descriptive, summarising the main points of a passage and highlighting any phrases of interest while allowing the analyst to do some first-order interpretative analysis work for the researcher. For example, if the participant talks about their closeness to another person constantly throughout the interview, then the researcher can infer a level of shared experiences that is important to the participant. However, exploratory notes can also be conceptual to a degree. The researcher can be interrogative and engage in asking questions of the data whenever the need arises (Smith, 2022). Sometimes, the data begs a question, and it is good practice to allow yourself to ask these questions and open new avenues and ways of thinking about the participants' experiences.

Experiential statements are meant to summarise and crystalise the data collected (Smith, 2022). IPA yields long and detailed transcripts, and together with the exploratory notes taken, analysts have a lot of data on their hands. It is imperative that

the data is made more concise so that it can be easier to digest and combined to produce the themes of the interview. The task remains to be able to summarise the vast amount of data while maintaining its complexity and still managing to deliver the most important aspects of the exploratory notes. At this stage of the analysis, the analyst will be able to introduce more of their own interpretation and their own understanding of the data and use that to guide how they go about creating the experiential statements (Smith, 2022).

This step is followed by the process of combining the experiential statements. In their book, Smith et al. describe a manual approach of writing all of the experiential statements on strips of paper and arranging those on a table, then proceeding to group all the experiential statements with common features under the same heading, as shown in Figure 4. Those headings are termed ‘Personal Experiential Themes (PET)’.

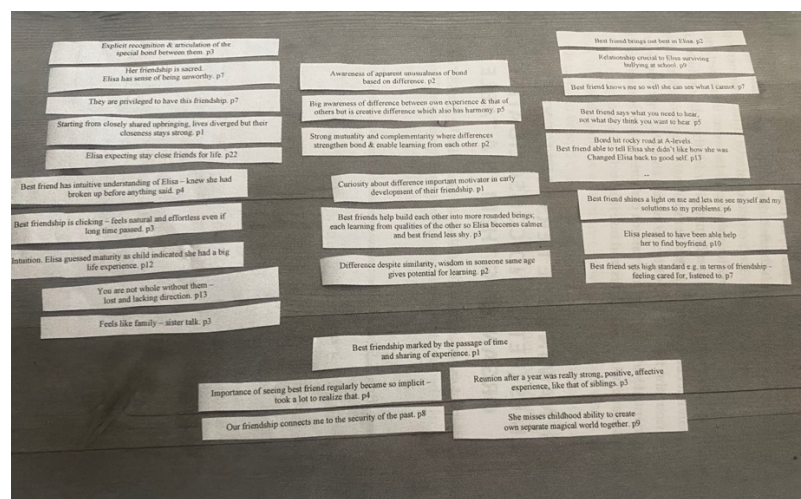


Figure 4 Experiential statements arranged into PETs (Smith, 2022)

Personal Experiential themes denote the personal nature of the shared experience. These themes directly relate back to the person whose experience is being shared. It is not imperative that all experiential statements fit neatly into the originated themes, and inversely, some statements might fit into several themes. Some PETs might have several subsets that highlight different aspects of the PET. PETs are then organised into a table that contains all of the PETs from the interview and serves as the final analytic unit of each individual interview. Finally, once these PET tables are produced for each interview, the analyst is then tasked to look across the interviews and try to combine the different themes into a master table. These newly generated themes are labelled as

‘Group Experiential Statements’ (GET) as they denote the shared experiences across the group of participants. At this stage, many experiential statements from each interview might be thought of in a new light influenced by what might have come to light during later stages of analysis, a great deal of reorganisation may occur, previously discarded statements might regain relevance and previously relevant ones might be viewed as less important. It seems that even though IPA is not a particularly iterative process when collecting data, with each interview and account standing firmly on its own as an individual unit, the analysis process, however, is iterative, with later interviews surely influencing earlier ones when the time comes to organise the GETs. The process of analysis is fluid, and it is important to always look back with fresh eyes and in light of new revelations.

As mentioned above, I fully incorporated reading and re-reading as a major part of my analysis. Initially, when I started to analyse my data, I sought to follow the steps mentioned above; however, I found that the process did not yield the level of analysis I was seeking. I felt constrained by what I thought was a very prescriptive way of doing analysis, and this was shown in my work. I was trying to get the steps “right” instead of trying to actually do any analysis. After having discussions with my advisor and experienced IPA investigator, Dr. Alison Rodriguez (Personal communication), I was given advice by her to cater my analytic process to what I need to do to extract the most meaningful results from my data. She highlighted that there is no “right way” of doing IPA work as long as you produce results that align with the principles of IPA when compared to their raw data. Therefore, I set out to develop my own analytic process, which I standardised for all of my interviews with the help of my supervisors. This process is highlighted in the table below

Table 9 - Showing the analysis steps adopted for this study

IPA Analysis	Explanation
Reading and Re-reading	The first step of analysis consists of reading and re-reading the generated interview transcript in order to familiarise yourself with the gathered data.
Observatory Notes	Similar to exploratory notes, they offer textual and conceptual highlights, bringing out the most glaring areas of interest in the participant’s account of their experience.

Personal Narrative	A concise, coherent narrative summarises the story of the participant while also offering the analyst the chance to insert their own interpretation of the participant's account.
Constructing Personal Experiential Themes	This is essentially a table representation of the major themes presented in the personal narrative clustered together and labelled with thematic titles serving as the final analytic unit of each interview
Combining Themes Across Interviews	Combining the PETs across the interviews to generate a set of themes that summarise the results obtained from the study sample

Table 9 Modified analysis process for this study

After reading the transcript, I started by taking my observatory notes. Those were similar in function to the exploratory notes as described previously. They were either textual representations highlighting the most interesting descriptive data offered by the participants in the form of certain expressions, examples, analogies or narratives, or they were conceptual interrogative questions arising from the text data. I was directly engaging with the text as it was presented to me, and my approach was guided by my main research question, which helped keep my scope within the boundaries of my research topic. Those notes were colour-coded in correspondence with the quotes and text sections that inspired them. This was done in order to refer back to the exact section the note originated from later in the analytic process.

Initially, when I had analysed my first interview using the Smith et al. process, having been dissatisfied with my results, I had decided instinctually to write what I referred to as a "Personal Narrative". This document summarised the core principles of the participant's account. Hence, this is why they were personal to their experience. They also allowed me to insert my own interpretation of their account, applying the IPA double hermeneutics standards. Simply put, this personal narrative was the participant's story as told, understood by them, and interpreted by me. Upon inspection, Dr Rodriguez commented that of the work I had produced in my first analysis, this piece was the closest I had come to capture the essence of IPA in capturing the essence of my participant's experience. Delving deeper into the meaning of their words and allowing myself the freedom to truly explore their story without trying to fit a certain set of rules.

She encouraged me to incorporate it into my analysis process. I did just that. After finishing my observatory notes, I sat down and organised them into a coherent narrative covering all of the talking points highlighted in the transcript. Additionally, I introduced my own voice into this narrative and allowed my own interpretation of the notes to seep in. I would first write the narrative in the participant's voice, summarising and representing what they had said; I would then read this preliminary piece and then work on a second draft, including my own commentary and interpretation, adding another dimension to it. I felt that this step was imperative for me to be able to dive deeper into my analysis and extract meanings that I had previously not seen.

The personal narrative was instrumental in constructing the PET for each interview as it offered a well-rounded and three-dimensional understanding of each case. Most importantly, it helped order the data and naturally cluster the notes as they came together to fit into the separate sections of the narrative, discussing specific aspects of the participant's experience. In a way, that was similar to how the experiential statements were clustered together by Smith et al. This made constructing the themes much more straightforward because I had spent an extensive amount of time combining my notes together in a way that served to create a cohesive narrative. All that was left to do was to break the narrative back down and present it in a table format. Similar to the process highlighted by Smith et al., the PET table was the final analytic unit of each individual interview. Also similar to their process, the disparate PETs from each interview were then brought together and combined in order to create the GETs for the entire study sample. That process included revisiting my analysis of each interview and trying to reconceptualise my PETs now that I had a full picture of all the data. The challenge was to remain faithful to each individual's account and experience while also being aware of new angles of looking at the data that I had not observed before, which brought my participants' experiences closer to each other. But it was imperative that I did not contrive to find commonalities when they were not there.

As can be seen, my analytic method was heavily inspired by the method highlighted by Smith et al. (2022) in their book; however, I elected to modify it to fit my style better. As an IPA analyst, I was aware that I had to bring myself into the world of the participant and in order to do so, I felt it was important to follow steps that eased that task for me and helped me yield better and more insightful analytic results.

Results

Participants

A total of 10 interviews were conducted for the purpose of carrying out this project. Of those, two were pilot interviews designed to examine the structure, flow, and span of the

questions on the topic guide, the depth of information they elicited, as well as providing practice for the interviewer to be able to better navigate the interviewees' narratives. That was followed by eight interviews that were carried over the span of 5 months from November 2022 until April 2023. Those 8 participants were selected from a pool of approximately 30-35 individuals who expressed initial interest in the multitude of platforms utilised to reach out to prospective participants (Facebook, Instagram, Twitter, direct email, personal contacts, professional contacts, gym adverts). Of those initial responders, 14 potential participants made it to the screening stage of the study. The remainder lost interest and ceased contact after establishing initial interest or after hearing more about the nature of the study. 6 of the 14 participants screened for the study were rejected due to not meeting the entry criteria. Of those, five failed to score above 39 on the muscle dysmorphia disorder inventory (MDDI), and one participant was deemed inappropriate after discussions with my supervisors due to the suspicious circumstances of their initial involvement and the vague and unforthcoming nature of their answers during the preliminary interview. I had been warned initially by my supervisors and members of the thesis committee about the possibility of encountering fake participants interested only in the financial token of appreciation. This participant fulfilled a number of the criteria I have come to associate with these individuals. Starting with the standard template email sent out from an impersonal email address, it led to practised and rehearsed answers to initial questions in the preliminary interview and failure to disclose anything more specific once asked for further elucidation. The final 8 participants cleared out all of the entry criteria and were subsequently invited to partake in the official interview. A summary of the 8 participants' basic demographic information is shown in the table below to be used as a reference point when reading through the themes and accompanying quotes from each participant. The participants were given pseudonyms in alphabetical order according to the chronological order of their interviews.

Table 10 - The Study Participants

Pseudonym	Age	MDDI Score	Relationship Status	Employment status	height/weight
Aaron	37	53	In relationship	Employed	182cm / 87kg
Benji	32	40	In relationship	Un-Employed	179cm / 76kg
Chris	26	52	In relationship	Employed	171cm/

					76kg
Daniel	33	56	Married	Employed	178cm/ 67kg
Ethan	25	59	Single	Student/Part-time employed	192cm/ 92kg
Fernando	29	41	Single	Employed	171cm/ 95.5kg
Greg	24	49	In relationship	Student	177cm/ 72kg
Harold	21	52	In relationship	Student	186cm/ 97 kg

Table 10 The interview participants were arranged chronologically according to their interview order, also showing their age, MDDI scores, relationship and employment statuses and their weight and height measurements at the time of the interview

Muscle Dysmorphia

Given that the core objective of this study is to understand the participants' experience of the signs and symptoms of Muscle Dysmorphia (MD), it makes sense to examine their understanding of the term and what it means to them in the context of their lives. Several of the participants provided quotes to help define MD.

Some of the participants had an academic understanding of the term that they have reached through independently researching it and trying to locate an expert-level meaning behind it. Harold referenced the documentaries that he had used to gain the knowledge to understand what MD is and how he personally identifies with it

“So, muscle dysmorphia, as I have come to understand it through documentaries, like Generation Bigorexia, which I think is the best sort of encapsulation of it that I have seen, is the fact that people cannot see themselves as others perceive them. It’s that difference in perception, you know. So, a hung man sees himself as scrawny and weak. And I think there’s also a key part of that is a persistent dissatisfaction and constant striving for more, as well as comparison to others.”

• *Harold*

Harold also mentions how that difficulty in being able to see himself as he is and always viewing himself as smaller than he actually does, in fact, hinder his ability to believe that he has MD because, according to his understanding of it, MD is characterised by being big and muscular which he decidedly believes he is not. And by that logic, he could not have an MD.

“To say that I have muscle dysmorphia would be me saying “Well, my physique is good. I’m just not recognising it” Which is not really accurate of how I believe when I look at it. I think it’s not good. I think I need to make improvements, so it is a bit of a contradiction, really.”

• *Harold*

Similar to Harold, Ethan links MD to an inability to accurately assess one’s own physical appearance and the desperate greed to continuously put on muscle despite your size and

muscularity. However, Ethan relates this definition of MD to his own past image as a child. This is significant for him because his image as a child was the source of much of his trauma growing up, as will become apparent later in the chapter when discussing bullying at school and how it affected the participants. For Ethan, that is how he sees himself despite what he might look like, and he feels the need to get as far away as he can from it.

[Definition of MD] *“I would probably define it as a constant feeling and desire to put on more muscle despite your initial size to begin with. As well as not being able to properly, you know, view what you’ve already got. Always feeling like you’re a lot smaller than you are.”*

• Ethan

“I look in the mirror and just see some chubby, overweight kid with no muscle whatsoever, and my goal for the future is to continue pushing myself further and further and further until I can reach a size which is socially deemed to be absolutely massive.”

• Ethan

Chris and Aaron both echoed a similar sentiment when it comes to their understanding of MD, linking it to a skewed sense of self and an inability to see the self as viewed by others. Chris highlighted the mental aspect of MD and how it, to him, is a mental health condition characterised by your brain working against you and setting you up not to be able to understand and contextualise your physical image compared to its surroundings

“It [Muscle Dysmorphia] is very much a mental condition. It’s a mental condition that sort of changes your perception of yourself, and there’s, you’ve probably seen it. There’s that sort of cartoony image of like, a really muscular guy standing in front of the mirror, and the mirror showing really skinny like. That is, that is exactly what it is. It’s not being able to see, see what’s in front of you, like your mind is telling you something, that your mind is telling you, that it’s not there, kind of thing.”

• Chris

Aaron was passionate about asserting that MD is true. It really exists. Aaron, being the eldest of the participants and one of the few ones who have actually engaged in therapy to deal with their body image, brought a lot of conviction to their defence of the existence of MD. He was very clear in wanting to dispel the notion that MD is not a real thing. He did not want to end the interview without making that statement and trying to play a part in disseminating the message to others, as he said when he concluded the interview. He also was, by virtue of his background and the therapy he received, quite academic in his understanding of the condition and how it manifests itself in a “skewed perception of self”.

“Bigorexia is a real thing. Muscle dysmorphia is the same package. And understanding that’s, that’s what it is. It’s not me being out of shape. It’s not me not being good enough. It’s just a perception of self-being skewed.”

• Aaron

Greg, on the other hand, links MD to his fear of loss of self-esteem and lack of self-worth. To him, MD is the culmination of his belief that he does not have much to offer beyond his physicality and that without it, he is not worth anything. Greg, as will become apparent throughout, is governed by this fear and mistrust of the world, and it is how he relates to the world; therefore, it makes sense that he sees MD through the same scope. Exercise and self-worth are very prominent themes that were touched upon by all of the participants and will be discussed in more detail later in the chapter. However, for Greg, it is central to his understanding of MD and his experience in general.

[Defining Muscle Dysmorphia] *“For me, it’s like this drive to exercise and go to the gym through fear. Like it’s a drive that cultivates fear within me. And pushed me towards the gym because without it, I think I just feel like, I feel like I’m pretty worthless and stuff. I think it really comes down to self-worth really in terms of body size and body image, but the routine as well. But yeah, the gym for me is pretty much all about self-worth, and I think without it, well, see, I think I just lose my sense of myself.”*

• Greg

Finally, Daniel had an interesting take on MD. He refuses to acknowledge a linear relationship between MD and size. So, whereas Harold found it difficult to acknowledge that he had MD because, according to him, to have MD is to admit that you are already big, and he could not do that, Daniel argued in his interview that MD is not about size and that you do not have to look a certain way to have MD. Like Aaron, Daniel was passionate about this point. He is someone who has gone through a significant weight and body composition change to suit his changing athletic interests from boxing to marathon running. However, he maintains the same compulsions and notions about his body, scoring the second highest on the MDDI (56) despite needing to look totally different because of his commitment to racing.

“I think it’s more complex than just, I’m not big. I think when it comes to muscle dysmorphia, people have an idea that it’s just about size. It’s so much more than that! It’s the fact your self-worth your time, and your energy are built around your aesthetics, your liftability. Your, like, everything. It is not just the opposite of anorexia. I want to be bigger. There’s so much more to it than that is. Is, is far more complex.”

- Daniel

Daniel also highlighted the value of aesthetic appearance and its importance in his understanding of MD. To him, a “set of abs” is far more important than sheer size. This indicates subjectivity in what the ideal body may look like for different individuals. And that MD does mean the same thing visually and that people with MD will not all look the same.

Yeah, because bigger wasn't me. Like, I would have swapped getting bigger for a set of abs. Do you see what I'm saying? So, it can't just be about bigger.”

- Daniel

As seen above, a significant number of the participants linked MD to a skewed sense of self and an inability to truly assess one's own physical appearance. They all had different ways of relating to that notion depending on their own personal narratives, and this will become clearer later in this chapter and in the next chapter. Moreover, Greg mentioned the notion of self-worth and its direct attachment to physicality directly in relation to the definition of MD. Finally, Daniel brought forward that size has not been the main representation of what MD is. He, too, brought forward the notion of self-worth and how you see yourself on a deeper level as the integral component of his understanding of MD.

Perhaps this section illustrates that the understanding of what MD varies even within this small sample. Many of the participants used other terms, such as “body dysmorphia” and “Muscle dysphoria”, interchangeably indicating a hazy awareness amongst many of them who had not spent the time to look into it like Harold and Aaron. This fact highlights the importance of this study as we aim to clarify what MD is, define its tenets, and make it more recognisable not only to people who may be suffering from it but also to the general clinical and research populations. The following themes in this chapter, structured around the participants' lived experiences with the signs and symptoms of MD, will aim to make some suggestions to achieve that goal.

Table 11 - Experiential Statements

The Experiential Themes	Experiential Statement
Parental abandonment and neglect	Early exposure to an emotionally neglectful environment at home facilitates the establishment of self-belittling beliefs about the self that are carried throughout life
Bullying and peer pressure	Bullying and peer pressure at school accompanying the home environment further establish a low sense of self and the need to always seek external approval

Exposure to competitive sports and exercise	Early exposure to competitive sports leads to negatively comparing the self with others and necessitates exercise as a means to measure up to competitors
Early exposure to gym and fitness centres	The dangers associated with early exposure to the adult environment of the gym and fitness centres, especially at an impressionable age
The Role of Media	The role media plays in perpetuating certain body image ideals onto young minds
Traditional masculine values	The pervasive natures of certain inherited beliefs about masculinity shaping the need for muscularity to telegraph strength and manhood
Emotional struggle	The presence of internal emotional conflict and difficulty coping in relation to fitness goals and gym association
Sense of self	The persistence of a negative sense of self that is inherited from the patterns established in childhood
Comparative narrative	The constant need to compare oneself with other men and measure success as individuals through that metric
High expectations	Setting extremely high expectations of oneself, fully expecting not to achieve them, and punishing oneself hard for that ultimate failure
Control Narrative	The compulsive need to exert control over all aspects of a fitness journey
The addiction narrative	The display of certain addictive traits and tropes in relation to exercise and diet habits
Functionality vs aesthetics	The inter and intra-conflict between exercising to achieve a look or to be more effective functionally
Supplements and Steroids	The Role of supplements' use in a fitness journey
Romantic Relationships	The Role of Romantic Partners in Reshaping Relationships with Exercise and Diet
Education and Awareness	The Role of Education and awareness in Potentially Altering the behavioural Patterns Associated with muscle dysmorphia among the Participants

Table 11 Summary of the group experiential statements in this study

The Participants' stories

Aaron

Aaron was 37 years old at the time of the interview, presenting at 182 cm in height and a weight of 87 kg. He started the interview talking about the personal value of “control” in his life. It is imperative for him to meticulously control all aspects of his physical presentation. That includes the hours spent at the gym, the exercises in each session, and the particularities of his diet. Control is of paramount importance to him.

“It’s probably a way of... uhm... control. Understanding that. Whatever I put into my body needs to be, needs to be burned off and to maintain a physique.”

It seems that for him, controlling the activities at the gym compensates for all areas in life where control seems to be unattainable. He, in other words, strives to control this aspect of his life to make up for all other aspects of life that are out of his control. Here, he mentions for the first time the fact that he had been abandoned by his biological father at a young age, something that he had very little control over

“Within life, you can’t control everything. But I can control that no matter what, that is completely and solely down to me. You know, I can, no matter what external factors happen shy of an injury that stops me... my mobility. You know, I can control that. And I guess looking back at it, that goes back down to everything that happened with my biological father leaving as well. I couldn’t control that. I had no control over that. Whereas with the exercise, I can.”

However, interestingly, it seems that Aaron, even though he is very proficient in being able to control his activities within the gym, is battling to gain control over his need for exercise, and he recognises that there is a compulsion to go to the gym despite himself because a perceived failure in achieving his self-prescribed exercise and diet goals leads then to a state of emotional dysregulation characterised by high anxiety and short temper, and an inability to cope that manifests itself in dysfunctional social interactions and a preoccupation with the concept of compensating for missed workouts.

I should. I should have a rest day, but again, I start to feel a bit on edge ... it’s still there [voice compelling him to exercise] in the background. I’m trying to control it better than I have done before, but I know it’s still there, so my perfect week, I wouldn’t, I wouldn’t have a rest day.”

“But yeah, if I, if I don’t, If I don’t train If I don’t exercise, I do get that anxiety of or how I’m gonna be forever clawing calories back now. It’ll then drive me to probably over-train and under-eat for the following week. And that cycle just continues.”

“[in response to missed workouts] Probably get short, snappy, agitated. Have not had that release to me; I’ve not been the best I could be in my life in that day. I’ve not got out and pushed my body... it is a bad place, just a dark place.”

Furthermore, Aaron details an extreme self-punishing measure for perceived failure in attaining his exercise goals where he drastically cuts back his calories to an unattainable degree in order to compensate, and when that ultimately fails as well, and his hunger overrides his attempts to starve himself, he then “demolishes” the food in front of him. He mentions that instead of having one biscuit, he chooses to eat the entire pack, which ultimately reinitiates a cycle of guilt that leads him back to the gym again in order to claw back the calories”, and puts him back on a very calorically strict dietary plan. He describes this cycle of bingeing using the analogy of crashing a car.

“It is a bit like if you crash your car, you don’t then think, ohh sod it and continue to crash your car into more and more walls. You’ll, you’ll reduce the damage. You’ll crash it once and think right, OK. I won’t do that again.”

Aaron, therefore, feels that he needs the gym in order to sustain emotional balance in the form of being able to “release” a lot of his pent-up energy and improve his quality of life. He needs the gym to be able to live life better, sleep better, be in a better place with his colleagues and, friends and family, cope with the troubles in life, assert a level of control over himself manifesting itself in the way he looks as a result of his efforts at the gym. He also mentions using the gym in order to cope with a particularly dysfunctional relationship. This then fuels his internal struggle between his dependency on the gym and exercise compared to his logic-based knowledge about the need for rest and the need to modulate his level of exercise. He seems to be always of two minds about it; where on the one hand, he does recognise the benefit of taking a day off, while on the other hand, he has a fear of slipping out of shape both physically and mentally if not being able to exercise regularly.

“I go back to completely ignoring what I know about my normal bodily function of burning X amount of calories while I am sitting doing absolutely nothing, and I can see it’s very, very rare. I can sit and do nothing all day. I’ll have to get up, and even if it’s just a walk to the shop where it’s 2000 steps, I have to get up and do that for my own mental well-being. Even though I know deep down that some days doing absolutely nothing will probably benefit me long term in a much more positive manner than, you know, having that constant niggling of, of going out and, and doing that [Exercise].”

The most damning example of his mental deterioration came during the lockdown when he was not able to access the gym. He talks about feeling restless, annoyed and descending to a very dark place. He mentioned turning to alcohol in order to cope because it had fewer calories than food. He mentions taking up running despite not being a runner in an effort to cope, and he finally talks about how a saving grace for him was when a friend managed to get him access to a gym during the lockdown, and he was clear in pointing out that without that he does not know if he would have been here today.

“I think if I hadn’t had access to the gym during the lockdowns... it was in a very dark place. I’d probably not been here ... for the first few months; I was just getting into a, a more and more dark place internally

Aaron also highlights that for him, looking muscular is directly linked to being a “successful man”. He talks about how, in his position as a lead singer in a band, he had decided that he could not put on weight and that he had to look physically fit; that belief was compounded by his observations of celebrated male bodies on social media that seemed to indicate to him that to be a better man is to be muscular and in good shape. Furthermore, the attention he received from the opposite sex directly linked to how he appeared further cemented this belief in him. He also mentions how getting this approval from women and, as importantly, fellow men gave him a sense of validation as a man. He relies on those stamps of approval to indicate that he has succeeded in his efforts to become a “successful man.”

“It’s that... somebody, uh, another male walked past you and thinks Jesus Christ, you know, he’s a big lad. I wanna... I bet he’s strong; he’s where I want to be. That big. That’s the only way to describe it.”

“It put me up on a pedestal, I guess, and I think it, it, it showed dedication to the, to the diet, to the training, to being there.”

Therefore, Aaron is exclusively preoccupied with his aesthetic appearance. To him, having a six-pack telegraph directly the kind of man he wants to appear to be, regardless of how functional he is. He talks about how if he appears big enough, then he is good enough. Possibly even good enough to the point of not being the kind of person who would get abandoned by their father. The kind of person who would not be targeted or “messed with” or hurt by others. Similar to how he was in school when he was made fun of for his appearance. A successful man. It is this desire for success that keeps pushing back into the gym and dictates his devotion to it. Without it, he does not think that he is good enough. And that is why that desire for him is unquenchable. He talks about never being satisfied and continuing to push his goals to get better, fitter, and stronger so that he can finally be good enough.

“I know guys that are in amazing shape, that can lift, you know, ridiculous weights that can do so much, they don’t have a six-pack. But it’s that aesthetic look of what... If I was a female, what would I look for in a male? Big chest, big arms, and the six-pack.”

“The therapist said to me, he said, do you know, Imagine... I can’t remember the, the, the same ancient... either ancient Egyptian or ancient Roman kind of person, he said, you know, they’ll roll this boulder up a hill and then stand at the top of this hill that’s 10-foot tall and be like, look what I have done? How proud am I? He said, but you’re not. You’re looking at the 20-foot hill, and going well. Why aren’t you? Why haven’t I got it up there? He said, you’re always trying to be better than that, and, as I said, that’s stemmed a lot, too, from my father leaving when I was younger, and I think it’s manifested itself with, with the diet and the body and always being better so I can never get bullied and I could never have somebody say I wasn’t good enough.”

Another very important aspect of Aaron’s life is his current relationship. He credits his parent with being the person that matters to him the most as she does “come first”, and for her, he seems to be willing to even relax some of his exercise and dieting habits, still with the assurance that he will be able to compensate for them later. But he seems to gain a great deal of satisfaction from the belief that she “loves him for him and not his physical appearance”, as it does not appear to matter to her at all. Instead, she is more invested in their spending time together, and therefore, he is willing to let go of exercise to give her what she needs

“[on meeting his partner] I was just in a big jumper and trackies, so there was no real... we kind of started to, to fall for each other without seeing that part, you know, she didn’t see that part of my life. She didn’t see the body.

“My current partner, Who I’m with now. She doesn’t have any preconceptions about that. She’s, you know, it’s just not, it doesn’t come in her vision line, you know? And it, it, it. It’s helped me balance. Because it’s put in less pressure, and there’s, it’s not mentioned, it’s not discussed, It’s not, It’s not something that’s a priority.”

This is in complete contrast to a previous relationship he had where the partner was very preoccupied with her own appearance, and he, therefore, felt very focused on his being that he was in the same environment as her

“The thing I suppose with my ex actually was that she was worried about her weight quite a lot ... that, that irked me a little bit because I was like, well, I, I worry about my weight, and I know what to do about it, and I will do something about it.”

In Aaron's life, sports have always been a permanent feature. Since he was young, he was encouraged to be active in sports by his own mother, who enrolled him in rugby, racing and football; the latter he still plays and is a big element in his exercise routine as it constitutes a lot of cardio efforts. He, however, links this early dedication to exercise with the development of body image issues both in himself and his sister, who suffers from bulimia, to the point where his own mother now questions her decision to involve them in sports with such zeal at a young age.

“My sister, she also, she suffered from bulimia for a long, uh, a number of years {pause} and, and so my, my mum often wonders what she's doing wrong. She would say. I've got my oldest son has got body dysmorphia and Bigorexia, and then my daughter suffers from bulimia. Umm, and I don't know, that's just because we were a very active, sporty family.”

Early involvement in sports led Aaron to an early induction into the fitness centre environment, where he won a free membership to a gym at a fair when he was 15. He talks about how steroids were prevalent at the gym when he went and how that established a connection between size and masculinity for him, where he began to view size as a measure of manhood.

“I was probably 15. I was at a fair, and they had a test. It was just a local gym that was at this local fair, and it had a 'test your strength' ... and I won the 'test your strengths', I won a bike, and a year's membership at a gym... it is a very old school spitting sawdust gym, so a lot of the people that are there are very clued up on steroids. So, a lot of the guys in that gym were big, jacked up lads, in really good shape physically, from an external point of view. I think that's probably where I made that connection of the gym to the, the muscle, the mass, the looking, looking like that.”

However, despite his lamentations about being introduced early to sports, Aaron still very much enjoys playing football. He loves the camaraderie and competition element of it. He indicates the duelling nature of football's influence on him. On the one hand, football has mitigated his use of steroids because he does not want to become too big and bulky and lose all of the agility that he needs in order to compete, but on the other hand, the football pitch is a place where he can exact part of his exercise routine. He talks about needing to compensate at the gym when he cannot get his cardio done on the field due to injury. He also talks about sneaking in a fitness watch to keep an eye on the calories burnt while playing football despite it not being allowed by the coach.

“it's just not a, not something that I wanted to get to because I didn't want to put on too much size because it'd hinder football. You know I'm a winger, so I've got to try and keep my speed. Now, if I start packing on, you know, a load of kilos on my legs, it's only gonna slow me down.”

“I've managed to sometimes; I mean, these are a blessing and the curse, these kinds of smartwatches that control that; if I can wear this under my sleeve where a referee won't see it and I put it on to the, the footballing setting and play. After 90 minutes, I can; I can do, you know, 2 1/2 thousand active calories and up to 12,000 steps.”

Bodybuilding is another sport that Aaron is engaged in presently with whom he appears to have a complicated relationship. He talks about how gruelling it is to prepare for a competition and how that, in the past, has led him to lose his temper and lash out physically due to being tired and hungry. He also talks about how bodybuilding necessitated using steroids in order to be able to compete, having lost competitions to steroid users.

“As I got more and more into the gym. I was well aware of people using steroids, but I was always very against them. I was like, no, I want to be natural. I like the fact that I’m natural ... Then I competed, and I was on stage and out of 16 people, I came in fourth in my competition ... When I looked at the photographs and the judges’ feedback, I got beat on my back and legs weren’t big enough. Now I know the four guys that came above me or know people that know of them, and every one of them was on some form of steroid, and I thought, well, if I ever want to get any better than where I am now, fourth out of 16, I’m gonna have to look at an enhancing drug.”

“The week before I was due to be on stage, and I think, I recall one of my friends took my hat off while I was in the middle of a leg press, and I punched him ... I’m not a fighter. I can’t fight my way out of a wet paper bag. I am; I’m not an aggressive person in any way, shape or form. But I knew then that was like, well, this is, you know, I’m, I’m, my body is at its limits now because I, I just, I lost it, and I just swung for him just for taking my hat off. It was something so simple.”

Within this particular sport of bodybuilding, Aaron also touches upon the area of comparing himself to other men and continuously striving to be as big and powerful as them in order to measure up and be successful, which then leads him to overexercise and engage in steroids and other enhancing drugs in order to compete

“And I think that’s why it uh... Just... you know... uh... I mean... you then see somebody bigger than you, in better shape. You think. Well, I want to get to that level. I want to get to that level, and you start to ignore your own body’s capabilities ... you then chasing everything that you potentially don’t feel like you’ve got, cause you see one person with something bigger than you.”

The subject of steroids is one Aaron had a lot to say about. On one hand, he is very critical of the depiction of men in media as natural, where he knows they do not appear to be. He believes that this false advertising is key to people developing a “skewed sense of self” regarding what they can achieve naturally. He calls for more transparency from famous movie stars when it comes to their bodies and how they achieve them. With that being said, he himself openly talks about his “steroid use” and is very adamant in differentiating between “use” and “abuse”. He raves about all the benefits using steroids has done for him in terms of energy, outlook, and appearance. He highlights that he has done his research, including talking to a medical professional in a personal capacity who encouraged him to use steroids. It is important to him that it is known that using steroids is not cheating; he himself has to use them in order to compete successfully in bodybuilding competitions. He thinks that if every man used steroids responsibly, the world would be a better place.

I think, particularly with social media and the very public domain of the news, films that they fail to tell you about the steroids that they’ll take. So, people like... I forgot his name... the dude that plays “Thor... Chris Hemsworth. People like him, Dwayne Johnson, they’ve all

been on cycles of TEST. They've used Anavar. They've used Winstrol; they've used steroids to get where they are."

"The perception of self is skewed. That you, you don't see how well you are. How, how your body looks because you've, you know, dysmorphia to me is surrounding yourself with things like Dwayne Johnson the Rock, the Marvel action heroes."

"Steroid isn't cheating. If you're not competing, it's not cheating. It's an enhancer. And if it's used... there's, there's a big difference between steroid use and steroid abuse. And people don't see that; they just see steroids."

"I was probably in the best shape of my life. And I absolutely loved it. Not only that, I loved how much energy It gave me. I repaired quicker... once you come off that cycle of steroids, it's that, you know, I don't feel as big. I don't feel as, as well."

Furthermore, Aaron blames the media for inundating him with images of men looking very specifically muscular as an example of what success looks like on a man, and that is where he has had a lot of his ideals generated from as he describes himself googling in order to gain knowledge about dieting and exercise

"I was Googling certain things [related to physical fitness and bodybuilding] about diet plans, about training regimes, Instagram, everything just dropped more and more competitors, more and more physically fit people into my news feed, so I almost found myself getting closed in by everybody that was bigger than me. That was better than me, that had a better life than me. Which, while it forced me to strengthen, well, I need to get better; I need to get bigger."

As mentioned earlier, Aaron highlights his distress at the idea of skipping a workout. This means that he will try to avoid missing the gym even if he is injured. In fact, he talked a great deal about the measures he takes when trying to work around an injury by modifying his exercises to accommodate the physical state. To him, going to the gym and working out is akin to achieving a euphoric state, and therefore, he is incapable of letting that go. He talks about how hearing the dumbbell clink feels like life being injected back into his body as he feels the blood rush through his veins, how that feeling of utter bliss and happiness is a massive part of his gym life. How he also relies on the gym to create a safe place for him to socialise and talk about his goals without feeling judged and misunderstood. To Aaron, it is particularly not easy to open up to his loved ones about his body image issues and his anxieties about exercise and himself. He feels the need to shield his loved ones from his own troubles. He also worries about their judgement when it comes to aspects of his life, like his steroid use, and he fears that they will interfere in an area in his life where he feels it is important to maintain control. He does not want them to tell him how to run his gym life. Therefore, he engages in secretive behaviours like going for secret runs during Christmas before people are up to justify his indulgences at the dinner table later or hiding that he is using steroids from almost everyone in his life. Or even him being relieved that his sister's bulimia was a more prominent worry for his family because it was more evident than his own body issues. He, however, seems comfortable confiding to his current partner, who was within earshot of this interview being conducted. He feels that her lack of interest in his appearance created a safe space for him to share with her. Additionally, he has made the step to seek professional treatment because he felt that he needed

it mostly for his disordered eating habits. However, he highlights how the subject of Muscle Dysmorphia failed to be raised by his mental health provider.

“That atmosphere, that release, you know, I was able to hear the clinking of weights and, you know, push my muscles to the extreme, you know, chucking up the dumbbells that were probably a little bit too heavy. But I was able to, you know, strain and get, and get them up and just. Get my body feeling like my body again.”

“[On therapy neglecting muscle dysmorphia] I think he mentioned the word. I think he mentioned Bigorexia as something that’s not yet defined. The word is there, but there’s still a lot more work to go into what it is?”

“I will find a way to train around an injury if I’ve injured my arm. I’ll train my lower body. If I’ve injured my legs, I’ll train upper body.”

“[About not wanting to open up to loved ones about his struggles] I suppose it could be down to denial of wanting to admit that I had an issue. [Pause] Uhhh, I think if you start talking about what it is, you’re admitting it. And then people become mindful of it, and it becomes people checking in on me all the time.”

“[about coping during the holidays] I’d have restricted myself [diet] on the run-up to Christmas, so it allowed me that freedom at Christmas to not really be as restrictive ... They didn’t see me going out for, you know, 10-mile runs in the morning before things were happening. So, I wouldn’t put it on social media. It’d be very much a private.”

“Apart from my two gym buddies, he was the only friend away from that cycle who knew about the steroids. I didn’t want other people to know because. People just, they are very judgy.”

Finally, Aaron is very thankful for gaining knowledge of Bigorexia. He feels that it has given him the ability to confront some of the deeply held notions he has about himself that have influenced his journey of seeking muscularity. He is not out of shape or not good enough; he recognises as someone who identifies with Muscle Dysmorphia that the condition is causing the exasperation of these feelings in him

“I think understanding that Bigorexia is a real thing helped me massively, and because I understand that, I’m probably looking after myself better. Because I’m not putting so much strain onto my body.”

He also mentioned how having friends reach out to him and take the step to open up with him about their perception of his struggles has really helped him in opening up and sharing with them instead of keeping it all to himself as he has done in the past

“He just asked the question [Are you OK?]. He knew I’ve always [struggled], he’s, he’s my closest friend, he has been my friend for, for a number of years, so he knew, he knew of some of my struggles but never to the, to the [deepest] levels, but with him I can speak about anything. As I said, he is my closest friend. I just said to him. I’m just, I’m struggling to get that release and that, that feeling of, I’ve done enough without, without the gym there.”

Benji

Benji has a conflicted idea about the concept of muscularity and muscle definition where, on one hand, he recognizes that he himself is in pursuit of a muscular ideal that he does not perceive himself to have at this moment, which then creates a degree of body dissatisfaction within him. He seems to be focused on weight in relation to height and where he needs to be personally in order to achieve the said ideal. However, He also rejects the "too muscular" image. He prefers a more "toned" look akin to the likes of the Olympian sports athletes he idolizes. He views their level of muscularity as a more meaningful one that shows how a man can conquer all of their imitations and look exactly ideal for doing so. To him, these sports stars are ideal-looking men because it is apparent that they have worked hard to get to where they are, and their shape and fitness then help them to achieve the extraordinary feats of athleticism that they display. He feels that he cannot perform these athletic actions without being in that shape

"Like I said, I'm not happy with my belly. It's too rounded, plumpy even. My arms look a bit like what you find on a tree, like branches, so, uh, they look a bit too dangly."

"If you wanted the best peak body, you know, you, you've gotta look at an athlete. At least an Olympic level athlete ... They go beyond their limitations, and that's the one thing I, I've always liked in athletes, or, you know, sports people in general. Like they, they go beyond their limitations."

"If you wanted the best peak body, you know, you, you've gotta look at an athlete. At least an Olympic level athlete ... They go beyond their limitations, and that's the one thing I, I've always liked in athletes, or, you know, sports people in general. Like they, they go beyond their limitations."

"Like, I want it to be toned, but it's not like muscular. Like I, I don't wanna be too muscular, but at the same time, I don't want to be flabby. So that, for me, would be my ideal physique. Just. Yeah, just, you know, no fat in my body and I think, for me, I'll be satisfied if I can achieve that."

"If you wanted the best peak body, you know, you, you've gotta look at an athlete. At least an Olympic level athlete ... They go beyond their limitations, and that's the one thing I, I've always liked in athletes, or, you know, sports people in general. Like they, they go beyond their limitations."

"But every time I do play in goal, I don't know. I feel like I'm a bit sluggish. My movement isn't as graceful as say, the other goalkeepers. So, like, I'm kinda like slow to respond. And again, when I look at myself and other goalkeepers, I, I don't feel like I'm proportionally right to be a goalkeeper, and it just bothers me."

To unpack this connection to muscularity and athletes and his idea of what manhood is, Benji states that he has the tendency to compare himself less favourably to men he perceives to be in better shape than he is; that comparison then creates in his mind the feeling that he is not as good as they are, and then he also fears their judgement. Benji is not muscular; he is not actively training at the gym, and a big part of that is his mistrust of the gym culture and the men at the gym. He feels that he would be judged and targeted for not appearing as though he

fits in that environment. He says that he would rather stay away than go there and be subject to what he highlights as

"It kind of affects me mentally a bit, you know, when you see other men who have like, well, as I would say, better bodies or like better physiques. Uhm, I wish that I had something similar because, all you know, because I look at the men and it just like, kind of bothers me a bit."

"When I look at myself in the mirror and then when I compare myself to someone the same age, it just put you, it really just put you on the spot, makes you feel absolutely crappy about yourself."

"[Explaining his reasons for avoiding the gym] I think it's, Uhh, I think it's less about the gym itself, and it's more about the atmosphere. Every time I go, every time I walk past it, the people that occupy it just don't seem. They don't seem like the friendly type. I I know, might be stereotyping people, but it's just what I gather every time I walk past there. They they just look down on you as if you are inferior... It's like the people that occupy the building; they look at those that walk by as if like, like, what are you doing here? Like, this is only for people like us. And you know it. It's just intimidating."

Benji, therefore, feels that facing your own limitations and conquering them is the best way to be successful as a man, and he highlights that for him, sports stars are the examples that best showcase this quality and achieve esteem because of it.

"They go beyond their limitations and that's the one thing I, I've always liked in athletes, or, you know, sports people in general. Like they, they go beyond their limitations."

"Ronaldo. He pushed himself to be the best. Like he, he didn't accept second best; he wanted to reach that, that, you know, the, the godhood, you know, if we go in mortality wise and Ronaldo is, you know, he's a perfect example that you know if you put in the effort ...as a human being. You, you, you can't help but respect what he's done. He's, he's gone from this skinny lad. This skinny 17-year-old lad, when he joined Man United, and then 20 years on, he's, he's, he's, he's achieved so much. He's, you know, he's defied expectation ... he's done everything that he's asked himself to do, and he's done it with. You know, with quite high esteem."

Benji's awareness of his perceived limitations started early in life, having been brought into the world in a traumatic way with the umbilical cord wrapping around his neck and causing lifelong learning disabilities; he highlights that he always felt a step behind. He always felt that he was not understood by his family, who, despite their efforts, seemed to be incapable of reaching him the way he wanted. And then, at school, he was extensively bullied, and part of that bullying in his mind stemmed from not being as physically appealing as some of the other students, and part of the focus on appearance was a focus on body shape and apparent fitness. He links his appearance to "how he was". The bullying was so bad that he developed suicidal ideations as a teenager and seriously considered taking his own life.

"I was bullied because of the way I looked. Like the way that I was. The way that I presented myself."

"People just took full advantage of it. People made me feel absolutely worthless. And I, I couldn't do nothing about that because like I said, I was just, I was just tiny lad. I just wanted to get through these years, and it was so hard. I mean, there was, I mean, it was that bad, Uhm, I, I'm just gonna say it as this, it was that bad that I, I, I nearly, nearly considered the possibility of committing suicide. And I came close to doing so because, umm, these people made me feel so, they made me feel wretched about myself."

Benji talks about how, to this day, he has carried this feeling of worthlessness that he inherited from these early experiences and how those experiences have shaped his life to always view himself negatively as compared to others and continuously pursue very harsh standards for physical fitness that he himself does not believe he can necessarily reach. Admitting that he knows that these ideal standards and the sense of happiness he is seeking are impossible to attain, but he is just not willing to give them up because he has tied his sense of success to achieving these physical goals while also fully recognizing that this is a personal thing and that others do not have to adhere to his standards in order to be successful in his eyes.

"That's always stuck to me [The effects of bullying]. Even when I left school. And, I, I tell you something, I was so happy to leave school! So happy! But that is the one that's always stuck with me, and I've tried to improve my physical condition. I wanted to prove to these people that, you know, I'm not as, you know, I'm not as invalid. And you know, as weak and feeble as you make it out to be"

"If you wanted the best peak body, you know, you, you've gotta look at an athlete. At least an Olympic-level athlete. Now, as I said, that's probably something that I can't like, I won't be able to achieve, and that's just me being real with myself."

"For me, the peak of, you know, the, the peak when it comes to physique has to be an athlete. That is something that, you know, I, I try and see myself in, and maybe I won't achieve it. Who knows? But you know I, I try my best to reach that level if I can. And I think. Only then would I be happy."

"I'm - funny because my partner, right, she's bigger than me, but like, I still accept her for the way she is"

Benji has found it historically and to this day hard to open up about his struggles with his close family members, friends, mentors and even professional healthcare workers. For him, this difficulty stems from several reasons. One of them is that Benji, who refers to himself as "a child of the 90s", states how he grew up with a very specific image of what a man should be. A man, to him, was meant to be physically strong and emotionally contained. For him, a man did not cry, and even though he nowadays believes that this is not what a man should act like, he still finds it hard to open up and be emotionally accessible. It also does not help him that he still feels that his family at large fails to understand his struggles and always has since his childhood.

"I was led to believe that people, well, men specifically, when, you know, when, when they come across big, bold, intimidating, they're not meant to cry. They're not meant to show weakness. That was something that was quite big back in the 90s. Any man, any male that cried, was considered a weak-minded fool."

"I couldn't even share it with my family, not because of what they could have done. It is that I just don't think they would understand how I felt. You know, the, the, the needs that you know that I have as a person... You know, the fact that I had a disability as a kid. They just didn't know how to go about it. So, they left it to the primary school and the secondary school to do something about it."

As mentioned before, even though he now believes that opening up does not make you any less of a man, he still says that opening up is hard for him because of his past experiences of being shut down or dismissed whenever he has opened up about his body image concerns. He talks about how both academic mentors and professional healthcare workers let him down and failed to address his issues in a way that was satisfactory to him.

"Most of the time, I, I normally keep this [his body image struggle] to myself because of fear of judgment. Like I said back in the 90s, as a male, you were expected to pull up with it and just get on with life. I don't agree with that. I never agreed with it back then. , I tried to open up, but all it got me was just constant trouble and people mocking me."

"I just couldn't share that information [body image issues]. I couldn't even share it with the teachers because, more often than not, they would normally just laugh about it".

"My GP in the area where I live don't have the best track record when it comes to giving the right type of advice. More often than not, they're just sort of fob you off and, and just say, oh, you know, we'll, we'll, we'll just put you in a room with a counsellor even though it, it, it's not what you're after."

"I did try and talk to the professional about it [body image issues], but, again, they didn't know what to do. They, they just thought that it was just ohh it, it was just a mental health issue, and that they would prescribe you with medication or they, they'll link you to a bloody psychiatrist or something and it, and it's just like that's not what you need."

"I actively avoid healthcare professionals because I don't know. They just, I don't think they have the right type of advice for stuff like that."

So, with that, Benji states that he feels safer keeping this information to himself and not exposing himself to situations that will bring about any emotional distress, such as going to the gym and receiving judgment for being inferior to the other gymgoers, or confronting his family with his issues or opening up to any professionals in the field. Avoiding distressful situations is a priority for him

"The one thing I don't do well with is. You know, people judging me like whether it's my appearance, the way that I conduct myself, it, it, it, it affects me mentally. So that's probably one of the reasons why I haven't bothered with the gym."

"I remember one time. Uh, a big guy. Uh, I wanted to use it, but uhm I don't know if it was the owner or just some people that were using it at the time. They were sort of mocking him because of his size. You don't want that because it, it, you know, it, it really affects you mentally. And what if that was me? You know, what if? What if I was the victim? You know, it

doesn't really do you a world of confidence when people mock you, you know, for no fault of your own. No. I just. I don't wanna be dealing with that."

Benji states that he realizes that there is a tendency to seek approval from others in order to prove that he is good enough. He also recognizes instances in his younger years where he did things that he was not proud of in order to gain the approval of his peers at school. He still carries that attitude and is trying to gain physical excellence to prove to people that he is good enough

"That's always stuck to me. Even when I left school. And, I, I tell you something, I was so happy to leave school! So happy! But that is the one that's always stuck with me, and I've tried to improve my physical condition. I wanted to prove to these people that, you know, I'm not as, you know, I'm not as invalid. And you know, as weak and feeble as you make it out to be"

"I think I was in year eight or year nine... I got in the fight with this lad, and it's not because I wanted to. I was sort of pressurized into doing so ... I didn't want to fight him like, like I, I didn't believe in like confrontations, but when you've got so many people, you know, banging into your ear saying "Ohh fight him, fight him, fight him" like what can you do? So, I end up caving into that peer pressure. I end up fighting this lad. I end up battering him. Teachers had to come out and split us apart. Uhm, I wish I had quite an ear full. And when I look back on it, I think it was pretty much deserved. UM. I think. I think the reason why I got into the fight is that I, I wanted to prove that, you know, appearance isn't everything, and that I, I wanted to show the other lads, and you know, the, the girls, that you know, I'm not as weak I as I look."

A degree of that need for approval stemmed from values of sexual attraction. He realized early on that to be successful at attracting girls then you had to look a certain way and that he was again not good enough for not having a certain appearance. He was determined to prove that he was good enough, which is why he says that he decided to get engaged in a fight with his fellow students, a decision he regrets to this day.

"You had them bad boy types, right? Who, who, you know, they, they stand out, they, they stick out like a sore thumb. And because of that, loads of, like, all types of females are attracted to that type of... Well, that particular type, but with me, I didn't really have a type. I was basically the black sheep in that school, the oddball."

Another way Benji says that he tried to measure and prove himself was by engaging successfully in sports activities because he perceived the differences between himself and the people who played sports at school. However, football has influenced him to compare himself to other unfavourably then and he continues to do so now. It adds to his anxiety about his level of achievement and his success when he perceives that he is lesser than his teammates and is not able to cope.

"When you consider physical education or P.E. for short, there's such a contrast between people like myself to those who've played football for, for a good few years, and, you know, that contrast is so evident the moment you play. I've always been, I've always stuck in goal back then, you know, the losers stay in goal as they call."

"Even though I had such a, you know, huge growth spurts when I left year 11. I managed to jump from, I think, I was like 4'6 to 5'4,5,6 or something like that. UM. The people that made my life of misery, I've now, I was just as tall as them, or just, you know, got a bit taller than them. But even, even with that height difference, if I stood next to him, I was still a skinny thing, so it didn't really matter as such."

"But I've noticed that when I played outfield, people could push me and I would quite flimsy, so I think that was one of the key reasons why I wanted to put on more weight. So, then I can transform it into muscle, and you know, and, and, and become more like, you know, harder to knock off the ball"

However, Benji credits football's involvement in changing his perception of what a man should look like. He talks about how, in his early life, he admired and looked up to the likes of The Rock Arnold Schwarzenegger and Chuck Norris as ideal men as were advertised on television, but then he realized while playing football that he could not look like them and be successful and that shifted his attention to the athletic body type endorsed by footballers that he idolizes to this day and gleans inspiration from. He feels that these body types are much truer to manhood because they mean that to achieve them, you have to work hard to be good and not just show off your appearance without anything to back it off.

"I think as a kid, uh, what do you think when you, when you hear the word muscle or muscular? You think of people like, you know, The Rock, Arnold Schwarzenegger, Chuck Norris. They, they were the peak of muscularity."

"You don't wanna be too muscular because you'll end up losing speed. And as a footballer, that's very important. You look at Gareth Bale. The guy wasn't big, and he was quick. But ever since he joined Real Madrid, he put on a lot of muscle, and therefore he lost pace. So, there's a balance, but at the same time, you, you know."

[On media representation of men on Love Island] *Most, most of the males come across like, you know, like them beach boy types, like, you know, them, they are quite bulky, and they like to show off their manhood as, as you know as we call it. That for me, I, I don't consider that peak. I don't. That's just showing off. That's something that I don't strive to achieve."*

As mentioned above, Benji has engaged in sports and has relented to peer pressure in order to appease his peers and appeal to them stemming from his belief that he needs to be a certain way, "bad boy type", and look a certain way in order to get the female attention. He carries to this day that women are into appearances. He believes that to get a partner, you have to look fit. This belief, he says, stems from his inability to acquire a partner easily and having had to wait a long time before he met the right person.

"Most of the women that I knew before my current partner they were self-centred. They thought highly of themselves. They thought that I wasn't good enough. They sort of played with my emotions, thinking that I had a chance.... It took a long time because before I met my partner I, I was trying to um seek um a companion, uh, you know, someone who loved me for the way I am. But I haven't had much success."

"I know that some women put a lot of emphasis on appearance, especially in a male and, and if it, you know, if it doesn't fit their expectations, then, you know, sadly for that"

male, they don't stand a chance. So, my partner was quite open. And I, again, I'm grateful for that."

So, having found his partner, he says that she means everything to him. He wants to change for her, and he wants to be better for her in the sense that he wants to get to a place where he does not care about his appearance because she does not care about his appearance. However, he says that it is hard, and despite wanting to do that for her, he still feels the need to be physically fit.

"She's the reason why I still carry on with my life and that, you know, I'm, I'm seeking change within myself. Whether I'm skinny, whether I'm big."

"She said to me that it, it doesn't matter because, you know, your appearance doesn't, doesn't define who you are. It's mainly what you do with your actions... I'm happy that she has that type of viewpoint because I know that some women put a lot of emphasis on appearance."

"Umm, It's like. It is like envy. UM. I know I know my partner loves me for who I am, and I, you know, I appreciate that. But for me as an individual, I wish there was ways that I could improve the physique of my body."

Finally, Benji talks about how he has always struggled with anxiety about not improving while working out and also relying on an "addiction" to eating certain "not-so-healthy" foods in order to achieve a sense of emotional relief. He is thankful that men's mental health issues are taking centre stage and work is being done to change the way we look at men, allowing them to open up and be vulnerable without the fear of judgement. He stressed how he believes his journey would have been much easier if he had the support needed.

"I've tried different methods, but I, I don't seem to get the right results. I mean, it just kind of like makes me feel a bit like low about it because, like, I'm doing everything that is required of me. But there's no change. There's no improvement."

"I have various food types ranging from salad, fruit, pasta, bread, dairy, whatever. But I also end up having a lot of junk food, which kind of offsets all those healthy options. I've, I'm pretty bad when it comes to Pringles. It's almost like a drug to me. Uh, I can get quite addicted to them."

"I wish, I wish there was more awareness back then. It probably would have made my life a lot easier."

"I'm glad that there's a lot of movement now in terms of men's mental health, but I, I still think there's a long way to go. And I think the sooner we can break down the stigma, I think it'll be, it'll be a lot easier for men like myself and yourself, you know, who can open up without fear of judgment."

Benji passionately wants it understood that men struggle and suffer and that it is ok for them to open up and share these burdens with being stigmatized and marginalized as "weak-minded."

"When I did cry, I had to do it in private because I didn't want them labels [weak-minded fool] associated with myself ... It was very rare that you see a muscular dude, you know,

crying. But, when you think of it, you think about it now. It shouldn't be uncommon to see that. It should be normalized. At the end of the day, you and I, my partner, um, people around us walking, we are all human. So, therefore, we're gonna experience, you know, the essence of sadness and crying and you know, whether you skinny, whether you bulky, whatever it is like, if you gotta cry, you gotta cry. That stuff should be normalized. I, I don't think there should be a stigma around it."

"When a man speaks about it, it's like it's no big deal. You know, just like, work it off or something. It's just not good, you know. You talk about equality, right? And don't get me wrong. I believe there should be equality in anything in life. But it goes both ways, you know. If females are allowed to talk about their mental health, or, you know, their problems and whatever. Why, why can't men do the same?"

When asked what he wants from his healthcare professionals in order to be able to achieve this state of being as a man and feel safe to open up, Benji said: *"A lot of transparency, understanding, acknowledgement. At the moment, I don't get that from my GP."*

Chris

For Chris, muscle definition has always been a main part of how he defines manhood and what being a man is about. He feels that manhood is directly linked to being strong or, more precisely, appearing to be strong, and it appears that his profession as a mechanic reinforced that belief in him. Muscularity for Chris also serves to give him a chance to be of service to others. He views physical strength as the means by which he can become a contributing member of his own environment.

"It's always been very focused on If you're a man, you gotta be strong kind of thing. For example, when I was younger and training, my dad bod wasn't really a thing. So that was always the goal. Like that's kind of what I wanted to achieve."

"My old job used to be a mechanic, and my old sales friends said you going to the gym is what we call a USP, so "unique selling point" and it's just that thing that just makes you a little bit more out there, and a bit more attractive. See, I guess that's. Yeah, I guess that's very prominent in that. sense"

"I have always wanted to be able to help people out. So, when it comes to, you know, can you help me move house? Yes, of course, I can because I'm strong enough to lift your sofa, etcetera. And, and, so, I felt like it enabled me to be a, a bit of a better person for other people if that makes. sense"

Additionally, he feels that muscularity has also given him a measure of attractiveness to the opposite sex. A belief that has been reassured by the fact that he only got into a relationship after he started working out. As well as he also feels that being muscular has given him social approval and the ability to make and maintain friendships

"And with the notion of, you know, women were always attracted to muscular men, and that's what everyone seemed to want to be like everyone was already in the gym training to be a muscular person or they sort of wanted to be. They would always sit back and go oh, I wish I went to the gym so I could put on some muscle kind of thing."

"I never had a girlfriend until I started going to the gym."

"It was like once I got to a certain level, I was like, right, I need to maintain this now because it's brought me friends."

Having given him all that, Chris feels that he was nothing, a nobody before he started going to the gym and that being successful at the gym has given him his identity, especially as he sees himself as having always been an introverted and shy person who never was recognized or "invited to events" but rather in the background and "invisible."

"I guess it can go back to childhood. Really. So I, I've always been a very quiet kid. I've never been the joker of the group, or like the leader of a group or anything like that. I was very much, sort of as, as I and my girlfriend describe it, invisible; I was there but didn't really sort of make an impact on anything, or I'd never get invited places unless one of my friends was invited."

"I wasn't really anyone till I went to the gym, and everyone started recognizing me in that sense."

[On gym and exercise] *"It's brought me, you know, brought me out of the shadows, almost, if you wanna call it that. It's given me an identity. It's given me a reason to sort of be proud of myself, and that's, that's why I need to keep up with it because I want to hold on to that"*

Chris admits that he likes to seek recognition for his success at the gym, specifically from other men, and that, for him, it brings him a sense of approval and validation. He classifies himself as an introvert, and he links this need for approval to his childhood, which was characterized by a perception of neglect and dismissal from his parents. This need for approval has put him in positions where he felt the pressure to keep up his appearance in order to maintain the kind of interest that it generated. He talks about racing shirtless because he was always expected to by his friends due to him looking good, but he, in fact, grew to dislike that. He wanted the recognition, but he was also daunted by its pressure. This has led him to change his attire at the gym in order to escape the constant scrutiny and attention and focus on his physical appearance

[On receiving compliments at the gym] *"I guess I've always been quite a quiet, introverted person. And when I, like, even now it's, it's for me... It sounds too humble, but when I was good at what I did, I kind of wanted recognition for it because it was finally something that I excelled in. That's something I could claim and put a stamp on for myself."*

"Strong men. Very noticeable in the gym. You know, these huge animals that are walking around. You always know that they're strong men or powerlifters. And stuff like that. And, I kind of wanted to be recognized for what I did."

"That kind of pressure was a lot on myself, because I had to turn up to every race weekend looking spot on. Because if, for whatever reason, say, I did take my shirt off and I wasn't in good shape, or whatever, then that for me would have been horrific. But then I couldn't get away with not taking my shirt off because that's what everyone kind of expected of me. And again, it was just keeping up that image of stuff like that."

, I even train in different kinds of clothes now. Like before, I'd normally wear a vest or, you know, some sort of compression-type gear, but now it's just very much like the regular oversized T-shirt and a hoodie kind of thing. And I think that plays into it because I just don't really want the, like, the hype."

Interestingly, Chris highlights how both the need for recognition and the pressure it creates come together and interplay within his life as he spoke about trying to explain his struggle to a friend who was questioning him about his anxiety

"A girl I was dating years ago. She was like, well, you can't have anxiety because you're always "showing off". And I was like. But that's the thing. That's, that's what I'm anxious about. That's just what I do. It's the after-effect, and what comes with it is what I'm anxious about"

For Chris, this need for recognition then informed his ideas about how to approach the gym. He talks about how "appearing" that he would be involved in a certain discipline informed his decision to then join that discipline of exercise. He wanted people to see him and say, "He looks like he is doing that successfully". And therefore, he developed an ideal muscular image to reflect that objective. He believes in a compact, lean, athletic look characterized by a low-fat percentage. He believes that is the shape that best fits his own body type and would make him look most successful.

"Do I look like I do callisthenics? That was a big thing, and I asked myself a lot. For example, if someone in the gym saw me, would they go? Yeah, that's what he does, kind of thing... I kind of wanted to stand out in that sense. Just to sort of be, like I said, be known for it, and it did kind of have that effect."

"The athletes that take part. It was very much. That age-old thing of if I'm gonna do this sport, I need to look like them, which was very lean, very, you know, like high muscle mass, low body fat kind of thing. But still athletic and able to move."

As mentioned earlier, Chris feels that his need for recognition stems from his relationship with his family. He explains how he was always made to feel dismissed by them and how all of his achievements were met with lukewarm reactions and an emphasis on improving rather than celebrating his successes. He, to this day, feels that he does not have their support and so he recognizes that his relationship with his family is still not ideal.

"So, take a math test, I get 75% which is well above the passing grade. It's in the top 20% of scorers and things like that. I would then go home. I'd tell my parents like look, I got 75% of my maths. This is really cool, like yay me kind of thing. And I was, nine times out of 10, I was greeted with, "that's good. But next time, let's go and get 90".

"My family were never really that supportive of it, if I'm honest. I sort of, I remember telling them, like when I started going to the gym, like, oh, I'm gonna start up the gym, and, yeah. They were just never really that supportive."

Chris states that now in his life - as mentioned earlier - he is very dedicated to succeeding at the gym and being recognized for it. He feels that he has to be seen as someone who "can do things". He has to keep up with appearances and make sure that he is not letting people down by not being fit enough to be a contributing member. He feels that he himself is incapable of

generating a positive assessment and recognition of his own achievements due to his dismissal relationship with his parents.

"In the sort of social circles that I'm in, most days our activities are very physical ones. And I just never wanted to be the person that couldn't do something."

"And it was keeping up with appearances and not wanting to let people down or make people think that I wasn't, you know, fit enough anymore. Or that I had fallen off the wagon, if you wanna call it that."

"Talking about that now [Their familial high expectations and failure to meet them], I realize I do that now in my life. I wouldn't say play down my wins, but I'm just like, OK, cool, let's just get the next bit now. And yeah, I think that's sort of where it's come from."

Chris states that he has always been hard on himself in pursuit of the success he seeks at the gym. He is never satisfied with his results and he is always pushing the goalpost further and further each time he achieves a milestone.

"I've always been hard on myself when it comes to how I look, so therefore, you know, I don't, really. Give me, sort of, the, the comment essentially, like, I don't; I don't look in there and go, actually, yeah, I'm quite happy today, I'm looking good kind of thing. It's very rare that I do that."

"That constant need to try and prove myself cause then I'd go on to the next bit and try even harder. And then I completed the next bit, but then there was always another bit to go, there was always something harder to do. There was something more difficult to try and achieve. You know, there was never that that well-done moment."

In addition to the gym serving as a place to give Chris the sense of recognition and success that he desires, he also highlights that the gym is a place for them to disconnect from the world and focus on themselves.

"I think I lead quite a busy, loud life. And it's just that one, maybe 2 hours, where I can just sort of have my own headspace. Like, it's very quiet in that sense. And it's, the only thing I have to worry about is what I'm doing, like I don't really have to worry about work or other people or. You know, not, just generally, other things that I spend, I'd say a good 90% of my time thinking or worrying about"

He further highlights how he relies on exercise in order to achieve a sense of emotional regulation and stability. He needs the exercises in order to feel emotionally better, and how a good exercise session is paramount in turning his day around from a bad to a good day

"I always feel 100% better, I'll, I'm always in a good mood out at the gym. Sort of, I never have a bad training session. I always come out in a positive mood. And so, in a way, I kind of used the gym as like a booster because I know I'm gonna feel better at the end of it."

"I'll take myself through the gym. Have a good session. And it sort of flipped the day round almost, like if I am having a bad day."

Alternatively, missing a workout for Chris is potentially damaging mentally and emotionally; he feels incapable of coping positively and ends up feeling short, angry and agitated, and he highlights how that has affected him both professionally in his place of work but also personally within his interpersonal relationships

"[Missing workouts affecting his job] take my old job. I used to be a mechanic. I'd very much just take out my, sort of frustration on, like because I was working on, you know if something needed hammering off, I'd make the most of, you know, swinging a hammer around."

[In relation to missing a workout] "I'd, generally, just in a bit of a bad mood and a bit sort of blunt with everybody. Like, sort of be like a sulky teenager, basically. Just sticking my bottom lip out and being a bit annoyed with everyone."

Chris also talks about how he feels guilt and shame about not being able to go to the gym.

"If I was very aware that even if I am feeling a bit, bit down, or a bit annoyed. Like, that's not their [friends and colleagues] fault. So, I shouldn't take it out on them. And if I ever did, I would feel quite guilty about it. And, I'd sort of profusely apologize and sort, say, look, I've had a rough day. I haven't been to the gym."

However, Chris then mentions that his dislike of skipping gym initiated the need to compensate triggered by the anxiety and frustration they felt when missing out on a workout. For Chris, this ability to make up for missing a workout gives him relief in relation to not going to the gym. It is how he chooses to cope with not going to the gym.

"I do feel like I've missed something. Like part, part of the day or part of the week, it's just been not right. I've missed it. I'm gonna have to catch up sort of thing, like, a catch-up thing. So that's alright, I didn't go Sunday. So, on Wednesday, let's go and try and do a little bit more to sort of make for it."

"The weeks where it doesn't go to plan, or anything like that. Again, I would be sort of, OK, we had a few beers and a pizza or whatever, but then I would focus a lot more on trying to get back on track."

Chris states that if he is not able to compensate for missed workouts, then he would most likely retreat within himself and refuse to go out and engage in social activities that he would have otherwise gone to

"[If unable to compensate] I probably would have stopped myself going out. I probably would have started turning down events and turning away social interactions in that way. And, just so I could then pull myself back into what I was doing... I'd probably cover up as well. I wouldn't say I'm not coming out because I need to get back on track. It would be I'm too tired, not feeling it, can't afford it. Whatever it might be."

Chris also highlights how people around him excused his outbursts in relation to missing the gym and allowed it to happen because they knew that he needed the gym to function and be emotionally regulated

"Like the people I worked with knew that I, I enjoyed going to the gym, they knew that, that was like the thing that I did, that was like my hobby. So, they were quiet on the rare occasions

I did sort snap at them, maybe, sort of, they'd understand that I haven't, you know, had, had my day. You know, I haven't done what I normally do."

"One of the guys I worked with explained it really well; he said, it's just, it's out of routine, so when you don't do it, you just feel a bit lost. And he said so, like, it's fine that you're feeling annoyed."

Furthermore, Chris talks about his general anxiety about his appearance. He links that anxiety to when he started working out at the gym when he was a teenager at 17 years old. This anxiety manifests itself in a need for a certain aesthetic muscular look - as mentioned earlier - as it telegraphs the manly qualities he is aiming for and gives him a sense of identity. And Chris talks about being stuck between wanting that and just wanting to exercise for health.

"When I was young, what 17,17-18 when I started going to the gym. And, I think I was just a very anxious young person, and I think the gym just fell into that as well."

"I've suffered with anxiety and depression for many, many years. Arguably, around the time I started at the gym, it has very much played a big role, and the anxiety as well, you know. It's, it's what I always termed as reverse anxiety. I wasn't afraid to take my shirt off. I was afraid of what I would look like when I took my shirt off. And that was I; I always called it reverse anxiety."

"I would say currently, I'm more on the functionality side. But there is enough on the aesthetic side to keep me wanting to stay a certain way if that makes sense. Like I haven't fully relaxed into just being healthy. Like, I still want to look good. So, I'm sort of stuck between the two at the moment."

Chris recognizes that his image of himself is skewed, linking that to muscle dysmorphia being a mental condition affecting one's ability to view himself and that he has the tendency to mirror check excessively and make illogical conclusions about the state his body is in compared to the level of exercise he has been doing

"It [Muscle Dysmorphia] is very much a mental condition. It's, it's a mental condition that sort of changes perception of yourself, and there's, you've probably seen it. There's that sort of cartoony image of like, a really muscular guy standing in front of the mirror, and the mirror showing really skinny like. That is, that is exactly what it is. It's not being able to see, see what's in front of you, like your mind is telling you something, that your mind is telling you, that it's not there, kind of thing."

"Looking in the mirror and nothing, maybe nothing had changed at all. But for me, after a few days of being back on track, if you wanna call it that, I then look in the mirror and go, OK, cool. Like I am. I'm happy now that we've resolved that bump-the-road kind of thing, and maybe nothing physically changed it. Probably never did, but the way I perceived it was. You know, I won't be happy with myself until we've been back on it for a few days."

Furthermore, it has been hard for Chris to open up to his family about his struggles with these anxieties regarding his self-image due to them not being supportive of him, as mentioned earlier. He also talks about how his not bringing the issue forward further contributed to them not being aware of it.

"I never really spoke to family 'cause I've never felt I've had the support from them in terms of fitness and, and exercise and stuff... Yeah, definitely. Just didn't feel like I'd have the support of that. They wouldn't understand."

"I've spoken to my parents about it before. And they sort of said, well, we, we never noticed that, we never intended it to be that way. But again, because I never spoke up, it was never really brought to light."

In addition to feeling that he would be misunderstood, Chris talks about generally struggling to talk about his issues due to his reserved and shy nature and his tendency to keep to himself, so he had never told anyone about his anxieties and body image issues. However, he talks about the fact that despite having a hard time opening up, he is willing to talk if/when friends and family approach him about it and open the conversation themselves either to simply inquire or to try and challenge his perspective and the way he looks at himself.

"I'm always generally a quiet, quiet person in the gym. I keep myself to myself... I'd never really told anyone. No one was really aware that I had sort of self-awareness problems."

"I'm very open if people do approach me like I don't ever disregard people or everything."

"I haven't spoken to anyone about it until I took my break from racing this year, confiding in one person who, you know, is a really good friend. And she actually approached me about it, she said. Did you? Like, did you ever feel under pressure to be in good shape for Spartan [Obstacle race]? When I was like, yeah, I did, and she was like, well, we, we always thought about it, but because you never said anything, we just thought you were happy with what you were doing [constant commentary on their appearance]."

"My current partner is, she, she's in the fitness world as well. She's a gymnast, so we are in the same world in that sense. And, she, she notices things that I say sometimes, sort of looking in the mirror and being like, you know. Yeah, really not feeling it today, or not looking it today, or whatever it is, or anything like that, and just like little things I might comment about, and she sort of picked up on it, and she's like, why do you say these things? Because they're not true kind of thing. Like, is that how you see yourself?"

But aside from that Chris feels that he should not have brought down his friends' experience by discussing his issues. He mentions how he would try to justify by making himself believe that his issues were not that serious when, in fact, they were that serious. So, he has elected in the past not to bring forward his anxieties.

"It was that whole, like, everyone else is having a good time. It's not really harming me; it's just something that bothers me. Where in fact, it probably was harming me. But, in my mindset, it wasn't really that much of a bother, and I knew it was good fun. So that's how it was gonna stay. It's just, it's just a bit of a laugh. Doesn't really matter that much. You know, it's all good fun, friends being friends, and all that sort of thing. I sort of played it down almost."

The people in Chris's life who have the greatest access to his anxieties are his romantic partners. Chris mentions that they are the only ones he would talk to about his issues because of the nature of the bond and the closeness.

"[In relation to his reluctance to open up about his body image issues] The only ones that ever did know were, uhm, say previous partners, or my current partner now. Like I didn't have to sort of pretend for them because we're in a personal relationship."

Chris places a great deal of gratitude for their partner and their ability to make them feel better about himself by complementing and encouraging him. He details the extent of the despair he has felt in the past when a romantic relationship had failed, internalizing the blame and centring around his body and appearance and deciding within himself that the reason it had not worked out was because he did not look his best and so he did not measure up and that is why he was left by his partner. He opens up that this was a time in his life when he, therefore, had considered suicide.

"My girlfriend's a great supporter, and she's always trying to, you know, compliment me and encourage me."

"So, one of the times [suicide attempts] was, I was going through a rough time anyway with work and family. And then I broke up with my girlfriend. The reason why she broke up with me was completely unrelated, but in my mind, at the time, it was because I wasn't good enough. So again, it kind of played into that not being able to keep up with appearances and not being able to be good enough to maintain what I had"

When it comes to steroids and other enhancing drugs, Chris talks about how he never indulged in those due to his chosen field of callisthenics and gymnastics, which were his two areas of interest. He felt that being big and bulky would not benefit him in these fields and, therefore, did not want to engage with substances geared towards achieving that look

"When I was in the callisthenics, and again, it is a very much natural sport, there are athletes out there that take enhances, but it's very much a natural sport, so I kind of took the stance of natural fitness over enhanced fitness. If you wanna call it that."

Finally, Chris talked about how he had very little knowledge about the world of fitness when he started out as a teenager. He talks about not having a structure and not knowing what he was doing at the gym and he talks about going in there and mimicking what other people were doing.

"When I, when I started out at 17, I very much just went to the gym and did whatever exercises I saw people doing. I didn't have any structure or focus or anything like that."

"I had a very unhealthy relationship with exercise purely because I, I just wasn't very well informed with what I was doing and looking back now, I didn't train well in the sense of health and stuff like that. Yes, I got results, but I didn't go the right way around it."

And for him this lack of knowledge extended from exercise to diet. He talks about how he used social media as his guide to gaining knowledge and how that in itself was not ideal because these sources are not always forthcoming about the nature of the image they are trying to sell. They fail to disclose that many of them are on steroids and that their looks are not natural and how that has affected how he and others would then see themselves

"Now, I didn't. I either didn't do enough research, or I didn't do the correct research into diet and nutrition and things like that. So, I just very much went with it. You know, what you see on social media and you know what you read in articles and stuff like that.... I never really paid much attention to the nutrition side of it. It was just. This is what people eat when they go to the gym, so that's what I'm going to eat."

"It was that sort of misunderstood notion that if you train like them [famous athletes], you'll look like the kind of thing that I had going on. Where in fact, you know, moving on now, a few years later, I understand that it's not. It's not that at all."

"There's a lot in the, in the media and the fitness world about, you know, people being natural but not actually being natural and I think it's very on. So, the knowledge out there isn't that great. So, I think a lot of people don't know the risks, rewards, the ins and outs of it all. And, I think some people can go into it a little bit blind, which I think is where a lot of problems stem from."

"It's sort of, it has a backwards effect [Steroids], because these, these guys that get big, get muscular, get really good shape with the use of enhancers are then promoting fitness in that sense of, you know, this is what man can achieve, and the average Joe is kind of believing that, and then when they don't get that result, I think that's how people fall into the cycle of. I'll never be good enough kind of thing, and I'll never look that way."

Chris also talks about how he engaged in the social media culture that he found himself surrounded by and how his life was immersed by the constant stream of content that existed on his phone.

[Regarding muscularity and sexual appeal] *"You know, I was a very skinny kid, you know, and stuff like that, and It's always been in, in the media and stuff like that, that sort of, muscular is the way to"*

"I guess with like the immersion. I'm just gonna go callisthenics because that's what I spent most of my time doing the immersion with, what you look at, what you see, the YouTube videos, the athletes that take part. It was very much. That age-old thing of if I'm gonna do this sport, I need to look like them."

"Much in the social media sense. So, I used to have, like, a fitness Instagram page that I'd post on multiple times a week. Uh, with training and videos and progress pictures and all that sort of general stuff."

"Once a week, I'd always put up a progress picture, and it would feel good,"
Chris concludes by talking about how finding proper channels of education was vital in giving him a sense of how to approach his journey in a sensible and measured way, using his journey with his nutritionist as an example. And how then he started doing more "serious research" in order to "take care of himself" so that he is not self-harming in the process due to lack of education.

"And with that came an opportunity to work with a nutritionist, which was very helpful. I wasn't on a meal plan or anything like that. She was the kind of nutritionist who worked on eating habits and eating attitudes...then with that came my own sort of incentive to research

correct nutrition. What I'm looking at? What I'm eating? What do I need? To sort of achieve what I'm planning to achieve."

"If you're gonna take training as seriously as you are, then you need to start looking after yourself in that sense. Umm, so I just of, off my own back, started doing more research, and again, I got in touch with that nutritionist which helped a lot."

Daniel

Daniel starts his narrative by talking about the value of control over exercise and diet in his life. He states how, for him, it is imperative to control his food intake and his exercise routine to the point where he is unwilling and incapable of freely joining in or enjoying social events such as holidays, vacations and dining outside of the house because it would take him away from his established routine and affect his set goals.

"I wouldn't go out to eat with my Mrs., like out at a restaurant. I couldn't control, maybe a Nando's I could control the food I had, 1/4 chicken without the rice, I'd have the sweet corn. And everything was geared around that."

"The whole holidays that I was less inclined to go on, like an all-inclusive holiday because that way, and, and my aesthetic like it was all in the back of my mind."

"I still have this a little bit around Christmas time where I'm like. I'd rather not have Christmas time. That's sometimes what I think. I'm like, I'd rather not have Christmas time, you know, because this is gonna take me away from my goals. Now, it's about putting on too much weight. Therefore, I'm gonna be slower in January."

This started when he was a teenager at 17, soon after he started going to the gym. He remembers how, for him in his childhood, exercise was always encouraged by his mom as a positive activity to engage in to burn their energy. And so, he highlights how she got him involved in multiple sports growing up (football, then boxing, and finally racing) and how his attitude toward his weight changed as he transferred from not caring about what he weighed to becoming fixated on it when he started boxing at age 12-13 due to the culture of boxing being centred around the athlete's weight. He states that this early introduction was his fixation on weight and muscle initiated, and that led to his obsessive reliance on exercise to achieve his body image goals to the detriment of his social relationships.

"Exercise has been a part of my life from my moment of reason."

"My mum encouraged exercise. She always used to say I was like a puppy like I needed to burn off my energy. So, she took me down there for that. But also, it was just very good exercise."

"Boxing before I came into it, I didn't have to worry about my weight so much, but then it went the other way with it, and I got very into my weights. And, and, that was the, the period probably where the muscle dysmorphia comes into it."

"It's all sport, which then, the muscular issue fed from the sport. Like it is a sport first. Do you see what I'm saying?"

"As I became older and I'd say around 17, I started to become more obsessed with the I can't miss a workout. I had to go every day, and I was happy to blow off friends. I was happy to blow off other things because that interfered with my gym routine, and it was almost like, in my life."

Daniel talks about how his early introduction to the gym was fostered by his mum, whose attitude was to favour the gym over other forms of socialisation such as "hanging around the streets" he highlights how the gym was a socially acceptable place to be at. He remembers joining the gym as early as age 11 on a junior membership, describing his fascination with the gym as a fun "playground."

"From the minute I could get them, they called them junior memberships like you can go to the gym at 11 [years], like 11 - 15 [years]. The minute I could. I was there."

"From a young age, it's hard to describe. I always had a fascination with it. Like I said, even when I was young, walking through a gym, I was like, wow, this looks fun. This is a playground."

"We would hit the gym, and it was socially acceptable and not bad. I'm not hanging around on street corners like my mom didn't want me to. Or like I could have been dragged into. It was a productive way of spending my time."

This was Daniel's introduction to the world of the gym at a young age, influenced by his early introduction to sports and the need he felt to keep up in his chosen sports, which drove him to exercise. He highlights that having boxed both as a teenager and later as an adult at university, he felt that pressure both times

"Because you are weighed every week [In boxing], every week from, from the minute you enter, because the, like the trainer, needs to know because if they get a call saying have you got any kids that are 57 kilograms like logically they just need that. So it's not necessarily, but it can be, like Jesus Christ, you've gone up to two kilograms. What the hell happened this week?... So when you're a kid and even as an adult because you know again, even the same as an adult, you're getting on the scales, and you're like, oh Jesus, it matters. So that's when I started having a bit of; I was too obsessed with my weight. And that came back as an adult as well."

Daniel talks about how controlling their workout regimen and diet, starting from a young age, has become an important fixture of their fitness journey. It is so important that he maintains his gym routine that he has "ducked out of work during lunchtime" to go and sneak in a workout, a fact that would be frowned upon and a fact that he was adamant should be disclosed without giving away his identity because it would get him in trouble. But he is dedicated to controlling his time, and using exercise to fill his hours is the best use of this available time.

"I have ducked out at lunchtime many times to hit the gym near my work. Many times, I signed out to get lunch, but I'm in the gym. Many times I've done that over the years. I've got a free period before lunchtime, and I've not got a lot of work today. Bang! Lovely, sign out. I'm in the gym for a good

hour, then showered and back before anyone even notices. I think what a great use of time that I can hit the gym in my working hours. This is such a brilliant use of my time!!!"

"I'm still a bit like it now, like, if you can imagine the way I think about my time is almost like a calendar, and my time is filled, and it's like, OK, what is a must? Here's my free time. Well, the gym's the next most important thing. So that goes there. If there's time free, we can meet up if the time isn't free. Sorry, there's nothing we can do."

Daniel then moves on to talk about the anxiety he feels whenever he feels that he has failed to maintain his routine. He describes being occupied with thoughts of not being "good enough" and "weaker" due to missed workouts, which then manifests itself in a short temper with his friends and a need to go back to the gym to make up for missed sessions

"You start then thinking, am I not as good today because of yesterday... I then start thinking, oh, am I weaker today? Because I didn't do it yesterday."

[On getting back to the gym to make up for lost workouts, *"Get in there. Just get it back up ... I was OK, as long as I get back in there and get back on track."*

"I get quite irritable If I hadn't, and it was more that I'd missed the workout I wanted to do if you get me because they [spending time with friends] weren't on my program, they weren't on my pattern of the day. If that makes sense."

Daniel recognises that this fear of losing strength and being weaker due to a short break from the gym is not logical. However, he maintains that it still governed him and that the only way to manage it for him was to go back to the gym and do make-up sessions.

[On perceiving a loss in fitness after a week off the gym] *"It was a feeling I got If I hadn't gone to the gym for a week, but as a, you know, like as a more educated person on the subject. You don't lose Muscularity in a week like it doesn't work like that. You don't lose fitness. You know. There's a scale with fitness that, after two weeks, starts to go down incrementally.... My brain couldn't do that. And I hadn't gone to the gym. If I was on holiday and I hadn't gone to the gym, I would have been twitchy, like I don't feel good tonight. I feel so fat. I feel sluggish."*

As long as when I got in the gym next, I was OK."

Another narrative that seems majorly important to Daniel is that of addiction. He links his attachment to the gym and his anxieties about it to his addictive personality. He talked about how his father, whose presence in his life was sparse, was an alcoholic and how he then inherited his dad's addictive nature, but that he has geared his addiction towards fitness rather than alcohol. This is how he has made sense of his attachment to the gym.

"The first thing is, is my very addictive personality; I'm an addict by nature. I'm the child of an addict whose addiction went a different way. Mine has always been very focused on sport and exercise."

"It wouldn't have been there [at the gym] without the addictive nature, and I had it from a young age, like and only as an adult have I realised with coming to reason that the behaviour I exhibit is not different from any other addicts, just in a different way. It has just gone to a different thing."

Daniel maintains the belief that for him, his addictive personality is inescapable and that, therefore, it is best that he has directed it to fitness because it is better than other addictive forms. He reiterates the gym as a more socially acceptable and positive place for a young person to be in comparison to other places such as "street corners". Something he says his mother encouraged despite his father's objections, highlighting that she was focused on him not ending up like his father

"I think my nature is addictive. It was always gonna go one way, and that's the way it went. I'm lucky that I don't think it's had a negative impact on my life."

[On comparing his addiction to other addictions] *"Maybe I would have gone to the club and drunk more and had experiences. I think I did the right thing in life. I still think I do like; I think the way I've lived my life has been perfect and I think more people have gone the other way and made far more mistakes and their lives far worse than mine."*

[On his Mom explaining the importance of gym in his life *"My mom explained to him [Father], 'Like you do realise when he goes in the gym, he knows everyone in there. They talk, they laugh like he's not just standing there on his own in a corner, he's got friends like, he has a very active social life. He's just not doing the same thing you did.'"*

And so, Daniel goes on to talk about how exercise is needed for him to achieve a state of emotional balance, and he goes further describing how he needs the endorphin release and how he, in fact, is "addicted" to that feeling, describing the feelings he gets at the gym from exercising as "unadulterated pleasure".

"It gave me endorphins. I suppose, you know, like humans are always seeking that. Some people get it from alcohol. Some people get it from drugs; some people get it from going to a nightclub and having a one-night stand. That's where I always got my little happy pills from. It kept me. I always felt good. I never came out of the gym feeling bad.... I'm now requiring those endorphins. So, if I go two days without some form of exercise, I am grumpy, and I don't know if that's physiological or psychological."

Daniel also talks about the measures he takes to keep his exercise habits private and secretive; he takes pride in being smart enough when leaving work to go exercise that he has a full plan of action so that no one can catch him, and that stems from him knowing that leaving work to go the gym is not something that will be taken positively by his colleagues. He also made a point of saying that these gym going habits for him are easy to quit whenever he decides he wants to quit them.

[On having to be secretive about going to the gym during work] *"In my mind. I know probably that it would raise an eyebrow because of the nature of what I'm doing. Like it's like, 'Oh, that's a bit. Ohh, I don't know.'"*

[On taking measures not to be noticed when going to the gym during work *"I'm clever enough that I check, like, the cover in the morning to make sure no one's off, that I'm not going to be needed. I'm not gonna get an email saying 'can you do this?' or 'can you come speak to me?' So, I'm very patterned. And I'm like, I know. I know. For this hour. I could sit here and read a book if I wanted to, so I'm gonna hit the gym."*

"If I ever in my head said 'You've gone to the gym for lunch. You'll never do that again'. I'd never do it again, so I don't need to. I've never. I do not need to have that fight, you know."

In addition, Daniel views the gym as an oasis. It is a place to go and disconnect from the world and its problems and just focus on doing something he enjoys; alternatively, it is also a place to go to and seek some form of bonding with other men who have the same desires and are on similar journeys as him. It is a place to go to and be seen and understood. He describes it as his "safe space".

[On Gym time] *"Like my time now, I don't have to speak to anyone. I don't have to teach anyone. I don't have to engage with anyone if I don't want to."*

"I love it. Nothing is better; it is my home, my happy place, what the kids call "safe space". It is my happiness like 'Yes, this is me, this is my time". Now me and my friends, I have friends who are very similar to me, maybe that is why we are friends without realising. But it is our hub; I know everyone in there, and I am not there for socialising, but it is a happy environment."

Daniel related manliness with size and physical prominence; he talks about how, in his current engagement with racing, he has had to lose weight in order to be lighter and be able to compete. However, he is still struggling to appear "less manly" because of his lighter weight and less muscular appearance. He states that the need to be physically muscular persists within him to the point of doing exercises at the gym, such as "bicep curls", despite not needing to do them. He is only doing them because he feels that he still has to maintain a certain muscular look in order to telegraph manliness and the ability to provide.

"There's the male thing like you don't wanna be that tiny."

[On relating his shape and size to his manliness] *"I've got this struggle a bit now where physiologically I need to be lighter. I've lost a lot of Muscularity over the years. I probably dropped a good, at least a stone, a good 14-15 pounds. Like, more probably, more than a bit of fat and a bit of muscle. And it's like, like we often say it, like, we feel younger because we look younger, like built. I'm 5 '10, 10 1/2 stone now. When I'm clean-shaven, I look younger than I am. I'm a bit bearded at the moment. And that's probably because of my size as well, so there's always that in the back of my mind where I realise I'm not as much of a man as.... Even like 13 stone guys who have got a beer gut who are a bit more manly than I am. Do you get what I mean?... There is a concept of men protecting, fighting, and I box, so I know that, like the realm of combat is not just about weight, but there is still a little bit of that, there's still a little bit of that, like you should have a presence. You should hold, be able to hold yourself in a certain way as a man ... These are the ways I brought myself up. Probably being in male-dominated environments all my life."*

"Even now, I'm a marathon runner. Like I'm, I'm fairly good, I've competed like in America. Like I'm OK for my age group. I'm like England qualified, I'm OK, like. But I still do bicep curls, but a bicep curl is not helping me functionally. I still do bench presses that are not helping me functionally. There is no function there. I still do them when I go to the gym. It is still all physique training even though it ultimately, and this is where the interesting part is, it actually holds me back. Because the more you bench, the slower you run."

[On not being able to let go of weight training despite not being needed for marathon running] *"But why do I still do it? Why? And that's where it never leaves you. I still have to*

go in at least 2/3 times a week ... I'll still do that at least two or three times a week. And there's no need. No need. But I still do because I can't let it go. No"

He links this need for size to his teenage years when he first started noticing the boys around him developing muscularly and got the notion that in order to be successful in sports and as a man, he needed to look like those boys.

"Teenage years, when actually like puberty hit, and now there's a difference in your peers. And that's probably where where it started. People develop at different ages in their teenage years. So, you've got the guy at 14 who's already got the six-pack, and you're like, whoa. What? How's that? I haven't got that yet. And, then you start questioning, and you start comparing and you can't help doing it. You have people that look stronger, they look more like men and you're still not. Even at like 14."

Daniel also talked about the messaging he received at a young age of thinness being the goal when it comes to being healthy as opposed to being fat, and how that is what he grew up believing and how that concept of thinness being good then transformed to Muscularity being the measure of health. So, thinness was substituted for Muscularity as he became a teenager and was exposed to his peers' development.

"Fat versus thin. That was probably from about six or seven up until about 12, say 13. That was the only metric that mattered. I would say for the beginning of weight and other metrics [Muscularity] coming into it of how I felt about myself would have been 13 all the way up until my mid-20s. That became far more measurable and even again when we get into the like just the muscle side of things, the lifting like who can lift what that type of thing when you're now competing with your adolescent peers."

Daniel also talks about the intense bullying that went down in his school when it came to physical appearance and sports performances and how he escaped it by being targeted because he was able to play football and make friends through them. That further cemented the link between being muscular and being successful as a man for him.

"Yeah, it was alright. I went to an all-boys sports school actually. And like the, the speciality of the school was sport. Sport was important in school because it's a hierarchy, isn't it? Like those who can play football, you get by, whereas those who don't do sport were targeted. I was OK from the get-go. It is probably how I made friends when I went there. Football team, lunchtime you play football, and so yeah. But you, you do actually start to compare and like, who's got the big chest, who can do the most chin-ups in the gym? Like silly things like that you do. That's the age of Comparison and hierarchies."

[On needing to play football to be accepted by their peers at school] *"Playing football at lunchtime was my way into getting to know people, and then you just became part of the friendship groups from there... it meant I wasn't ostracised. It just gave me a way in to not be isolated."*

In addition to Daniel's belief in the importance for men to have a physical presence that telegraphed their strength and ability,

"There is a concept of men protecting, fighting, and I box, so I know that like the realm of combat is not just about weight, but there is still a little bit of that, there's still a little bit of that like you should have a presence. You should hold, be able to hold yourself in a certain

way as a man ... These are the ways I brought myself up. Probably being in male-dominated environments all my life."

He also mentions how he grew up to believe that, as a man, he should be emotionally reserved and not be too open about his struggles with his loved ones. He is turned away from sharing by the notion of not wanting to appear "ill" or "weak" in front of their loved ones and invites sympathy and concern where he does not feel there should be any. He wants to maintain the status quo of his life and not have that interfered with.

"Like our generation wasn't brought up on talking about your feelings. Like we weren't brought up that way. Like we weren't brought up to hide it, but it just wasn't a factor. Like "I'm sad today". You don't talk about that. That's not a conversation ... I like going to the gym, so I'm going to the gym, but I didn't really think a lot deeper on it."

"Like, I don't wanna bring my problems on anyone else. That's why. That's it. Actually, there you go. We've just hit the nail on the head. Like, I don't wanna, like my problems are no one else's problem. Like, if I'm not acting in a certain way then it doesn't affect you, so don't worry about it. Like I'm like, "Ohh, don't worry, I'm not affecting you, so don't worry about it. I'm dealing with it, don't worry."

"I Suppose... I don't. I wanna be... look after me if I'm ill, but I'll tell you when I'm ill."

Daniel also talks about how, therefore, in the face of dedication to the gym, he has found that his loved ones have been understanding of his needs. He gives examples of his partner allowing him to go to the gym, his sister excusing him of missing out on visits with her and his mum and his father-in-law catering to his dietary needs. He is appreciative that everyone seems to be willing to accommodate what he wants to do. He realises that due to this level of accommodation, he is not challenged to change his habits because everyone else seems willing to let them continue

[On people accepting his exercise habits] *"But it's always been me, always since for so long it's all very accepted like no one ever, ever comments on it or. Everyone gets it and accepts it, actually. Like so, I never have a problem."*

[On his partner coping with his low mood when missing an exercise] *"My missus knows. She's like, go for a run, like, go do something if we're on holiday."*

"I used to get annoyed as a teenager that the quality of food my mum bought wasn't very good, so that's the age of my life when I actually started to do my own shopping. My mum would still give me her bank card, and from the age of 17, I'd do my own shopping. And so I could get the foods that I wanted."

"My father-in-law, he's very good. When he got into cooking a few years ago, he always made me a carbless alternative."

"My sister understands If I don't go to see her. She's moved away to like the South Coast, and if I've got a race at the weekend, I'm not going down to see her. People have accepted that about me. It's been such a part of my trait for so long that no one really argues about it."

[On the importance of maintaining peace in all aspects of life so they do not have to be at peace with their exercise habits] *"I don't need to because it doesn't have a negative impact. I don't think so. I don't think it does. I don't need to make peace with it. If my wife had a*

problem with it, maybe I would; if I fell out with my mum over it, maybe I would, but my life is very well patterned. And everything is. Maybe it actually affected my job, but it doesn't. If I ever in my head said: "You've gone to the gym for lunch. you'll never do that again". I'd never do it again, so I don't need to. I've never. I do not need to have that fight, you know."

In fact, Daniel highlights how, for him, exercise has been seen as a priority and how the people in his life could be viewed by him as a distraction from his exercise routines and that would have been part of the reason why he would be mad at them for taking him away from the gym if they interfered with his plans.

"I used to get annoyed with whoever had taken that time [exercise time] away from me. If it wasn't worth it if I had done something, I'd have to meet some friends, and it was actually, sorry to swear, just a bit shit, was a bit boring. Like I'd get really annoyed with them and myself by proxy because I had not, you know, I had taken myself away from what I really like doing, and it wasn't worth it."

[On his loved ones having to earn taking time away from the gym] *"I was quite irritable with myself and probably other people like, oh, what was the point in this, like, what I thought this is, we were going doing this, like everyone was saying, "oh, let's go and do something socially Well, we'll do this, and then we'll play pool, go to the pool hall", and say the pool hall never came. I'd be pissed. And I'd be like brother, you told me we were doing this, that, and we just did nothing. We just sat around and played Xbox."*

As for his relationship with his father, as mentioned earlier, Daniel talks about his dad's addictive personality and how that has shaped his relationship with exercise and the gym. He talks about how he must have inherited his traits from his father and how inevitable it is that he, too, must have an addictive personality

[On his addictive nature] *"You can't get rid of an addiction; you transfer it. I'm a believer in that... I have his [father] genes, and my addictive nature just went another way."*

"Sadly, there are bits of our traits that are alike; I know how to be wary of.... Like, I have a lot of. I have a lot of him [their father] It's probably why I won't have kids because I'm very similar. So, I've got to watch those traits."

He talks about how, aside from his inherited genes, his father's role in his life was minimal. He admits that growing up, he wanted to please his father; he wanted his approval, but he ultimately feels that his dad was not a true presence in his life.

"If he [Father] was happy, I was happy, but he never really got it."

[On his father's part in his life] *"It's complicated. I suppose that's the only way I can put it. He didn't really have a role in my journey."*

"I don't think he ever wanted to be a parent. He loved me, but he was; he had that selfish side of him, that kind of wanted to party and do his own thing."

And when it comes to his relationship with his partner, Daniel is very devoted to her. He feels that she is number one; he feels that he needs her and that he is willing to sacrifice things for her, even fitness and diet-related behaviours that he has relaxed in order to appease her.

[On the importance of their partner in their life: *"She is my number one; I am willing to miss things for her."*

"I need her [partner] more than anything else."

[On relaxing their controlled attitudes in order to satisfy their partner] *"I used to be like that about going out for a meal. I'd be like, I don't really care if we go out for a meal, to be honest. Like, I'm cool. Like I'd go. And if I did go, it would be for her [The Partner]."*

Daniel also feels that having a partner is important because it gives him something else to centre his life around. He talks about how when he was 21, he had nothing else going on for him and therefore his entire focus was on his physique because that is all he had to define him.

"Back when I was 21, it related quite a great deal, quite a great deal of my self-worth because I didn't have it. When you're 21, you also don't have a lot else going on in your life but studying... . There's not really a lot you've got as a package of a human being. So, the shape you're in is more important than. I don't mean health. I mean, how you look aesthetically."

And so, he feels that back then, his sense of self and his confidence were greatly influenced by how he felt about himself, and it, therefore, influenced how he presented himself to the world.

"When I thought I looked good, I got pictures of me when I was in Egypt at 21, and that's when I was probably at my most muscular. Like, I felt good. I had my vest, you know, the tight topman vests from back in the day ... I'd almost be posing like the way I'm standing is very intentional to tighten my bicep or to tighten my triceps and shit like that."

"If I felt bad, I'd wear large clothes. There's never a realm of possibility where I need to wear a large T-shirt. I'm not a big guy, height or out, but it's like, no, I don't. It hides... wear black, that type of thing. So, it, it did matter."

Finally, Daniel talked about his journey with educating himself about the ins and outs of fitness and exercise. He remembers starting with little to no knowledge and solely relying on platforms such as celebrity-endorsed products and social media platforms such as YouTube in order to gain the knowledge needed.

[on his early gym routine] *"Terrible. Terrible. So, I think as a 15 to about 17, I'd go to the gym. I didn't know anything about body parts. I'd go in on every machine-based exercise because that was what my gym was like"*

I started the silly things. I got Arnold Schwarzenegger's book. That was not gonna help me at all. But, you know, whatever, the encyclopaedia of bodybuilding."

"That's when YouTube started to hit as well. So now I'm watching, you know, like, silly things like 'the day in the Life of a Bodybuilder' and 'Ronnie Coleman', and they're telling you what they eat, and you're like, 'oh shit, I better eat that type of food' and you start, you start following them like the kids do now. And, and as well as supplementing with protein after every workout, I'd have my big two scoops of maximuscle cyclone chocolate flavour and cookies and cream."

[On getting their education regarding supplements from unverified online sources "I think that's when I started to get into podcasts and, again, YouTube videos and everyone seemed to bloody do it. So, I thought, I don't know, it might be safe to do this; I wonder what it could do for me. Like, I wonder if I get stronger and faster and, you know better."

He talks about neglecting rest days and viewing them as an exercise in laziness

"Rest days didn't mean anything to me. Rest days were what lazy people did. And what, like people who wanted an excuse, did? Oh, you need a rest day on Sunday. As an adult, I know that's not true, but I then start thinking, oh, am I weaker today? Because I didn't do it yesterday."

Interestingly, for Daniel, the one area where he has always been cautious is steroid use. He mentions how he never engaged in steroids despite his willingness and eagerness to engage in a variety of other substances such as protein shakes, amino acid supplements, creatinine and celebrity-endorsed treatments such as testosterone boosts. He talks about how he always knew that steroids were not healthy and how they conjured the image of dirty needles for him, which immediately turned him off.

[On not taking steroids] "I felt like that is a step too far. Like to me, that just that's got connotations of a crack addict. Like that's got connotations of a going in the toilet with dirty needles like that's not, that's not life."

"A lot of podcasts I listen to have always talked about it, like Joe Rogan, they've always talked about testosterone boost. So I suppose I wouldn't be averse to that, but I suppose it was the needle, the steroid, that I did not like."

[Comparison between steroids and testosterone therapy] "I had a visceral reaction to steroids almost as a drug; one is seen more like a dirty drug whereas the other is seen just like a medical, a medical treatment that could be of benefit to you."

"I loved it. Creatine loved it, loved it! And it did the job. Terrible. It would be terrible for me now, but as a teenager, I had a hell of a pump, and it was great at the time."

"I remember I had these amino acids in a jar. Someone at the gym gave it to me like, 'Oh, this was my son's; he doesn't want it. You want it?' Yeah. And it was like you put two tablespoons in a spoon and ate it."

Daniel concludes by asserting that for him, muscle dysmorphia is not an obsession with size but rather with muscle, and he highlights the difference as being dependent on the current goals in life. He talks about how his desires changed as his sports engagement changed from bulkier when he was boxing to leaner when he started racing. However, he is still preoccupied with Muscularity and definition. He is still obsessed with his muscle mass and

the need to have the ideal physicality. He also identifies muscle dysmorphia to be directly linked to self-worth, to how one sees himself and what his physicality says about him as a person

"Here's two types for me. You can differentiate from what you asked me about it. One is like the type of Muscularity I had from, like, 16, 17 to sort of 21 which was size. Now, it's a bit more aesthetic. Maybe more like what you'd call physique. If you get what I'm saying, the differences between the bodybuilding and the physique."

"I think it's more complex than just, I'm not big. I think when it comes to muscle dysmorphia, people have an idea that it's just about size. It's so much more than that! It's the fact your self-worth and your time and your energy are built around your aesthetics; you're liftability. Your, like, everything. It is not just the opposite of anorexia. I want to be bigger. There's so much more to it than that is. Is, is far more complex."

Ethan

Ethan (similar to Daniel) begins his story by talking about the value of control in his life and how that has manifested itself in his exercise habits. He adheres to a strict exercise regimen, and he never strays from it. He views this routine as an integral part of his success, and he feels then that without his routine, he will fail to make any of the gains he is seeking to see in himself muscularly and will, in fact, stall or lose any results he has achieved. And therefore, he is adamant not to let life interfere with his routine in any shape. He mentions going to the gym while feeling unwell

"I find it comforting to know exactly what it is I'm going to be doing purely because if I didn't have the routine, maybe I'm wrong here, but I feel like if I take away the routine, once again, the training becomes suboptimal, meaning I'll either stop making progress, and I'll stall, or I'll completely lose everything that I have built thus far if I remove that kind of very rigid routine that I've got"

"I really try to make sure that life doesn't interfere in any way, shape or form. You know, I've gone under the worst conditions possible. I have. I've gone to the gym while I've had the flu. I've gone to the gym on 0 hours sleep. In the past, I've gone to the gym when I've still been drunk from the night before. I've gone to the gym when I thought I had COVID. Nothing stopped me, really. I really try to make sure that life cannot interfere with it."

Ethan then talks about how he organises his entire day around his exercise time at the gym and how he is willing to sacrifice sleep and rest time in order to be able to get in a workout before work

"If I'm working one day and rather than starting say 10:00 o'clock or 9:00 o'clock, they've decided they want you in at 7-8 o'clock, it's like cool, OK, I'd get up at 4:00 in the morning and go to the gym, you know, rather than when I normally do. I'm not letting anything take it away from me, really."

Ethan also extends this level of controlled approach to his diet as he talks about having a "perfect diet" for four to five years straight. He has a great deal of numerical knowledge

about the calorific value of each food group, and he talks about putting that knowledge to use when devising his diet.

"So, for about five years. Maybe not five years, four years straight, I had what I considered a perfect diet where it was like, you know, getting tons of protein, and eating perfectly clean foods, and never ever cheating on that. Never had anything that could be remotely bad for me. Anything high in sugar, high in fats, anything like that. I was really dialled in for a good amount of time with it."

"Yeah, definitely like fats, probably the main one for me because I know that fat has nine calories per gram in it, and I'm like ", Well, if I've only got, you know, let's say I'm going on a cut, which I am at the moment. So, I've got 2000 calories I can eat per day. You know, I'm like, "Well, why would I waste any of that on fat when I could, you know, for one gram of fat, I could have two grams of protein instead", which is more food, which will keep me fuller for longer with carbs. Umm, yeah, there are quite a few foods that I particularly like to avoid. Anything that's really kind of calorie-dense like rice, pasta, things like that. It's like, Nope, won't touch them, won't go anywhere near them. Why have those when I can put light courgette on my plate instead?"

Ethan then goes on to talk about how this dedication to diet and exercise comes with a price. He feels that he is making sacrifices when it comes to eating food he would actually enjoy versus eating food he knows will give him the desired physical effect; he also talks about having to sacrifice spending quality time with friends because he is worried that it would interfere with his regimented dietary and exercise plans. Furthermore, he talks about Christmas being a particularly hard time for him because he has to indulge in dietary choices he is not comfortable with as he sees them to be determinantal to his success. So, he talks about the anxiety that comes with trying to maintain his routine in the face of all the social distractions that he faces. He talks about secretly checking his Fitbit in order to check the macronutrient contents of food items on menus at restaurants and worrying about not getting enough protein.

[On eating food at restaurants] *"The food always tastes nicer, but I would rather avoid doing it purely because I don't get to control the macros at that point."*

[On diet] *"Is it enjoyable? Is it tasty? Do I actually want to eat it? No, but why would I go for the thing that's just pure carbs and tons of calories when I can go for, you know, still carbs but not as many calories? And then put more of the protein on the plate instead."*

"People are like "We should go out tonight? No, I'm good. You go without me". I'd rather stay home and eat something pathetically bland and flavourless. Instead, because I, you know, I just don't enjoy going out and enjoying food. It doesn't work for me."

"It just makes me hate Christmas. And you know, like it should be a time of enjoyment and spending time with loved ones. And the only thing I can even remotely think about is, "Oh, God, I haven't been able to exercise today. And I'm about to eat an excessive amount of food that I don't particularly wanna eat". So it's like, I just end up hating the day, really. It makes me not really want to engage in it."

You know, I don't know. This is the one aspect of everything that I really hate because, you know, I can sit at home, and I know exactly what's in everything that I eat, you know, to a rough amount. But then when I go out, I've gotta sit at the restaurant with my fitness pal, looking at the thing I'm about to order "OK. OK. The fat-to-protein ratio is pretty bad.

Alright, we'll skip that. OK, OK, what's the next one?"

[on the mental stress of maintaining a diet routine] *"I find that really stressful, to be honest. Quite an anxiety-inducing really, because, you know, if I look at it, I think, based on my current weight at the moment, I try to get in 180 grams of protein per day, so you know, if I've got myself to a point where I'm at like say 113 and then I go out and the meal that I'm having is only like, you know, 15 grams of protein, it's like. You know, I'm like, "Well, this is such a waste of a meal. This is pointless. This is stupid". And I, you know, I've got to have a sit and go through the menus and think, "Well, what's gonna be the best. Let's double-check it."*

"When I'm checking these things [dieting apps] on my phone, I've become quite good at typing without actually looking at my phone. So, at the moment, I'm actually on my phone at the moment scrolling through it, and I'm keeping, like, complete contact with you. I could type out a full message right now without anyone noticing, so I can hold it under the table, you know, scroll over because I know where my fitness pal app is. Open it up. Go on to the diary entries, and then I've just got to play a bit of a guessing game. Occasionally, glance down to get to the search bar, start typing, let's say, like McChicken and boom, you know, got it, and no one notices. And if at any point they do, that's fine. I'm just replying to a message, you know."

Ethan next talks about the need to compensate when he misses a workout. He talks about the intense fear that would take over if that were to happen. A fear of losing every gain he has made and, therefore, having to go the gym the next day in order to make up for the lost time. This came to a head during the pandemic lockdown, which he describes as being extremely difficult for him mentally as he had to rely on anything he could get around him in order to continue exercising. It was very important to him not to be disconnected from his exercise routine.

"[on disrupting his routine] "I think it's only happened a couple of times, to be honest. I felt awful those days. I absolutely hated it. I would just be kind of, like, cooped up indoors, thinking to myself, like, "Oh, oh, God. Oh God. Oh God. Oh God. Like, I'm gonna go to the gym tomorrow, and I'm not gonna be able to lift the weight I normally do. I'm gonna. I'm gonna, like, go in and be deflated and really small and look terrible."

[On trying to maintain his routine during lockdown] *"That was horrible. I kind of had to improvise quite a fair bit. So rather than like, you know, actually going to the gym, what I did was, I would go and buy loads of like 2-litre water bottles and put them in a shopping bag, get a rolling pin, put it through the handles of the bag and use that as dumbbells*

Furthermore, he talks about working around his chronic lower-body injury that he sustained during his early working out days by doing 1000 squats a day in order to develop his legs. He talks about being possibly able to train around the injury since he hates that his legs are not as muscular as they should or could be

[on compensating for his lower-body injury] *"I've been toying with the idea of trying to find a way around it cause I've just joined a new gym which has more equipment that might give me the opportunity to train them a little bit without so much pain. My old gym was literally like, you had a leg press, you had a squat rack. If you cannot do one of those two, you are stuffed. So I'm gonna experiment with them [equipment]. See if I can do some exercises there to just even add a little bit of toning to them."*

Ethan is aware of the conflict within himself about his dedication to the gym. He wishes that he did not need the gym as much as he does. He wishes that he could wake up in the morning and not have to go to the gym. He says about his relationship with exercise and the gym:

"It's hit a point now where it's like I would very much like to not be doing it, and just relax and not be in pain and everything. But as soon as my alarm goes off in the morning, it's like, right, cool time to go to the gym. You know, even though there are plenty of days where I'm like, this hurts too much. I don't wanna do it."

"It's kind of been almost like a saving grace for me, but it's also then perhaps the absolute worst thing I ever thought to engage in. Because as good as it is for me in terms of, like, you know, when you go to the gym, it releases like endorphins and dopamine and everything. It is also such a double-edged sword."

This conflict for Ethan stems from how much he perceives that he has hurt his body during the years of training. He is a 25-year-old university student, but he lists chronic pain in relation to exercise as being a side effect he has to deal with, especially when it comes to his lower-body injury.

"Over the years, I've become quite worn out and run down from it all. I've got a lot of joint pain across the entirety of my body; even standing up now, my knees are painful. So, it's kind of limited me on whether or not I can even do leg exercises anymore. I've got that in my elbows, I've got that in my shoulders, lower back. There's never a point in the day where I'm comfortable really because of it."

"So, like I said, because of the joint pain, I really can't do legs anymore because even standing up is like murder for my knees. So I focus completely on the upper body."

When asked about his idea of manhood, he immediately started talking about the people he was exposed to in the media. The Mr. Olympia figures of the 1980s. The bodybuilders. To him, they are the ideals of manhood and masculinity and it is all centred around how they look. To him, looking muscular is peak masculinity. He remembers being exposed to these images when he was 14-15 and immediately developing that association that is still a part of his life to this day

"So when I started wanting it, I really can't remember how old I was. I don't think I was that old. I think I was probably about 14-15. I'd never been introduced to the idea of, like, you know, bodybuilding building, or muscle, or anything like that. And then I started watching a load of old 80s action movies, you know, where those guys were absolutely, like, humongous, and I remember, I watched Predator with Arnold Schwarzenegger, and I was just like, "People can look like that! That is achievable!". I was like, "Wow. OK. Right". You know, so that was kind of like my first moment of thinking, "This is what I need. I need to look like that. That's amazing"."

[On glorifying muscular aesthetics "My new kind of thing is like, you know, Mr Olympia contest, and even, you know, going above and beyond that, I think the only person that can match up to that from the 80s stars is the king himself, Arnold. But yeah, something along those lines."

"I perceive those guys to be the absolute peak of masculinity. Bodybuilding, to me, is a very masculine thing to do, you know, and having a large amount of muscle mass to me is particularly masculine. So you know it does it. There is a degree of me that does kind of think, "Well, I am not really a good man if I do not have the muscle mass."

Ethan also talks about not feeling good enough when he was young because he was constantly made fun of for being out of shape, fat and ginger, and he then started to equate muscularity with success in the sense that he, as a big guy, would be enough and would be protected from being made fun of by others, he also states that his fitness achievements are the only ones that he feels assured in. Everything else for him is temporary; every other success comes with question marks. He feels that anything good in life will be succeeded by something negative. Exercise is the one arena where that is not the case for him. He feels that because in the gym, each day is about lifting heavier, and that is a tangible positive direction that, he then cannot fear feeling negative as he normally would.

"It [bullying] did get quite Intense, really. And certainly most certainly shaped my view of myself really as not really being good enough because I was, you know, I was a very, very easy target, to be honest."

"I developed a kind of this, this idea of, you know, I'm not good enough. So, then, when I started to see that that was humanly possible [Bodybuilding physique]. I was like, "Wow. That would make me be enough... That's the point where I know that I've truly kind of done something worthwhile"

"If I'm really muscular, really big, no one will have anything they can make fun of me for, yeah."

"So if I'm ever sort of happy in every other aspect of life, like maybe I've, I've gone out and done something which is enjoyable. I'm always prepared for the feeling that kind of comes afterwards. So I say I have a really good day at work. I leave feeling really, really happy, but shortly afterwards, I start to think to myself, "OK, well, tomorrow is now going to be awful. I'm going to have a really bad day tomorrow. Tomorrow's going to suck". Whereas When it comes to the gym, it's much more like, "You know, I've had a great day today. I've lifted more than usual. I've been able to do higher weights for the same amount of reps or more reps".

And I realise to myself that because of the progress, tomorrow's also going to be great because that [the progress] then translates into whatever I'm doing the next day. Sort of like an incremental increase in strength. It's just nice to know that when I go in the next day, it can't be a bad day."

And so, despite all of his ambivalence and struggles with injury and his own fitness compulsion, Ethan states going to the gym is the "purest form of happiness". It is the place where nothing bad is going to happen to him.

"So, I really can only describe it as the purest form of happiness I've ever kind of experienced where I don't feel like there's ever sort of any bad that's gonna come afterwards."

Ethan then talks about how, for him, training is all about achieving the aesthetic look that he has come to desire from his early exposure. He wants to look like these bodybuilders he grew up idolising. Muscle, for him, is a success, not a job or a career. He feels that to be able to match the look of the bodybuilders is to match the most "amazing thing" he has ever seen. He is not concerned with the health benefits of exercise; he is only concerned with being as big as he could possibly be

"You know. I've always looked at those guys as being incredible. Like, you know, I can't look at a professional bodybuilder and think to myself, like that is one of the most amazing things I've ever seen."

[On the value of muscles] *"More or less. Yeah. Like, you know, that is kind of how I view it; it's like, that to me is what success is. You know, job, career, how much money I make, none of that really matters to me. How big can I get? That's what drives me to sort of think whether or not I'm worth anything. Yeah, very much."*

[On aesthetics vs functionality] *"Aesthetics! Anything else I do not care about. You know, my only goal with training is purely to get as big as humanly possible. I don't care about any other aspect of it. It's like, you know when people are like, "Ohh, this is really good for improving this, this can really help you with this". I don't care how much health benefits it puts me on."*

Ethan, therefore, is very anxious about his appearance compared to other gymgoers. He feels that he needs to be on their level to be comfortable in a gym setting. He otherwise tries his best not to be put in a direct comparison with them by trying to avoid going to the gym at crowded times. He also has severe anxiety about losing all of his muscular definition in the case of missing one exercise session, and that fear further drives his anxiety.

[On going early to the gym] *"Because, I mean, I don't like going later in the day because there are more people at the gym, and I'm, you know, I don't like that because the more people there, the more insecure about myself I feel."*

"I kind of had this impression of the gym, of what you would go into, which was guys who looked like Arnold, you know, in there. Who were, you know, bench pressing like every single plate in the gym, dry scooping protein powder, and I thought it would be a horrible environment. At the time, I did struggle a lot with anxiety; like even just going and paying for something in the shop was a bit anxiety-inducing for me. So when I thought that's what the gym would be like, I was like, "Well, yeah, I can't bring myself to go there."

"But the whole point of, like, you know, when I wake up each day, no matter how many times I say to myself "tomorrow's a rest day. Tomorrow, I'm going to take it off" My instant thought is if I take one day off, then all the progress I've made, all the muscles I have made, all the gains I've made will be just gone, wiped out, like overnight. So it's like I have to go because I can't take that risk of losing any progress."

Aside from these insecurities, Ethan highlights the level of stress he feels when he sees men bigger than him at the gym. He details feeling down and says that it "kills him" not to be on their level of fitness. It evokes negative feelings about himself

"Yeah. So, the gym I go to was one of the more popular ones in the area, so, there's a really good mix of people in there from, you know, you're sort of average beginner who I don't mind, all the way up to your like, a person who could step on stage, contest ready. Bodybuilders. So, when I start seeing those guys, you know, way bigger than me, way more defined than me, way more toned than me, it's like. It kills me a little bit because I'm like, why can't I? Why don't I look like that? Why are you so much bigger than me? Why are we lifting the same weight, and you're double or triple the size of me? And I say that just looking at myself in the mirror and I'm like, "God, I'm tiny. I'm small. What's the point? Why am I even bothering? I'm clearly not going anywhere". And it gets to a point where I'm like, "Look, I'd rather go when it's like dead quiet" because of that because at least then I can kind of look around and be like ", OK, I'm in like the top ten people in here I suppose, so, that's Ok". But otherwise, it's like, you know what? I can't stand that, you know."

With those goals in mind, Ethan endorses using steroids. He is not bothered by any of the physical consequences that they may carry; he is fully aware of them and states that they will not deter him from using them. He says he would rather live a shorter life looking the way he wants rather than a longer one that is not in the shape he desires. The only reason he has not started using yet is because he wants to see how far he can push his body without them, and when he feels he has reached his limit, he says that he will be turning to them. Interestingly, he even refers to the use of steroids as cheating, but that does not seem to deter him from using them as well.

"I'm constantly researching the idea of is now a good time to start using steroids, or muscle enhancers, or things like that, because I want to see where I can get to naturally. But that's a slow road and not always nice. So, yeah, I'm always looking into, like, well, you know, "Should I cheat? Should I cheat and just go for it? Should I deal with hair loss? Should I deal with the, you know, cardiovascular problems and the health issues that come with it?" Because to me, those don't put me off it in the slightest because it means getting bigger, you know. And that's the only problem I'm particularly focused on."

[On using steroids] *"I mean, as I said, the health implications really don't bother me."*

Ethan is willing to do anything he can do in order to achieve his goals, even taking up smoking because he perceives that it may help raise his levels of testosterone.

"I read that smoking can increase your testosterone, so I started smoking, you know. And you know, if I'm willing to do that and I've got grandparents who are no longer here because they were smokers, and two smoking parents who probably wouldn't be here for much longer for the same reason, you know, in the pursuit of getting fit. Yeah, the idea of shortening my life a little bit really isn't all that big of a deal to me because, you know. I derive my worth from my size, really, so why spend 80 years not being the size I want when I could spend 50 years being the size I want and go out pretty well? That's the way I kind of look at it."

Regarding his self-imposed standards of fitness and diet, Ethan says that he is very aware that he does not expect the same from other people. These are the standards he holds himself to,

but he does not hold other men to. Other men do not need to be masculine in order to matter and be successful.

"I only apply that logic to myself, though if I see like any other guy in the street, it doesn't matter whether he's, you know, big, skinny, overweight, whatever. It's like, you know, whatever you have, that is masculine enough. But for me, I've got to have as much muscle mass as humanly possible, you know."

"But in an ideal world for me, everyone else is happy in themselves... Yeah. I just want people to be happy in themselves. Just, you know, I'm not at the moment."

Ethan is also hesitant about seeking professional help because he is aware of the fact that he will be asked to stop and cut back on his exercise and relax his dietary routine, and he is not ready to give in to that

[On seeking therapy] *"I am putting it off purely because I don't want them to make me change the way I'm doing things, or trying to stop me from going as often as I do or stopping me taking muscle enhancers, you know?"*

However, due to his awareness of his own compulsion and despite his dedication to fitness, he is not putting off going to therapy because he recognises that somewhere within him exists the desire to be able to be more relaxed with his image and look in the mirror without having mostly negative thoughts about himself.

"I think that would be the point where I would have to go and seek help, to be honest. Because you know, as much as I'm still motivated towards improving and getting bigger. It would be really nice if I could look in the mirror once in a while and actually think to myself like, "Yeah, that looks really good," And that would definitely come with seeking some help."

Ethan's interpersonal relationships have both influenced his attitude to muscularity and have been influenced by his attitude to muscularity. It starts with his father. Ethan is not warm towards his father, whom he views as a disappointment. He completely rejects him, and in fact, he states that one of his goals in life was not to end up as his father who did not exercise and was not athletic. Ethan remembers his father taking him to the pub for quality time; he does not want to be anything like that. He says his dad had no role in raising him. He wishes it was different, he wishes he had a dad who cared but the reality of the fact is that he did not.

"The more I kind of realised about him, the less I wanted him, or wanted his approval really because I don't think he's a good person, to be honest. So if he's given me his approval, if he's proud of me, then something's gotta be wrong, though, you know?"

[on his father] *"I haven't seen him in seven years. I didn't really see him much when I was growing up, either. Sometimes on the weekends. And his idea of quality time with me was to go to the pub as soon as it opens on a Saturday. He would stay there till it closed and repeat the process on Sundays. And I would kind of just sit there and just wait for the time to pass... I do not want to sound harsh, but I never really liked him that much anyway."*

Additionally, Ethan mentions that he is quick to reject any romantic partner who belittles or criticises his physical aspirations. There is no room for people not to support his goals, and

with that in mind, he finds it hard to disclose his journey and his frustrations because he does not want to be judged, or worse, fussed over or to appear less calm than he wants to be seen as. He does not want to be told to stop; he does not want to have to reject people because of it.

"But as far as, like, you know, like, relationships, past girlfriends, or what have you? I've said to them, "You know, I want to get big" " and they're like ", What do you mean by big?" I'm like, "Big!". So then I'd pull up a photo of, like, peak Ronnie Coleman, 2006 Olympia and be like, "Well, that big". And they'll turn around and be like, "Oh, no, that's disgusting. I don't want you to do that. I can't be with you If you like that". And I'm like, "Alright then, off you pop and go away. That's the goal. If I start getting there and you don't like it, tough."

"Truthfully, I don't want the concern and the winging and the inevitable "If it makes you feel like that, you need to stop going to the gym". Umm. Like, no! That's not gonna happen. That is not on the cards at all."

"I'm just not big on sharing my personal feelings with people, really. I'm just not big into sharing these kinds of things with people. I don't like to admit that maybe I'm not as calm and collected as I seem."

Ethan also talks about the value of muscularity in physical attraction. He himself is attracted to muscular men and women and wants to likewise be appreciated for his own muscularity as he sees it as a main measure of physical attraction

"Personally, I'm far more into the more muscular guys than anything else. Umm, but at the same time, you know. I am also into more muscular women as well. And I feel that to a certain degree, if I am not, then I'm really punching above my league. And I'd at least wanna be able to get myself in a position where I can, you know, feel like I belong. If I took interest in someone who was like, you know, really, really big, while I am not, then do I belong?"

[On wanting a partner who appreciates his physique] *"Yeah, 100%. That is kind of like a bare minimum requirement for me because you know if they say. You know, "It is too much" or something like that, you know, they're not gonna work out then"*

Again, Ethan fully admits that he does not think he will ever be good enough, but he emphasises that he needs to push forward in his journey

"I know I'll never be good enough for myself in my own eyes. But you know, the more I keep going, the closer I get and I do not want anyone interrupting that."

"I look in the mirror and just see some chubby, overweight kid with no muscle whatsoever, and my goal for the future is to continue pushing myself further and further and further until I can reach a size which is socially deemed to be absolutely massive."

For Ethan, there was a double-edged sword of an early exposure to bodybuilding muscular ideals at the age of 14-15, which he then internalised as ideal to strive for, and an early misconception of the gym as a place where only these types of people existed which fostered in him a sense of intimidation. He, therefore, decided to start his exercise journey at home to build enough physique in order to qualify to gain access to the gym. He also states how he was under the impression that all of those bodybuilders achieved their statuses naturally

without the use of any substances. So, he operated under the impression that he could achieve the same by working out at home by himself. This led him to overexert and caused him a chronic lower-body injury in his knees.

"I kind of had this impression of the gym, of what you would go into, which was guys who looked like Arnold, you know, in there. Who were, you know, bench pressing like every single plate in the gym, dry scooping protein powder? I don't know where I got that impression, to be fair... I was under the impression that all those guys were natural, you know that it was like five years of working out, and if I'm just doing the same at home, I could probably look at least halfway decent. I never bothered to research it. But that was my impression."

"Back when I first kind of got into the idea of wanting to get bigger and everything, I didn't know what I was doing. And you know, my anxiety was quite high at the time. The idea of going to the gym scared me, and then I would see all these videos on YouTube where it was like, "Ohh, you know, if you do this at home, you know, you'll look amazing". So I was like, "Ooh, brilliant". So, I was doing upwards of over 1000 squats every single day, which has caused my knees to completely just give out on me because I did that for a solid five years, and it's now reached a point where I can't exactly load up heavy on the squat rack because as soon as I start going down, my knees will just give out."

Furthermore, he details that his loved ones seem disinterested in his muscular pursuits and do not take them that seriously

"The most I've ever shared is "I wanna be big, like, really big". Hmm. You know, my mum just kind of ignores me. She brushed it off as, you know, whatever."

Ethan also points out his frustration over the lack of transparency in the media about the level of steroid use the celebrities are engaging in, given his own past and the consequences of the belief that these celebrities and gym goers were all natural.

"Where have you now got all of your, like, big Hollywood actors going from normal looking guy to contest ready in like 6 months, and they're like "Ohh yeah, yeah, yeah. You're on chicken, broccoli and rice and 8000 calories a day" and It's ridiculous. It really does work me quite a bit because it's like, you know, that's just setting people up for having a really unrealistic expectation and ending up in the same position I'm in where, you know, going to the gym becomes a non-optional part of life because they're under the impression of what if I just, you know, train really, really heavily for six months, I'll get to look like Chris Evans or Chris Hemsworth or whoever from, you know, one of the Marvel films where they suddenly become absolute units of people. I think that's just going to lead to a lot of guys experiencing, you know, rather, you know, huge letdowns, which is going to lead them to either, you know, feeling worthless about themselves. Ending up feeling like they're not good enough in terms of muscle definition, you know, potentially developing eating disorders, jumping on steroids without knowing what they're doing, doing harm to themselves. You know, whereas I think, if they would just open about it, you know, it would save people a lot of issues, because if you could actually look at them and I go, "OK, right. I can't achieve that naturally. That's not gonna be me in six months to a year". I think a lot more people would probably be happier with the way that they looked."

Therefore, Ethan thinks it is important to be transparent about steroid use in the media and that people need to be made more aware of the conditions under which these stars achieve their physical appearance so that regular individuals are protected in the way he was not.

Fernando

Fernando begins talking about the interplay between functionality and aesthetics when it comes to his attachment to muscularity. He declares that for him, muscularity is the means through which he can be functional in the world as a man. He relates it to strength and agility and the ability to work hard and, therefore, be a successful man. He talks about how, as a young boy, he was taken to the farm where his mother grew up, and there, he saw farm hands exhibiting these qualities of strength that he now associates with manliness. Inversely, despite rejecting muscular aesthetics as a motivator for wanting to be muscular, he still sees in himself the drive to "look good" because he believes that looking muscular is important in being successful as a man in attracting partners. He also recognises that a part of him is still attached to the ideals of muscularity as advertised in the media through action stars in comic book franchises that he was exposed to in his youth.

[on the reason for exercise] *"Strength mostly. Like I want to be not aesthetically pleasing, but more of an athlete. So, I'd rather it be very generic, I guess, but some people only work out glamour muscles, right? Because it looks nice, and they take pictures, and I'm more interested in, like, I don't know, if a catastrophe happens, can I pull myself up?"*

"Alright, so have you ever heard the expression farm strength, performance strength compared to gym strength? Those people that work in farms typically are really, really strong, whereas you translate that to someone who could bench press 100 KG at the gym, and then they put him in a farm and are like, "Can you lift that? Hey, that's like 40 KG", and he's like "Yeah, sure", then he goes to do it, and he can't."

"When you're young, and you first start at the gym, you wanna look l; I, I don't know, Captain America, you know Chris Evans or Chris Hemsworth. Yeah, they look amazing, and it's great."

[The struggle between functionality (logic) and aesthetics (emotional) exemplified in role models] *"Sometimes I see, like Chris Evans and be like "Ohh, I'd like that". But then you're like "That's not as athletic as you could be". So then you pick an athlete, someone like Conor McGregor but then you are like "yeah, no, I mean I am the same height but different body types".*

"Well, if we just look for an evolutionary point of view, if I look good, if I'm the ideal, you know, body mass and whatnot, girls that I'm dating will, therefore, be more attracted to me. There's a reward system in place. In terms of clothing, I can wear whatever I want."

Fernando highlights how, for him, the gym environment and specifically the "mirror" was an instigator for him to be more focused on his appearance as well. He talks about how he himself is not a mirror person and how he usually focuses on dressing for comfort and

functionality, but he then talks about how the mirror fed his sense of vanity. How he suddenly became attached to how he looked when he was training and how that, too, took him away from his functional exercise goal.

With the mirror right there, some people are not used to that. For example, I dress like a slob, I'm not used to the mirror, I dress for comfort. So the minute that I was put into an environment where I was lifting weights, I, like, all of a sudden, I saw the effects that it was having. I was like, "Ohh, Yeah, take a selfie, and it will be great".

On a deeper level, Fernando talks about his own self-worth and how he usually feels that, on a personal level, he has very little to offer the people around him. He recognises that he is excelling professionally, but he is not personally valuable. He talks about how he links his feelings about his own personhood with his looks and talks about how when one looks better, they would feel better about themselves and vice versa. He also mentions how he finds that most friendships in life are superficial enough to the point where he would feel like he would be judged and lose friends if he is not in good shape because he stresses how the external look is the most valuable thing to people when it comes to forming opinions of others.

"I especially feel my worth in terms of what I can offer people is quite low. My self-worth is like what I am individually. As in terms of, like, I don't know, accomplishing goals workwise or in professional settings is way higher than my personal side."

"I think if you look better, your self-esteem is high. If you look worse, it's gonna be lower."

"Because all of a sudden, your self-esteem goes down because you know that people value you for external means, right? Like unless you're really close friends, and you've had emotional conversations, or you've shared experiences. Sadly, that's gonna be like the 1% of the population that you surround yourself with. I mean, you're gonna have friends. You're gonna have normal friends you can go out and have a drink with, but it would not be a close relationship, so you know that the way that they look at you has now changed, so your value goes down. Like bitcoin, basically."

Fernando also talks about how he himself is attracted to people due to their physical image. He tends to seek out people who are "sporty" and in good shape and have toned bodies.

"If I just look at people that I have been attracted to, they are typically in good shape because then they're definitely sporty. They definitely do some sort of exercise where you can definitely see lean muscle as well."

And in wanting that for himself he then talks about the pressure he puts on himself to look good enough to measure up to the standards he himself is seeking and how he ends up internalising their rejection of him and attributing it to his physicality. And how that, in turn, affects his self-worth negatively.

[On internalising rejection by potential partners] *"Six months ago, I wasn't too bad; I looked OK, in my opinion. Uh. OK, for that time. I still wish I looked better, but I wasn't to the point where I'm like, "Oh yeah, this matters". And then it was meeting a girl. And it was, like, the realisation that I'm not what she's into. And it was kind of like, I don't know if that's body-wise or my attitude. Whatever. So. You do what you can. You start to think that maybe it's body-wise. And I think I have internalised that a bit."*

In relation to his negative reaction to rejection, Fernando alludes to how he is seeking approval from his potential partners to make up for the fact that he never got it from his parents. He says that he needs his partners to approve of him so that he can finally feel that he is good enough

"Because retrospectively looking at this. If my issues primarily come from a lack of validation from my parents, right? That love of "oh no, you look fine. We accept you whatever way you are", right? Surely there's someone out there, whether it is friendship or relationship, that's gonna be like, "No, you're OK". That's the way I see it."

Therefore, Fernando recognises that his issues with self-acceptance and body dissatisfaction stem from his early experiences with his parents, whom he describes as "vain" and "critical" of his appearance. He details how they pressured him into looking a certain way and how they belittled him when he did not. He describes an incident when his father placed the blame for his recent breakup on him being a "pig". He states that this made it very hard for him to open up to them emotionally because he felt judged and excluded. He felt that though they provided for him financially, when it came to emotional support, he was neglected.

"One is that growing up, my parents have always been very superficial."

"My dad had a nose job because he didn't like the appearance of his nose, and my mum then had surgery also on her teeth and stuff like that. So, clearly, they are very superficial people where it's like, "No, we need to look this way or, you know, the people will judge us". Which then turned into when I was a child growing up, "No, you have to look this way, right?" Like your cousin has a six-pack, and my cousin didn't even have a six-pack, but it'd be like little fucking white sprinkled lies that makes you feel like shit because you're like, "Oh. Yeah. Johnny has a fucking six-pack at 12 years old". What is he doing? He's a superhero."

[on parental criticism] *"I have. I have multiple times like there was one time, so, yeah, the 156 kg, and I dropped to 82 in three months, and there were like, "Oh, you're still fat: And I was like "What the fuck?" I actually had a complete little mental breakdown where I just pulled up jeans that, like, you know, that were now huge on me. And I was like, "How the fuck are you saying that I'm fat?" And it was like, look at the difference, right?"*

"This is the one thing I say to everyone. Like I can never fault my parents for not being there financially. Emotional, not so much. And again, it really sucks because, you know, you grow up, and you think maybe it could be different, but I stopped telling my dad my problems after the first ever break up I had, and I was reeling from this, like, you know, first heartbreak. And I did something stupid like, I don't know, I think I forgot to, like, wash a dish or something, and his response was instantly like, "This is why she left you, 'cause you're a fucking pig".

Fernando then talks about how he has internalised their criticism of his appearance and how he has then linked his own inability to ever be satisfied with himself because their continuous rejection of him has caused his own standards to become "deranged."

"But again, it was like, it was never good enough. And I've realised that, and It's not just them; it's also with me now as an internalised response from them. But now my goal orientation has become a bit deranged, where even at my best, I am looking at myself like "I'm not good enough". Like, you know, all of a sudden, you like, you know. 9% fats are

relatively OK. In fact, I mean, if you look at the national average, more than OK, but it was like no, I could be 7%."

He has made an effort to rebel against their body standards by always choosing comfort and functionality over aesthetics because he does not want to end up being like his own parents. He tries to be logical about his approach to life in general but also fitness because he grew up thinking that his parents were overly emotional, and so he decided that he should go the opposite, relying on logic and burying his emotions, and that has led to an internal conflict within himself between his logical and emotional sides.

[on logic vs emotion in his life] *"It matters because I like to be quite logical in the way I do things"*

[on the struggle of reconciling logic and emotion in his life] *"This is exactly what I told you. I think most people approach life with a good mix of both, whereas the mix I have is not a good mix. It's almost like a war over each other, which leads either to an emotional base response covered in logic or a logical response covered in emotion. And self-awareness is an awful thing because you're self-aware, but how do you fix anything?"*

[on rejecting parental emotional patterns by embracing a logical one] *"Honestly, I couldn't tell you. I've tried to think about it. I like to think, you know, I think you learn a lot from your parents. It's social learning theory, right? Or from those around you. But no one in my life is that overly logical. If anything, they're the opposite. So maybe it is an overcorrection on my part. But, I, hmm, don't know. I also don't feel that way [super logical] all the time because I'm still prone to emotional positions. Yeah"*

When it comes to going to the gym, Fernando describes himself as "strict" with his routine. He links this strictness to knowing that he can, therefore, control his exercise outcomes and achieve his goals by exerting control over his input. Control at the gym brings relief in more than one way. He also talks about how it is nice to be able to go to the gym and know what you are doing and control that, whereas in life and at work, there are so many things outside of your control. It is logical for him then to go to the gym and have an effective structured approach that will then give him the results he wants to achieve.

"I'd like to say I'm quite strict, as in, like, if I know I'm going in there to do chest, and my workout consists of four chest exercises with maybe six reps. Uh, I'll do them. Like, I will not fail at that"

"Because you better the odds, right? For example, I know I wanna get somewhere with my fitness. I have to start training now. The longer I leave it, the longer it is no longer in my control to lose 30 kilos, at least in a healthy way. So, there has to be a structure"

"And in a way, that is the reason why I think, going back to why the gym helps me kind of get the stress relief, is because I know that there are things at work that I can't control right. So for example, a clinical study, I have no control over that. Uh. In personal life, things happen. People pass away and get engaged. I can't control that. The one thing I do have control over is the things I do at the gym."

Given that the gym provides Fernando with a sense of emotional relief and control, he talks about how skipping workouts is a source of anxiety for him. It, in turn, affects his sleep cycle and ability to cope with other life stressors. It becomes another thing he could not control and, in fact failed at during the week.

[on negative feelings about skipping gym] *"It lingers in me for the week. For example, funny enough, this was last week, and the gym was closed for two days because they were doing repairs to the AC. And immediately, I just felt like, "OK, what am I doing?" And I went out for a walk. So I went out for maybe a 3-hour walk. But that is not the same. You do feel uneasy. You feel like you know a certain thing hasn't been completed, and then that has"*

[on difficulty coping when missing exercise] *"I definitely have an excess of energy left, so I'll stay awake for longer periods of time, which then throws off my sleep cycle."*

"But in terms of my weekly goal. That's where it starts to affect me because now, suddenly, like, if I didn't do the gym, which is like the one thing I can control, and then I didn't do something, like, I don't know, send a PhD application, then all the sudden that it's like two things I failed at, and then that makes me feel like shit."

Fernando also talks about using the gym to compensate for exceeding his normal food intake and how he relies on the gym to ease any potential anxieties around overeating or engaging in good times with friends and how that, too, takes a toll on him because he feels that he is then always chasing compensation at the expense of his own energy and health

"So, the way I compensate for that is OK. If I'm gonna eat out today, like, for example, we go drinking, we get that burger. There's like 2000 calories. Uh, I'm not gonna stop myself from having a good time with my friends. They drove there; they met me. So, I'd rather just go to the gym for an extra two days. Hmm. Because I know it is physics, right? I'll eventually have to burn that energy off. So the weekend that I was supposed to be resting, I would go to the gym, but then that now creates a little spiral of you've gone gym seven days a week, and you're so lethargic when you get to the start of the new week."

And so Fernando states that he holds himself to a high standard when it comes to sticking to his set goals. He describes himself as goal-oriented" and is harsh on himself when he views that he has not achieved set goals. What complicates matters for him is that when it comes to these goals, he is never fully satisfied. He talks about how he is never satisfied, which leads to a state of continuous self-punishing rejection and desiring to be better

"I mean, I've always been that type anyway. I feel like you have to... I'm very goal-oriented, so during the week, I'll have a couple of goals. If I don't meet them, then I'm like, "Well, what the fuck was I doing?" And the same goes for the gym as well, where it's just like, "Well, I should be able to at least start to push for a personal best."

"For me. I think it's the constant unhappiness of how you look. That it's either not enough or it will never be enough. No matter what stage you're at, whether it is the very beginning, and you can see the outline and you like, you know, you should be proud. To being 1% body fat and you're still gonna be like, "No, could be better."

"Even like I said, like even at my best, it was never enough. And even like before working out when I was a, you know, young 17-year-old. I used to play a lot of football. So I was in shape. And It was not enough."

And for Fernando, there are no shortcuts. He does not believe in achieving goals through weight loss pills. He says that it would not be his achievement if he relied on extraneous substances to get what he wanted.

[On not wanting to take pills to lose weight and get in shape] *"As in like it wouldn't be my accomplishment. And I feel like if you want self-worth, it has to come from you, right? It's the same thing when using steroids. All of a sudden, I can lose loads of weight, but it's like I did that myself?"*

When it comes to food Fernando talks about food being an outlet to find comfort for him. He retells how his parents would leave him for days by himself, being gone all day long and leaving him with nothing but an ample amount of food. And so, he has developed an expectation when it comes to portion sizes to be big. Inversely he also talks about using food as a measure of expressing his despair when he is not seeing the results that he is seeking physically. He calls his dieting in those circumstances a "defeatist" manifestation of how low he feels. So Fernando defines food as both a source of comfort for him and also a tool to punish himself for failing because, in those instances, he does not feel good about eating. He, in fact, is feeling quite bad, but he cannot stop.

"But yeah, so sometimes days would go by without seeing them [parents], three days or so. Food would be left for me. Quite big portions, cause in Colombia there's this thing where you just have to eat big portions. Also now, I kind of see the error in that cause I'm like, "Well, maybe this is why I'm not full sometimes" Because my stomach has just been overexpanded."

"I don't know. I think it's finding comfort. And unfortunately for me, comfort comes from food."

[On using food to self-punish] *"It's an accumulation of a defeatist way of thinking like "What's the point in trying?" right? And then you just overeat, you order McDonald's or whatever, and then after you have it, you're like, "Fuck, Why did I do it?"*

He draws a distinction between instances where he engages with food positively in a setting of socialisation with friends versus when he is being "defeatist". However, he does say that he feels the need to compensate by going to the gym in either case. However, his feelings are different depending on the emotional situation that governs his eating habits.

"So, when it's with friends, it's fine. And again, because I meet my friends like, once every month at best. Whereas when it's like at that defeatist point where you're like, "Well, fuck it. I'm just gonna order McDonald's and eat". The food doesn't even taste nice. You just eat for the sake of eating. Umm. Like you can taste it, do not get me wrong. You know what McDonald's tastes like. But it's not like a "Ohh. This is scrumptious". You know, you don't take a selfie or food picture, right? Whereas when you're with your friends, you do that because it's like, that is a treat."

Fernando talks about using self-deprecating humour as a defence mechanism against being picked on for not being in shape. He talks about how, in creating the joke, he then controls

the narrative and does not become the brunt of the joke himself, and he highlights how he has a constant anxiety about being "found out" and called out on this tactic. That mechanism of action started at school to protect himself from being targeted, but it is still something that he does today. He recognises that in doing that he is cementing these notions about himself being out of shape to others.

[On not being bullied for his appearance: *"I was the class clown. So, like, it's very hard to make fun of the class clown if you take little things in stride, right? Yeah. Nothing is serious to you."*

"I think even now, you know, like, I can think off the top of my head of a joke I used recently, but it was something like ", Oh, you know, like at least I know with the food shortage and like, you know, economic crisis, I'm gonna starve as quickly as you". Yeah. You know, It's silly shit like that, but it's just like, yeah, that's also a double-edged sword because now you're accepting the fact that you're a specific way."

"You take the ammunition before someone shoots you. As I said, it's very hard to make fun of someone if they've already accepted it. As they can no longer be hurtful, that works at least to the untrained eye, which is, yeah, on a superficial level. Because I'm sure that once they start to realise "Well, they're making too many jokes about this". That's when you know, "OK, let me hammer in, there is going to be a response eventually"."

"One person, yeah, I think that they saw through me like paper... It was awful because suddenly, whatever facade you had on it was like, "Oh, well, shit. They can see through this". Uh, because even though it's one person, you're like, "No, no, everyone can see through this now"... I talked about taking the ammunition from someone; well, they took it from me. I could not use comedy."

Fernando is critical of the media's role in disseminating unrealistic muscular body goals and advertising them as representative of masculine ideals of strength and ability to tackle anything in life the way a man should. He talks about how he did not realise at the time that he would never look like a superhero because he did not have his body type or the resources available to them to dedicate themselves to achieving these muscular looks. But he did not get that from the media. He got that from educating himself about what he can and cannot achieve with his own body type.

"It was, again, the lack of education which stemmed from. It was the "I want the Chris Hemsworth body", right? Massive bulks of muscle. Turns out that unless you have his body type, you're not gonna get those arms. He's also 6 foot five, which means that I can't get that either. So it was like working out for six months, maybe, like, religiously hard and then finding out, like, ohh well, I don't look like this, I am stumped. And I'm following the whole program."

"I go back to how the media has shaped us into thinking what masculine looks like, you know. You look at the Batman suit. It's skin-tight, and there's a six-pack for some reason. And it's that type of stuff that makes you look good, that makes you look like you're ready for whatever."

"Ohh yeah, losing weight is fine when you have your own personal trainer, your own cook", and stuff like that. And he really put that into perspective. Yeah, these Hollywood guys that

everyone compares themselves to you, they do like 8 months with someone by their side. Whether that's helping emotionally or just food, diet or a personal trainer, that has a huge impact on their development, in my opinion.

Another aspect that has a profound effect on Fernando is social media dating and dating apps. He talks about the demoralising value of facing constant rejection solely based on his appearance and how that has fostered in him the need to physically compare himself unfavourably to other men, including his partners' exes, while dismissing his other achievements that he is otherwise proud of such as his master's degree.

"I've started to use dating apps recently. And man, that's just depressing. So I found out the statistic that women only swipe on the top 10% of men, and the other 90% of men are just kind of left there. Uh, so obviously, statistically speaking, I know I'm not gonna have, like, much success. Right? Because now you have to put your height on and all that crap. And if you're curious, you take a peek on the other side of what men are posting, and then yeah, you see, like, the majority of guys have a really good picture of them, like in the gym or playing sports where you are like "OK, yeah, they clearly take care of themselves". Uh. Whereas, like, at the moment, I can't take this type of picture because they won't look as good. And if I use a picture from, you know, back in the day, that's disingenuous, and I'm gonna feel really shit when, like, if it goes well and she meets me and is like, "Whoa". Trust me that will come up in conversation, whether it's instantly, which is almost like mercy, you know, it puts you in your place, or whether, you know, you get lucky, and you go out on a couple of dates and they just bring that up Like "Ohh. You don't look anything like you did in that picture."

[On comparing himself to partner's ex-boyfriend] *"I take pride, and I should not take pride; really, I am average at best in terms of education. But I took pride in the fact that you know, I have a master's degree. He did not have one. I think he only did like six forms and that is it. But then he was tall, skinny. Better than what I was, and I always had that chip, right? Cause. Now I'm carrying that shit like, oh, you know. The comparison. And I think that's where it starts to really manifest because you are always gonna be compared, right? No matter what you do."*

This constant feeling of inferiority exerts a level of stress on Fernando in his life, and he talks about his discomfort with taking pictures with his friends because he is not as comfortable documenting his physicality as they are due to how he has been made to feel about it.

"I felt like my friendship, in a sense, is very limited. And I won't lie to you; the physical aspect of that comes into play, right? Because everyone likes taking pictures. And when you do an activity, you take pictures, right? That's just a common thing. And because now I've been exposed to online dating and stuff, like, you see, like, people really are trying for pictures, and as I told you before, I've never been that person. I dress for comfort. I mean, I'm still in shorts. And I've just gone to, like, the street, right? It's cold as fuck, but I dress for comfort. I know that I can't elevate a picture like that for you. I'm not gonna look good. At least if I was fucking ripped or if I was really tall, right?"

Finally, Fernando credits educating himself with his attitude, which started to migrate from an aesthetic pursuit to a more functional pursuit. He mentions talking to personal trainers about the unattainability of the superhero physique, which then helped him overcome his youthful, uneducated body image desires.

"It was, again, the lack of education which stemmed from. It was the "I want the Chris Hemsworth body", right? Massive bulks of muscle. Turns out that unless you have his body type, you're not gonna get those arms

"So, when you're young, and you first start at the gym, you wanna look like, I don't know, Captain America, you know, Chris Evans or Chris Hemsworth. Yeah, they look amazing. But, then you find out the more you educate yourself and talk to PTs."

He also talks about how his education prevented him from engaging with extraneous substances to help him lose weight or other substances, such as steroids, in order to gain muscles.

"The NHS is unveiling that fat loss drug, right? And I've actually thought about this now that it came up, and I was like, "I still don't wanna do that" I'm like ", that's not the right way". And for me, I don't know whether that's because. One, I know that there are complications with it, no matter how safe things are; I mean, you never know how you're gonna react to anaesthesia. Or what other things can then stem from that injection."

[Refusal to use weight loss substances] *"No. But I also think it's because, like I told you, like, the sense of self-awareness of what these things can do. Had I not been educated, and maybe if I wasn't educated and then I was in a slump, I would have probably. Because everyone likes to cheat, everyone likes the fast way."*

He also talks about how his parents' lack of knowledge about muscular-related body dissatisfaction hindered them from being able to understand and help him. He talks about how their approach is mostly in relation to skinniness, with a tendency to celebrate weight loss even when it is done questionably fast.

"Even though now my mom is a bit more self-aware of, like, what bulimia is, or what anorexia is. And it's funny that she only focuses on, like, you know, the "skinny problems."

[on his parents failing to be concerned about his quick weight loss] *"I mean, I dropped a lot of weight. But yeah, no, they don't care. If anything, they celebrate it."*

Interestingly, despite his own awareness of his body image issues and his own insights on where they came from, Fernando does not seem to think that it warrants seeking help because there are other more important things to cater to than his own body image issues. He talks about having gone to therapy for separate issues and that despite being "OCD" about the gym, he does not see it as a big enough issue for himself despite it taking control over "moments in his life."

"Yeah, I've had a therapist. Not for body issues, but the stress of the job at the NHS during the pandemic."

[trivialising his body image issues to justify not seeking help for them] *"In the grand scheme of things, I think like the problems that I have day-to-day. Uh, I would not consider that a big issue, even though that clearly, it does take moments of my day, like for example, going to the gym is almost like an OCD. But there are still other things in my life I would deem higher up that list."*

Greg

Greg describes having a low sense of self-worth and attributed his inability to be more positive about himself to growing up in an "emotionally cold" environment with his family. He describes not having much self-confidence due to feeling rejected by his family

"I did grow up in a very cold like it was a household that wasn't abusive or anything, and I was very, very lucky materially. But it was a very emotionally cold household in the sense that I wasn't really ever told that I was loved very much; I wasn't really hugged very much. Well, I wasn't really hugged, and I was kind of left to my own devices."

[on growing up in family] *"I think the process was that I felt pretty emotionally isolated, and, like, had very low self-worth, and like a lot of self like, I wouldn't say necessarily hatred, but very low confidence in myself and no belief that I was worth anything, right."*

Furthermore, Greg highlights growing to become limited in his ability to share his emotions because he was never taught how to do that by his family; he describes feeling "emotionally numb" most of the time and, therefore, needing to seek high levels of excitement through engaging in extreme scenarios and risky behaviour in order to battle the numbness that he feels and establish a feeling of "happiness."

[On being in touch with his emotions] *"It's like, through my whole life, I haven't been used to doing that, and it hasn't been, like, a pathway that I feel like I can easily jump into. And it's not that I'm scared of doing that or opposed to doing that. It's just that it's just difficult and quite draining and uncomfortable sometimes."*

"I think it was just because I just don't really have the tools to dive into my mind really because I don't really. I was never really emotional. And I've never learned to think about my emotions, or I was never taught to be introspective at all."

"I think I just look for happiness through excitement, and I'm always chasing like extremity and stuff to find happiness."

"I've always been the person like, running schemes, like, breaking the rules at school, like, doing drugs, like, you know, kind of going mental and stuff. And I think I've always felt like there's some kind of distance there and that perhaps they don't understand me. But then again, that could also derive from a lack of emotion; that could also be me looking for something to feel."

"Most of my social activities are all around drinking and drugs. Well, they did. I'm not doing drugs anymore, but I still drink, and when I drink, I go mental. But. When I meet up with my friends, I can't feel satisfied. It's great to see my friends, and I have a nice time, but I can't feel satisfied. I can't feel comfortable having a nice relaxed time. I always have to push it to the next level. I always have to say let's go and climb this rooftop or Let's get some spray paint and go and spray paint the walls or Let's go and get black-out drunk. We would wake up on a park bench at 6:00 in the morning covered in vomit."

Greg also mentions how he feels that he has to always provide entertainment for the people in his life to justify their wanting to be around him; as he does not feel that his company is enough to keep people interested, so he is always planning something "extreme" to keep them engaged

"I've always felt like that was my role. To bring excitement to people and bring madness and bring chaos. In a way, that's fun for a while. That's my job. I've always thought that my job has never really been to connect on an emotional-feelings level, and it's just because I've just developed mechanisms for behaviour that are so far detached from that. And when you develop mechanisms for behaviour, they are very hard to break down."

"I think that I needed extremities because I've always felt that distance. And I've always felt that emotional inadequacy, so I've always looked for extreme frameworks in which I am needed, or in which I am perceived as being someone that's worthwhile having around, I guess, yeah."

Greg actually goes as far as describing how he is "disinterested" in everyday normal conversations that he is exposed to by his colleagues, and he describes an awareness of the fact that maybe he needs to be more engaged in these "normal" topics in order to actually be happy.

"And coming to this uni, this year, where people are, I don't know, like I think the people I've been around, my course mates, they're far more like, sensible and normal, and the things they talk about are so just like standard and I'm really struggling with it because I don't find it that interesting".

"I'm realising this is actually what it is like to be happy. You have to be comfortable with normal things."

Greg explains that this "extreme" approach extends to his view of exercise and fitness. He details incidents in his life where he inducted his classmates at school into a fitness cult where they engaged in extremely rigid, strict and often heightened behaviours at the gym at school. They had free access to it, so they would go in and push each other, behave loudly and brashly, and engage in snorting creatinine for muscle gains. He talks about having led that group and not allowing anyone to leave or falter. It got so bad that the school had to intervene, and access to the gym was prohibited and then regulated afterwards.

"I feel most comfortable in chaos, and when there's madness and when there's risk-taking and rule-breaking."

[Exercise being a venue to engage in extreme behaviour] *"When I talk about exercise when I talk about the gym, it's quite intense. So, like, If I'm running, I'll be running often until I'm throwing up, right?"*

"I mean, ever since I can remember, I've always been like a ringleader in a way. I've always organised people together and made them want to break the rules, and I've always looked for ways to get around the system for excitement... I was, like, getting people to do creatine tablets at school and like, snort, creatine, you know, like I was just trying to make it extreme. You know what I mean? Getting people to all come in with me at lunch and go for like 3 or 4 courses, you know, as you eat and then you'd run around the back of the building and rejoin the queue without the teachers realising and stuff, and have more food... I actually got in some trouble because I shut down the school gym, basically because I was running like a gym cult. We were just running like a gang, and everyone was really obsessed with getting really big. And they basically shut down the gym because they said it was like a really aggressive, unhealthy culture and stuff... I had this big speaker, like a big, like, massive speaker, and I started bringing that in and just started playing it in the gym. Just started playing, like, really

like, uh, like aggressive electronic music and stuff. And then we were turning off; I was turning off the air conditioning unit so the whole gym would steam up... we'd always get our tops off and scream in the changing rooms and scream down the gym for like 5 minutes... You'd get people like people doing their max reps and stuff, and you have like 10 people around the bench just screaming at them, like going mental. They would go out of control."

Therefore, Greg has always chosen to surround himself with people who share his propensity for "extreme behaviour" who, therefore, are susceptible to becoming engaged in his schemes and joining in with him.

[His choices in friends are another example of his tendency to choose the extreme in life.]"
I've always been around very extreme people."

As mentioned above, Greg describes a low sense of self-worth. To him, muscle definition is a tangible metric to measure his success as a man because he feels insecure about the other attributes of masculinity, such as "Confidence and self-assurance". He feels he does not have those naturally, and he cannot control having them, but what he can control is success at the gym and, therefore, gaining a measure of success through that.

"If I'm looking at a lot of those words, which I think people should equate to manhood [confidence, self-assurance]. A lot of them, I know that I can't do because I'm very deeply insecure, or at least I think I can't do them. So, I look at the ones that maybe I can control. And perhaps I look at the ones I could control physically because physical things make more sense to me than mental things. Physical things are far easier to sort out and far easier to deal with; they just require effort in a very simple way, in a physical way, and that makes a lot of sense to me and is something that's kind of attainable. So that's maybe why the gym and exercise were important for me. I guess it's like one of the few ways in which I can be the person that I think I should be because the other ways, perhaps, are not available to me."

Greg relies on being physically fit to gain a sense of confidence and to present himself to the world in a coherent way.

"I think it definitely does make me less confident, less able to talk to people that I don't know, or sadly makes me less confident in the ideas that I express if I don't feel physically like I'm strong because if I don't feel like I'm physically strong, I feel like I mentally bit weak and frail and that very directly translates."

Exercise brings Greg a sense of mental relief in the wider sense as well; he feels capable of tackling everyday stresses once he goes to the gym and exercises because it gives him a sense of structure that he feels he otherwise lacks in his life

"I think I really struggle with being organised and diligent, and to meet deadlines, and do these tasks that I feel like I should do to get me by. And I think the gyms are a really important thing for me because it's so entrenched in who I am as a person because it's a habit that I feel uncomfortable with skipping. I have to do it, and it's one of the few things I organise my day around and organise in my life around."

Greg, therefore, describes feeling very low when he is not able to access the gym in order to gain this physical boost. He talks about having travelled the last year, which interrupted his

exercise regimen, and how that, in turn, caused his mental health to plummet so low to the point of describing having suicidal thoughts that were brought on by different factors in his life, one of them being his relationship with his body

"I took a year to travel. And when I should have been having the best time of my life, I felt, to be honest, pretty low and pretty disorientated. The gym was a big part of that and not exercising was a big part of that. But also, I think having a lot of time to confront my thoughts was a very painful thing for me, and so just this past year has been like a time to learn, and I have not been very happy at all."

[on being suicidal] *"I was just very depressed, to be honest with you. And at no point did I find any joy in life, to be honest with you, I didn't find any joy, any pleasure in life at all. And to be honest, I've kind of had a general realisation that I haven't really, I've never really been truly happy. I think I just look for happiness through excitement, and I'm always chasing extremity and stuff to find happiness. I think, yeah, I think the gym has always been like, knowing that I look good, Like in a muscular sense, has always been something least I could look back on, and when I lose that well, the few times when that has happened my mindset has really plummeted for sure. I don't know, I wouldn't say it ties directly to my body, though. It's not like, it's not my first thought when I'm thinking about my body. But my body contributes, but its multiple things coming together. It's never a single reason."*

Greg realises that these feelings come about when he is not busy distracting himself with extreme activities that he uses normally to escape his own unhappiness

"This year, actually at uni. I've been chilling out. And I've been trying to be a bit more like normal, I guess. Uh, and I've been pretty depressed, to be honest with you, because I'm confronting a lot of things that I've never really had to confront before because I'm not distracting myself with extremity. I'm not drowning out my mind with risk-taking and extremity in the same way that I have always done."

Greg reiterates how he feels completely inadequate in most aspects of life and that he always feels like he is lesser than everyone else. He talks about feeling academically inadequate despite actually objectively doing well. He then talks more about relating feeling skinny to the feeling that he does not "have enough" and, therefore, is weaker in his mind. Greg is aware of his attachment to cultivating a sense of self-worth through physicality rather than cultivating it from within himself.

"To be honest, for much of my life, I have felt pretty inadequate. I felt like I failed in so many ways, and when I see other people getting what they want and doing well, even though I'm like, again, this is just like an anxiety oh mine, because actually, I'm doing fairly well objectively."

"I feel terrible about... I feel completely underachieved academically, like massively."

"My natural state is being very skinny. And then, when I don't exercise a lot in the gym. I really feel that; I feel kind of just a bit thinner. And then, and then I think when I, when I feel like that, I don't feel like I have enough. And I just don't feel well. I don't feel strong in my body. I don't really feel very strong in my mind."

"Instead of cultivating a sense of self-worth, I am probably reliant to an unhealthy extent on bringing external things into my life, and one of those things is body image. So, if I can look after my body, it's like a metric of self-worth."

To Greg, looking good is not solely about looking good, but it is about "something deeper" that it says about him as a person and the value it brings to his personhood

"I think a big part of it is that there's this expectation that I should be in the gym, and if I'm in the gym that I will look good. But it goes deeper than just looking physically bigger, like the size of my arms or the size of my chest."

Having placed such value on exercise to bring worth and meaning for him, Greg expresses intense fear of missing workouts and feels that his body will "deteriorate quickly" if he is diligent in his workout regimen

"Even if I'm sort of aerobically fit, I've always been very good at running and cycling, and I've always been very fit. I've always had a very low heart rate, and I'm very good at running and stuff. But when I feel like I don't exercise, I feel like my body physically deteriorates very quickly."

Moreover, Greg talks about never being satisfied with his appearance and always viewing himself as smaller than he actually was

"I was really big. I was probably one of the most muscular people in my school, right? But yeah, again, I just. I felt like I looked tiny. Like, I look in the mirror, and I'd be picking out, like, all these body parts that I didn't feel like were big enough for me. Like I always had a very big chest, but I had very weak shoulders, and all I would look at was my shoulders, and I would get fixated, and I felt very small."

"When you're constantly thinking like that when you look in the mirror thinking you're small, you're thinking like, what can I do to fix this? What can I do to get to the next level? But you can never really fix it. When you think about it, and you do, you think about it for years, and you have that same mental thought process as you are getting continually bigger, and the thought process doesn't ameliorate."

Greg relates the development of this attachment to fitness to his early days playing rugby. He mentions that despite being the fittest boy on the team at 14, he was still lighter than many of his teammates who were older than him at 16. This has bred in him a sense of competitive comparison, and he started attaching his own value to exercise because it meant that he became fitter and capable of competing.

"I think it sort of happened when I was like, so when I was like 14, I was very, very, very skinny. I used to play a lot of sports. I used to play hockey pretty seriously, not professionally, but I used to play like 6 times a week and at a fairly high level, like a regional level. And I remember going on a sports tour, and I was like, I weighed... I was 14 years old, and I was playing with those; everyone on the tour was basically 16, so I was two years younger than everyone else. And I was the fittest person on the team, and I was like hyper fit. But I also was one of the lightest people on the team and I weighed less. I weighed like 45 kilos or something, and it was very, very light. And I just felt like I was. I suppose growing up, I suppose, I suppose, felt like it was not like the body type that I really... like being skinny and short and stuff. That wasn't really something that I thought I really admired or wanted to be."

"Growing up, I was always obviously shorter than average. And I hit puberty pretty late. So the first thing I noticed about my body was my height, and I guess then you start thinking about your height, and then the other parts of your body, and you start realising you're actually pretty skinny too, like at 14, other people were like pretty built, and I was pretty skinny."

[On exercise] "I feel like it was more that I found something to latch on to and that's something that gave me meaning. And, like, it's something that gave me some kind of metric for value. And I've, like, latched onto it, and I felt real sort of attached to it."

He also highlights growing up in an environment where access to different aspects of gym culture was easy. He mentions having access to the gym and being surrounded by steroids from a young age.

"So, from 14 to 16 years old, I was going to the gym, but it wasn't too crazy. And then from like 16 to 18, I was fully going crazy."

"One of my friends once was at his girlfriend's; we were eighteen. He was at his girlfriend's house, and his girlfriend was out of the house. Just his girlfriend's mom was there. He was like shooting steroids into his leg with a needle at 18. And he missed the vein and hit a nerve, and he, like his body, started spasming, and his girlfriend's mom had to, like, drag him down the stairs, bleeding all over the carpet and stuff."

Greg talks about how that early attachment to exercise and the gym still prevails despite his working on himself to gain a healthier approach. He still feels he needs the gym in order to feel a sense of happiness, to feel "amazing about himself."

"I think it got a bit mental during school. I mean, now I've got a much healthier relationship with exercise than I used to have. But It's still. So when I go on holiday, let's say I go on holiday for seven days, and I know that there's gonna be no gym, or when I went travelling for a year just before my masters, and I was going for months like not really exercising in the gym. And it really did bother me actually, like I was trying my best to try and, like, go for runs and stuff, but I couldn't really ever access a gym very much, and it really did bother me, actually. I actually had quite a negative time when I should have been having a really amazing time."

"I get uncomfortable if I miss one day. I normally go to the gym every day. If I miss one day, I have to go the next day."

[on compensating for missing days] "After I go, when I'm done, I feel great. I feel really happy. Often going there, I don't feel so good. But when you finish, you feel amazing, and that kind of reaffirms the worth of doing it for me."

Another aspect that still lingers for Greg from his early rugby days is the narrative of comparing himself negatively to other men depending on their appearance and what that says about them. He has already mentioned feeling that he lacks the masculine ideals of confidence and self-assurance and that he tries to seek that through the tangible metric of muscular definition. He, therefore, feels bad when he sees men in the world being athletic and fit because he feels that he has failed at his pursuit of fitness in comparison to them. He,

therefore, engages in socially avoidant behaviours such as not posing for pictures when he does not feel good about himself or avoiding social media so that he is not forced to compare himself to the men who post pictures of themselves up there. He is very critical of social media for perpetuating these competitive and comparative narratives that further damage his mental health

I think I definitely look at other people. If they're really, really athletic and they're fit, like outside of the gym, then. It would definitely exacerbate those feelings that have, like, the insecurities that I'll have if I'm not exercising."

"I'm so I feel like I wouldn't really want photos to be taken even though objectively I wasn't out of shape at all. Like, I just wasn't looking big, but I wasn't overweight or anything like that. So I wasn't looking bad, but I would feel uncomfortable being in photos ... I would be thinking in my mind, if there's a photo being taken, "Ohh, I'm not; I'm not in the best shape that I could be right now", and that makes me feel uncomfortable being in that photo."

"I think social media is one of the worst things ever for mental health. I actually don't use Instagram on purpose because I just know that it would really mess up my conception of how I look and stuff."

"I don't really use social media too much, like I literally just use it to message my friends, so I'm not really consuming lots of media of like really big guys and comparing myself to them."

Interestingly, Greg realises that other men can afford to be successfully masculine because they have all the other masculine attributes that he feels he lacks, such as confidence and self-assurance, without having to look big. He feels he personally needs the muscles to prove his manhood

"I just feel like I have this conception of a man being self-assured and confident. And like I see people that I really admire, and they're not necessarily muscular at all but they are confident and clear and assured in who they are as people. And I think that's something that I've never really had. And I think perhaps obviously If you believe you are a man, you're gonna want to live up to manhood. Like that's gonna be your expectation. And I think for me to get there, to be a man, I'm not very self-assured, very confident in myself. At all. I'm very deeply insecure about who I am and my competencies. So for me to get to, for me to get to there, for me to become a man, I think, or to feel like I'm there, I have to find other ways of doing that and like I'm pretty easy way or maybe not easy, but an accessible way of doing that is getting muscular."

Greg, therefore, describes his relationship with exercise as a two-fold one. On the one hand, he views exercise as an enjoyable, fun activity to take part in, and on the other hand, he views it as a stressful activity that he spends a lot of time worrying about failing at

"It's [exercise] kind of twofold. So, in one sense, it is something that I really actually enjoy. I know that it brings me lots of positive benefits, and it's something I look forward to. It's quite an intense part of the day, and it's a good way to push yourself, and it's. Umm, but yeah, it's also something like I get scared when I know that I can't do it, so it's. Yeah, if that makes sense."

Greg also talked about how he finds it hard to "delve deep" with his friends, commenting that the nature of most friendships is a shallow one and that any mention of deeper body image struggles with them would be quickly shut down by them and that has discouraged him from ever being open to them. Similarly, his relationship with his own family being emotionally distant has not helped him open up. He talks about having one-sided and very curt and disjointed conversations with his own father, again highlighting how that made it harder for him to open up emotionally to him.

"I think with my friends it [the conversation about body image issues] wouldn't really go far beyond "I feel small", and then my friends just say no, you're not, you're talking shit. I think I wouldn't really open up about my body to anyone beyond that... again, I think, in general, that there's always a very shallow limit for reflection and depth about personal mental struggles sometimes. Unless you really, really want to confront it. I think if you bring up these situations in public with your friends, normally people will acknowledge it, but they won't tend to dig too deep unless you're pushing for that yourself."

"With my dad my conversations would always be, umm, it always feels very, like, sort of very one way, very insincere. I wouldn't really feel like my dad really appreciated what I said or there wasn't really any two-way dialogue. It was often like I'd say something and then my dad would just give me a lecture on, like, liability and like being sensible. And I don't really feel like I was ever listened to by him."

His current partner, however, is the first person he has felt comfortable opening up to. He credits her with opening him up emotionally and challenging him to deal with all the uncomfortable notions about himself that he has been running away from. He says that it is due to her that he feels that he is worthy of love for the first time in his life. That has led him to believe that he is worthy of help and, therefore, book himself into therapy in order to tackle his own issues.

"My current girlfriend, though I've been having, I've like, she is the first person I've really deeply opened up to like totally ever in my life, right? So, I think before I was like 21, I probably cried like once or twice in my life. Umm. And I think I have been with her, since when I was 21 and I'm 24 now. I have cried like 10-15 times or something in like 3 years, which for me is a lot. And I'm not saying this is because she's making me sad. Like this is just because it's me fleshing out my emotions and confronting things that are pretty deeply sad and uncomfortable, and I think it's, yeah, she's definitely been a really big part of it for me dealing with a lot of these emotions, and being more comfortable in myself now. And that might be a pretty big determinant as to why I'm less obsessed, less obsessive with the gym. That is because I perhaps feel more deserving. She's like the first person I believe truly loves me, right? And I think it's; I guess that does good things for yourself belief and stuff like that."

"I've kind of like developed as a person a bit more, and I think maybe I've kind of developed better relationships, particularly with my girlfriend, I think, and perhaps I'm more believing that I'm deserving of love than I have ever been. And it's like maybe that; maybe I don't need to look as good in the gym anymore because I can find love elsewhere."

"I still feel like this emptiness, and I need to basically get some help. Because the things that would help, well, they're helping a little bit, but they're not solving the problem... I'm gonna

be getting therapy, actually. I gotta go to my first therapy session today at 4:00 PM, which should be interesting."

Finally, Greg talks about never engaging with steroids despite being surrounded by them. He says that he considered doing them and came very close to them, but he was dissuaded by his knowledge of his family's history of heart disease and knowing that steroids can induce heart problems as a side effect. It was that knowledge that kept him away. Inversely, he also talks about how he instead abused creatinine and other enhancing substances, such as protein powders, while he was a teenager to the point of causing himself erectile dysfunction as a side effect of taking too much creatinine.

[on rejection of doing steroids "That was at the time when a lot of my friends were doing steroids as well, and I was really considering doing that. I decided not to."

"It [steroids] was a massive consideration for me. I was very close to doing them... But I just could not rationalise the rewards compared to the risks."

"There's also a history of heart disease in my family, too, like on both sides of my family. So, like, my mum's dad died when she was 14 of a heart attack and stuff. And like on my dad's side, it has been the only cause of death for the whole line in the family, too. And I think because you change your hormones and change everything in such a wholly way with steroids. I just don't think that... I just... I wasn't... I mean, I was very close to doing them, but I've just always been very scared about my heart, I think."

"I was always just taking a lot of supplements. , So, like, I was taking lots of creatine. I was talking like, I don't know how much, but I'll say like 6 times the daily dose of creatine for ages. It gave me erectile dysfunction. I was doing a lot of supplements, like powder protein, mass gainers."

He describes a very hyper-awareness of steroids' reputation as a drug with serious consequences and how that played a part in him never wanting to engage with it.

"I think in my mind, steroids, I always perceive steroids to be far more total and far more like, I don't know, just comprehensive in every way, in terms of your mental state, your bodily functions, and there was a very complicated process like post cycle therapy (PCT) and stuff. It was like a serious leap. And I was also very aware that your body will never produce the same amount of, like, testosterone hormones that you would have done before the cycle."

Greg concludes his remarks about steroids by mentioning the fear he had of getting addicted to the outcome of using steroids. He did not want to develop a reliance on steroids to give him the satisfaction of having big muscles.

"The gym was a very big, deeply entrenched part of my life, and the steroids would become associated with that too; I think if I was to do them, I think it would have been very hard to stop. I think if I'd started to swell up and get big and gotten used to how big I was looking, I would have felt pretty great, at least temporarily, until the moment that I attempted to stop. I think that would really, really, really would have twisted me up, to be honest with you. I think I was very scared of that. I think the prospect of getting there and then losing it and then having to continually do it to keep it there and knowing that keeping it there is gonna be such a deep part of your psyche and part of your worth; I think that was very scary. I think I was

just pretty scared by that prospect. I think that I would've been opening up a lot of cans of worms in a way that perhaps recreational drinking or drug use wouldn't."

"I think that it [steroid use] would be so deeply associated with myself worth that I think it would affect my ability to control myself. I think I might lose that agency; I might lose that. That was pretty scary. For me, for sure, it was something I just didn't want to open up."

Harold

Harold started by recalling his early exposure to sports at school. He recalls an early association between displaying high fitness levels and receiving praise accordingly. He talks about starting to see the value of exercising in order to achieve that "effect."

"So, I think I'd always been active from a young age before I was able to have a conscious grasp on fitness and doing things. I was always, you know, a good runner. I was keen to play sports, and you know, I earned some kudos as a result of that when I was, you know, 12-13, and then probably around that age or just after that, I suddenly made a more conscious effort or more conscious recognition of exercise in terms of achieving a certain effect."

Harold recalls his involvement in team sports to have also brought about the element of comparison with other boys in the team who were more developed than he was physically due to them being older than he; he suddenly found himself actively looking at them in comparison to himself. Furthermore, he remembers playing against teams from other schools and being shocked by the level of physicality the players from those teams displayed. He talks about "boys playing against men". He expresses the frustration he had then because he could not compete with them and how that led him to exercise at the gym in order to improve his strength and fitness and gain more muscle. He even talks about how his coach recommended that he do so. This is how he recalls his introduction to the gym via his involvement in team sports as a teenager.

"I started off at a very small school. Umm. And we barely had a rugby team. But whatever rugby team we did have was in part due to us being very young and sort of fearless. And I was, you know, physical. And it was at an age where, aside from maybe the odd tall kid or something like that, there wasn't much physical difference. But once I got to my secondary school at 13-14, a much bigger school, I started to play rugby again there. Suddenly, I was playing with, uh, you know, a lot bigger people and also, you know, I was witnessing as a 13-year-old how the upper years played their games. And obviously the disparity in physicality between a 13-year-old and an 18-year-old was massive. There's a lot of growth that happens in that time, you know. They were giants... you know, it makes a big difference if you're 15, weighing 70 kilos, and you have another 15-year-old weighing 80-90 kilos at that age. There are quite big differences, and so, again, I was acutely aware of that, uh, you know, I had seen and felt it first-hand."

"Even though I was lifting and I was training that school every morning to build myself up, and I got to a point where I was like physically one of the bigger players on our team, that really wasn't saying anything because we were all very skinny, very thin. We would play other guys from other schools, and there was just a clear physical gap between us. And so I would go to my coach, and I'm like, "Well, look, I'm doing all of this, and I come to these games, and I'm playing men. Uh, what's going on?" So it was definitely through sport that I

became aware of the gap between myself and other people of my age who were physically far bigger, far stronger than me. That certainly exacerbated it."

"Again, going back to physicality, I joined to play rugby, and the coach there told us that we had to go away and do extra amounts of press-ups and sit-ups."

This need for comparison, and competitiveness drives Harold to this day, where he never feels satisfied with his results at the gym because there is always someone out there lifting heavier weights than he is, and therefore, he has to keep pushing to the next level in order to keep up. This frustration with not being competitive also stems from the feelings he harboured during his school years when he perceived himself to be less successful physically than his competitors

[On coping with other players being bigger than him] *"I guess. Umm, so initially, there was the frustration of not understanding why they were so much bigger because I was like, 'I'm the one who trains. I'm the one who does all these things, and I'm nowhere near,' and I'd ask my coach, I'd say to him, 'Look, I'm doing all this training, and you know, coming to these games and look at these guys, you know, they're making me look like a twig', and they would say 'Ohh, you know, well they eat more, or they do this or that' you know? And so even then, when I tried to do the same, I still wasn't getting to the stage they were at."*

Once you go into the gym, you start comparing yourself to other people at a young age. So I'm comparing myself as a 15-year-old to 20-something-year-old grown men who have been doing it, you know, for years and years, you know, becomes. The expectations are never going to be met."

[On competing with other gym goers] *"So, I'm like, you know, say I reached a milestone, for example, I go look at this other guy, you know, and I'm thinking 'Ohh shit. I finally reached that number, and that guy has already done that' And whereas I may have added, you know, 20 kilos onto a lift, he's added 40, you know. And I am like, 'Right, what is going on here then*

For Harold, exercise is about being better than others. His main aim is to be the best person in the gym environment and "beat" everyone else in that arena, and therefore project the kind of strength and confidence that comes with being the best.

"Exercise has always been a means for me to want to be better than others. You know, so there's that freedom of what I suppose is going to the gym, and being able to go into that environment and not be feeble and not be weak, but in fact to be, you know, confident and dominant in that space."

And this, in turn, affects his gym habits. He works out intensely and does not allow for rest days because he feels that to take a rest day is to allow yourself to fall a day behind where someone else out there is advancing. That is not acceptable for him

"Often, when you're having a rest day, someone else won't be. Then when I hear them talking about whatever they're doing, whatever they're training, I am like, 'shit, I should be doing something today?' Umm. And so there's definitely sort of that guilt mixed with a bit of

irritation that they're doing something. And I feel that I ought to be doing something as well. Umm, so yeah, that's probably the most, uh, prominent way that comes to mind."

And therefore, under these circumstances, Harold recalls being exposed to the gym at an early age. He recalls his first visit to the gym as a teenager and how he was confronted with the fact that people left their used steroid syringes and other hazardous in the changing room.

"I probably started doing things like press-ups and stuff in my room most days when I was 13-14. And then when I moved schools at the age of 14, well, more like when I was 15 because I wasn't allowed to go until I was like 14-15. I started going sort of infrequently. Just do it like the classic basic routine of 6-7 times a week. And, then, it probably became a well-structured, cohesive, and coherent sort of indoctrination into the gym when I was around 15-16."

"By the time I was like 16 I was probably training, you know, different body parts and training those five, six times a week. And that sort of continued as I got older."

"I mean, I remember the first time I went to the gym here at home back when I first went there; it was mostly bodybuilders and steroids sort of paradise. I remember the first time I went into the changing room, and there was a notice in there saying, "Dear customers, please do not leave any hazardous substances behind in the changing room". And I was like, "OK, so this is the sort of place I'm at"

Harold then details how, in those early days, he had very little knowledge, awareness and understanding of dieting and exercise. He states that he just wanted to get bigger arms because that is what he perceived to be the most prominent feature of men, and it took him a few years to understand that he had to work on other body parts as well.

"So, as I said, when I first got to the gym, and I was, you know, about 14 or so, all that mattered was having big arms. And so that was all I did. Umm. And then, you know, as I started not seeing the results I wanted to see, I started to try and find out more. And then, by the ages you know of 15-16, I learned that there was more to your body than just your arms. That I needed to train other parts of it, and then also as a part of that, I started to gain more of an appreciation for diet."

"When I started, I had no appreciation for dieting at all. I thought you just turned up to the gym. You did your bicep curls, and you became massive. That's all I thought it was, and it took a while for me to understand diet. And I think, as well, when I first got into it, when I was 15 and 16, or whatever, It was hard to find information, or at least I found it hard to find information online about dieting; you have to dig quite deep."

Similarly, Harold talks about how he could not find a reliable, knowledgeable source of information in his own parents, who often seemed to dismiss his concerns and attribute it to his growing and place the blame of his outbursts on the fact that he was using protein shakes and creatinine instead of tackling the body image anxieties that according to him fuelled his anger and anxiety when he was younger. So, in his opinion, there was a mutual lack of understanding and confusion between him and them. This has made Harold wary of opening up to them about his struggles because he feels that they would not understand it.

[on misplaced blame and judgement due to lack of understanding and awareness] *"And an interesting side note is that when I first started using protein and stuff and I was, you know, insecure about my body, and that would come out, you know, in sort of those negative emotions that we discussed earlier, you know, obviously probably mixed with those sorts of teenage school life stresses. It is funny that my parents would blame the supplements, as well as the protein and creatine. They'd say, "Oh, it's these things that are making you unhappy and making you depressed", you know? And I'd say, "Well, that's nonsense! That's not the case". And I don't think I recognized myself as having body dysmorphia at the time. I didn't even know what body dysmorphia was. So even though I was aware I was deeply unhappy with my body, that was all because I wasn't where I wanted to be, and I wasn't big, and I wasn't strong. That's where I thought it came from. I didn't know that body dysmorphia existed. I had no conception of it at all, you know."*

"I think some of the challenges that have come, you know, in the teenage years from, you know, not having an awareness of myself, or him [father] not having an awareness of my insecurities and the body dysmorphia and the preoccupation with my physicality. I think neither of us properly understood or recognized that. He'd say, "You're still growing. You're still growing", but obviously, that's a difficult thing to understand when you are in that process and you're training. As I said, I was unhappy, so it was not sufficient to say, "Oh, you're growing; you'll get there", while I needed to happen now."

"Like my parents are very wise, very caring that I would feel comfortable sharing a lot of things with them, but also at the same time, there are things that I feel they might not have the best grasp of."

Part of Harold's early exposure was to muscle-enhancing substances such as protein shakes, creatinine and steroids. He recalls convincing his parents that he needed protein shakes and creatinine and, therefore, obtaining those substances as a teenager to improve his musculature, and he says that he has continued to use these substances to this day. Steroids, on the other hand, are something he has never engaged in due to his military aspirations. He cannot use steroids if he is to be in the army, but he does talk about the very real possibility of him using steroids if the military aspirations were no longer on the table

"But you know, I suppose the first key thing was learning about protein shakes and creatine. And again, as a 15–16-year-old, I didn't really have any money. So I had to persuade my parents that this was something that I needed, that it was important to me. And it was quite difficult to do that persuasion, because they didn't understand it. It didn't register with them at all."

"So personally, for a long time, as I said, I've had protein and creatine. And then, when I was 17-18, I started using pre-workouts, and that's become a staple as well since. I also take amino acids. So, I have an amino acid blend, and I've been taking that since I was 17-18."

"I've never used steroids or anything else. Again, that's because I want to join the army and doing any of those things would make me unable to because I'd come up as positive in the drug test."

"I'm fairly certain that if I didn't have any military ambitions or plans when I was about 18-19, I probably would have started using steroids."

Harold also talks about how the steroid culture is still very present in the gym environment and that he is surrounded by it all the time

"But I'd have to say it's still something that is kept in some ways quite under wraps, like going back to this gym I am talking about, there's still a lot of usage there, but not a lot of the sort of admittance of it as well. Like, not many people will openly talk about it in that sort of environment. So yeah, I've definitely been aware of steroids. As I said, probably increasingly so at about 18."

And so, Harold talks about how, for him, being muscular and bigger translates to being better and more successful with both genders. He strives to achieve the "effect" that walking into a room and having that muscular presence gives one. That level of "invincibility" and protection from being "messed with". This lingers back to Harold's experiences as a new kid in the school and the isolation he felt from his fellow students, especially one who originally befriended him and then cut ties when he perceived that Harold was his competition. Harold then realized that being big enough would shield him from these situations.

"You know, to be successful, to be admired, and to be respected by both genders, I have to be big, strong, fit, capable."

"Being strong, being fit. When you are the bigger and the stronger person in the room, that does give you that sort of invincibility, you know, and people recognize that, and they aren't gonna mess with me because I am that much bigger than them."

"There's another boy in the school, in the same house as me. The houses were quite important. They were like your sort of school family. He was doing it as well, and you know, from the start, he'd been quite nice to me, and I was looking forward to, I felt like he was going to be the person to, you know, sort of be my friend and sort of introduce me to the wider year and for whatever reason, unbeknownst to this day, his nose got put out of joint. Apparently, it's because when we were told to do these press ups, or whatever, I said in a light-hearted, you know, sort of friendly competitive way, "I'm not gonna let you beat me at this" or something to that effect. And apparently that just sort of triggered him to take a dislike to me, and as a result, well, it wasn't serious bullying, but there was definitely an element of bullying, and an element of sort of toxicity, you know."

Harold states that for him then muscularity is an important part of his own self-worth. He talks about how he does not have much else going for him when he is not strong and physically capable. He believes that is how he is seen by others and that he, therefore, is tasked to maintain that image in order to keep himself seen as a respectable figure by others and, therefore, maintain his self worth

"It's [muscularity] a massive part of my own self-worth. As I said, when I got that injury in October, uh. I definitely became more aware of it. It really came to the forefront of my mind that if I don't maintain my strength and my physicality, then I've not really got anything else going for me here. This is how I am perceived by others, and I need to maintain it. When you go places for the first time your physical appearance makes such an initial impact, and it is also responsible for the initial shaping of people's opinions. It is important for me to maintain and keep that sort of "easy win" as well. Because yeah, It's always perceived as, yeah, the easy way of getting that instant sort of respect from others, and therefore the fuelling of my

own self-worth, and going, "Well, people respect me because of my physicality". And therefore, you know, I will lose this respect, and people won't treat me the same if I'm not the way that I've become increasingly accustomed to, if I'm no longer physically fit or strong or whatever."

To him, there is a sense of freedom that can be achieved through exercise. He is free within his own physical capabilities, which then allows him to deal with anything in life because he is confident in his own body

"There's freedom in the results, but the results are also driving the exercise. So I should be able to do more, you know. So, when I exercise, I gain confidence from, you know, being stronger and fitter than other people. But that's another sort of key thing."

"So when I was locked down, and all I had was time to do as much as I wanted, I could definitely, you know, exercise all I wanted, and there was this feeling of, you know, complete freedom that I could deal with any sort of task. Uh. And then that then relates back to confidence, you know. That's what exercise serves."

That is why he feels especially anxious, and he feels that his confidence is knocked down when he does not have access to the gym, for instance, during beach holidays when he feels the urge to cover his own body because he is not as strong as he wishes he could be, not having exercised.

"There's one time where on holiday, I had no access to the gym, and it was stressing me out, and it was becoming quite uncomfortable, and it was a like a beach holiday, and so that involved me having my shirt off at times, and I was really uncomfortable doing that, and I felt very insecure about it and that resulted in, you know, tensions rising there at that time."

Harold talks about how he feels that if he skips one single workout day, all of his muscle gains will disappear. He feels that he needs to go every day to maintain them.

[On linking missing workouts to immediate loss of gains] *"Massively. That's really it. Because again, as I said, you know, if I look at myself on the rest days, or when I've had to take time off, I don't like what I see, and that's because I'm not training. To avoid that, I will try to do something. I try to get some form of a pump or whatever so that I do not have to look at myself in that way."*

As mentioned before, Harold sets high standards for himself at the gym that he knows he will not meet. He talks about how, for him, muscularity is the main trademark of masculinity. For him to be a man, he has to look big. Interestingly, he does not project that belief onto other people. To him, other men do not have to be big in order to prove their masculinity, but he has to be. He recognizes this personal attitude as "traditional", and he admits that he must have inherited it from his own father

"I've always set high expectations for myself that are rarely ever met."

[On limiting his intense physical requirements to himself] *"I think it is an interesting thing with me and masculinity; I'm more on the traditional side of wanting muscle to feel*

masculine. I do believe in that personally for me, you know. And again, I don't wish to attribute these views on others or say that others need to conform to the same image."

"My dad is a far more peaceful, kind and loving person than I am. But at the same time, he has no tolerance for nonsense or people trying to take advantage. He was just being a protective father and didn't want people to be taking advantage of his son. He's sort of old-fashioned in that sense as well. He's from the generation where masculinity was more clearly defined, or what we would now consider in terms of maybe toxic masculinity; not that I'm saying he is toxic in that way, but his understanding of masculinity and being a man is more traditional, and that has probably shaped my own attitudes as well."

[On limiting his intense physical requirements to himself] *"And is not meant to make me look at someone else and go "He's not this, therefore he's not a man". But for me, you know, being fit and being strong, and being able to carry yourself in that sort of way is a key part of being a man."*

Harold also mentioned that being in the army environment further cemented these notions of masculinity in relation to physical strength

"And I also do the army reserves as well. While at university, I reserved at the Officer Training Corps, and again in that sort of environment, it's a macho environment, and that sort of physicality again. Uh is the important role in terms of self-identity and how I'm perceived by others."

Harold then talks about how protective he is of the gym as an environment in which he succeeds at standing out as a man and how he resents the fact that nowadays, most men do exercise. He feels that exercise is something only for those who are serious about it. He hates having to share that gym space with other men he deems to be subpar in their dedication to looking muscular because if everyone trained, then he would be less of a standout.

"This is, you know, probably an unpopular thing to say, but a part of me doesn't like it because then it makes me less of a standout. That means everyone's doing it, and suddenly, it's not as much of an important thing. So it becomes even more of a necessity to be better and to be above everyone else. Umm. Now, certainly, everyone is a "gym goer", and I'm like, Umm ", Well, I don't want to be perceived as just a gym goer". I've spent too much time with too much effort that you know it's important that I view myself and that others view me as a cut above the rest. So for instance, the first time I got something from Gymshark was a big deal because I felt I had to have earned this, you know, to wear a gym brand in the gym. I felt I had to have earned this, and now suddenly people would turn up to the gym wearing it, which, well done to the brand and everything."

"The exclusivity was a massively important part of it. The key attraction was the fact that it felt like something that not a lot of people were doing. Not a lot of people were willing to do, and as a result, you know, in terms of my identity and confidence, the fact that I was willing to sacrifice all this time and put an effort to achieve something was important, whereas if every you know Tom, Dick and Harry does it, then it sort of cheapens that value or rather you know I am, you know, incentivized to go even further to maintain that sort of leg up, so that I'm not just the average sort of gym goer. I'm someone who understands the gym. I understand the training. I understand intensity; I understand form. I understand all these

things. Umm, you know, I did not just buy a GymShark tracksuit and rocked up for my first session, having bought all of you know, my protein weight collection."

In fact, standing out is very important for Harold, and he talks about resorting to making disparaging compliments about himself in order to receive praise. He fishes for compliments so that he can feel that he has achieved success physically

"Another thing I haven't mentioned yet is the need to look for validation, whether by throwing offhand comments about myself or expressing dissatisfaction with my legs or arms and then hoping that someone might just go "No, man, you are looking good" or something like that. Or I might compliment someone else in the gym, hoping that they might reciprocate. I've never just sat down and said that I really struggle with my body image and things like that. I think I'm just hoping that people will be able to notice that it is something that I'm not satisfied with as opposed to me having to say it."

Harold recognizes that, again, this need for using physicality to gain approval stems from his young years at school, when being physically capable was an important factor in being accepted as a new kid. As someone who had felt isolated by the experience of moving schools, Harold was very sensitive to that fact.

"I was sort of shut off. I felt shut off from the wider networks. And other people there in my house who I was starting to get along with, I'd ask them to sort of help, you know, introduce me and meet people, but because they've already got those relationships and they were focused on different things, that did not happen

[On needing physicality to gain social approval among peers] *"Yeah, obviously, when you're young, physicality plays a big role in your sort of self-positioning within like the sort of social hierarchies elite, at least for me it was. And I think a lot of other teenage boys can attest to that, whether they care about whether they're big or not, they still recognize that it plays a role."*

This belief was further cemented through his first romantic relationship, where a lot of emphasis was placed on his physical attributes, and it became the centre of that attraction, leading to him linking his desirability to his muscular definition.

"So I had a long-term girlfriend when I was 16 to 19, and she certainly made me feel very desirable, and even though I know that her primary motivation wasn't because of my physicality, at the same time, she still would be very complementary, and she would certainly make me feel because of my muscularity that I was, you know, attractive."

"The big difference was just the way of affection being displayed in the relationship I'd grown up with for half of my teenage life; there was just a more explicit admiration for the physical side than in the current one. But because that relationship was over such a formative period of my life, half of my teenage years, that became something that was quite difficult for me to get to grips with entering into a new relationship."

Harold then talked about his attachment to exercise and his fear of injury, which led him to skip working out, and how that affected him. He highlights that for him, exercise is now a "habit" that he has to engage with daily and that the prospect of injury affects his ability to

enjoy his time socially with friends like he once was able to. Therefore, affecting his social life

[On exercise becoming a habit] *"That's become a habit, I suppose. Exercise is now just a part of my day, and it's an important one, and one that I sort of have to do."*

"I definitely took a more averse position on some things to avoid unnecessary injuries. I think that is one of my biggest fears in terms of dangerous situations or taking risks. I'm not so concerned about it, but it's hard to reconcile yourself with death anyway. But I'm not worried about, like, uh, coming out of something dead as I'm worried about getting a needless injury that would stop me from doing the things I want to do and being strong."

[On his fear of missing exercise affecting his quality time with friends] *"I never used to be scared of heights or jumping off things, and then in recent years, I don't know why. Suddenly, the prospect of jumping off high things has become like a lot more of a thought. I mean, I still still force myself to do it sometimes. The most prominent example is when I was in Croatia with a friend a couple of years ago. There was this bar and there was like this Cliff jump. When I was younger, yeah, it wouldn't have bothered me at all. I'd want to find the highest thing to jump off. Now I was thinking when I got to the jump, and I looked down, and I was like, "If I messed this up, I'm gonna break my legs." It definitely bothered me more than things like that ever bothered me before."*

He talked about recurring injuries due to his intense exercise habits forcing him to restrict himself at the gym, which would often also cause him to feel depressed and in a low state of mind, therefore necessitating mitigating his exercise habits and adapting them so that he is not out of the gym for too long even when it is not recommended for him to be back.

"The most recent injury I had was October last year, and it was quite probably one of the worst ones I'd had. I was not done in the gym, but that was immensely stressful because I knew that I was going to have to seriously restrict what I was doing.... and there was just this constant, umm, it was my primary focus all the time. I was pretty much, you know, moving my arm up and down like, "Well, is it feeling any better now?" That occupied a lot of my thoughts. I just wanted to get to a point where I could do what I wanted to do again."

"In hindsight now, obviously, I just needed to take more time, but I would go to the gym, and I would do resistance exercises. I'd do the physio ones first; then, I would probably try to push things beyond where I should have been with other exercises. The niggle of the injury continued for maybe another 3-4 months. I still would notice it, but maybe after two months I was training a bit more normally. I didn't take significant time off. Well, I didn't really take any time off."

Similar to restricting himself socially, Harold talks about how he became more and more inclined as he grew older to restrict his diet in order to maintain his muscular goals. He details a very specific diet catered to gaining muscles, and he talks about cutting out all of the other dietary substances that he deemed to be disadvantageous to his growth.

"When I left school, and I was off on the holidays, that's when I heard about the magic chicken and rice and broccoli or whatever and that's become my lunch. Ever since, I will have that every single day."

"I used to have a massive sweet tooth, and I still do. I used to eat a lot of sugar at school. Once I left school, I started work, and I pretty much immediately cut out all the sugar. I sort of maintain that discipline. So, Christmas, where I'd used to destroy the family share boxes of chocolate. I now would, you know, have fewer of them."

"When I go to restaurants, I typically will pick the meal that will give me the most sort of protein and carbs or whatever, and I would avoid any sort of issues with that, and I will rarely ever get a dessert."

"I was like, I'm looking a bit fat. And so, I would cut out any sort of indulgences in terms of carbs, or you know, if I was having like a couple of sweet things here and there, I've cut those out now."

Similar to his disciplined dietary plan, Harold has a strict exercise routine. He talked about the value of exerting control over his workouts because so much is "out of our control", and so he enjoys being able to control all aspects of his exercise

"It [control] is an important part of I because there's so much out of our control, you know. I probably haven't consciously recognized that so much of it is the element of control, but It definitely plays a role. I suppose I enjoy having that thing that I set aside time for and then make an effort to produce an effect. And I know the things that go into helping achieve this effect, and they are things I can control."

Harold also talks about how, for him, the gym is not a place to socialize. He is there to achieve his results and not to make friends. His over-socialization is distracting from his goals.

"I'm not one of these happy, chirpy sorts of powerlifters who go into the gym to do, you know, one rep and rest for five minutes and spend, you know, twenty minutes speaking to everyone in there about their knee sleeves and singlets and stuff. I'm there with a purpose and for a goal."

i.t's a good time to see and speak with someone, but at the same time, that might have a negative impact on the session because we spend too much time talking, and so when I leave, I'm like, "OK, it was nice to see such and such, but that negatively impacted my session."

Finally, Harold talks about his attachment to media. He mentions how social media is a vehicle through which he continues to compare himself to a "rarefied" image of masculinity as seen mainly through muscularity and how the media, in general, is a place where certain ideas of masculinity get popularised

"I think we all, to a certain extent, compare ourselves to others. Uh, I mean, I think parts of it, I've always attributed to social media, or, you know, the media in general. There are always these glorified and rarefied images of, or conceptions of masculinity and the masculine body with which to sort of aspire to, and, you know, that sort of comparison."

[on the depiction of manhood in media] *"I suppose, I think that when you're younger, whenever you see a strong man on TV, or, you know, the cartoony depictions of strength, it is the flexed biceps. And so that was probably like my initial thing."*

He mentions how social media specifically uses algorithms to propagate the attachment to hypermuscularity by inundating the feed with images of men that are meant to idealize one body type as the peak of masculinity. However, he also talks about how most of these advertised images are "fake" and hide the reality that most of these men are using steroids or even lighting and camera work to exaggerate their features and create a false image. But the effect of it is that normal people then internalize those ideals as personal goals

"I think part of it again is social media. I think you know the media in general, but I think social media, especially because it's easily accessible, and it's so pervasive in the way in which algorithms propagate certain images, meaning that you're so inundated. And you become, you know, there is this epistemic bubble of, you know, if you get into the gym, you're suddenly going to be flooded with, you know, all the top bodybuilders, people who have, you know, crazy physiques. And that, in turn, also encourages the posters or creators of these images to, you know, either lie about steroid usage or use lighting and camera angles to, you know, present this sort of illusory version, which is, you know, removed from reality. And because we have social media in our pockets all the time, it sort of becomes a part of our life."

Harold also talks about the distinction he makes between social media influencers who post honest content worth following and gaining inspiration from and others who are posting falsehoods that need to be challenged and dismissed

"There are still some images I see that I don't perceive as falsehoods, and I do see, you know, a very good physique or something like that. I don't see them as illusory, and I see them as true. And so it still has that sort of effect. Umm, you know, most of the things I've followed when it comes to fitness on Instagram, I've moved away from. The gym shark athletes, the David Laid's and whoever else who do the very sort of stylized, dark shadows, camera angle images, and I instead follow this group of, well, basically the network of British bodybuilders predominantly, who don't do any of the clear visual illusions, and they're much more focused on sort of results and training. But they still have crazy physiques, and there is no hiding behind that and, you know, I've seen some of them in person as well. So, in that way, it still has that effect, you know. Because I've been following them for a couple of years now, and I've seen their stuff, you know, go just upwards and upwards and upwards, making continuous progress, whereas mine has been far more sort of, uh, a case of attrition and much slower."

He then highlights that those "true" depictions of the journey towards muscularity still exert an effect on him; where he feels that he wants to achieve that same result because he believes it to be inspirational in his journey towards continuous muscular progress

Analysis and Discussion

Early Life influences and low self-esteem

The first chapter of the story starts at home. Parental influence and presence in the life of their sons prove to be instrumental in shaping their relationship with themselves, their levels of self-satisfaction and degrees of self-judgment (Pérez-Fuentes *et al.*, 2019; Krauss, Orth and Robins, 2020; Brueckmann *et al.*, 2023). Children rely on their parents to gain a sense of themselves in the world and understand their value in it (Krauss, Orth and Robins, 2020). In a sense, the parents form the first standards by which their children judge themselves. In this study, there

was a universal perception of emotional neglect and abandonment by the parents. This ranged from physical abandonment to emotional neglect, withdrawal of affection in response to a perceived lack of academic success, and extensive judgment based on physical appearance. Cold homes with no sense of emotional warmth and transparency were described by the majority of the participants, with broken communication marking their relationship with their parents, which in turn intensified the perceived sense of rejection the participants felt from them. There was also a focus on the absentee father in the participants' narratives. Studies show that the absence of the father in a son's life has effects that extend to adulthood, affecting their mental health as adults and increasing the propensity to engage in risky and impulsive behaviour (McLanahan, Tach and Schneider, 2013). There seems to be a clear internalisation on the part of the participants of the perceived parental rejection. Chris, Fernando and Greg all highlighted feeling "not good enough" because of the way they were made to feel about themselves by their parents, while Aaron specifies holding himself responsible for his father leaving him at a young age because he was not good enough. Greg mentions engaging in thrill-seeking behaviour as a way to make himself worthy of being around because he has to make things "exciting" for his company to be worthy of his friends' time.

Bullying and peer pressure in childhood lead to the development of low self-esteem and subsequently increase the likelihood of developing symptomatic body dysmorphic disorder (Webb *et al.*, 2015), and it also leads to developing muscle dysmorphia later in life due to the internalised feeling of rejection (Boyda and Shevlin, 2011, Wolke and Sapouna, 2008). Bullying was a prominent factor in the early experiences of many of the participants, and it was mainly focused on their appearance. Ethan recalled being targeted for being perceived to be overweight and for having red hair; meanwhile, Aaron was targeted for the shape of his ears, and Fernando was targeted for his weight. Similar to the effect of parental pressure, there seems to be a sense of internalisation of what the participants thought of at school. Ethan and Benji both directly link the bullying to developing a belief of not being good enough. Alternatively, some of the participants reported feeling isolated from their peers at school. Chris describes himself as being shy and invisible and often forgotten about by his peers, and Harold felt isolated by virtue of being the new student at the school and having to walk into already established dynamics between the other pupils. Whether due to active bullying or passive indifference, the majority of the participants have experienced a sense of removal from their peers at school, which in turn affected their perception of self and their self-esteem. It is not a shock that physical fitness levels influence adolescents' placement in the social pyramid at

educational institutions (Joffer *et al.*, no date). The participants seemed to have learned quickly that physical fitness was important in not only avoiding being targeted but also in establishing their place in the upper echelons of the school's social hierarchy. This was one of the earlier links between physical prowess and success and being an overall success as an individual. Many of the participants' ticket to social acceptance was through excelling at competitive sports at school and, therefore, establishing themselves as above-average students.

This low sense of self and the need to seek out "physical fitness" to attain validation echoes the findings in the research done by Martensnyn, Maguire and Griffiths. They reported that their participant, too, had a low sense of self-esteem prior to developing MD and that they sought out building muscular physique to find a purpose and also to attain praise and acceptance from their peers, and become more desirable and sought after by partners (Martensnyn et al. 2022). Many of the participants in this study match this sentiment. Aarons and Chris both detailed how getting approval from the men they look up to at the gym is what makes the training worth it. At the same time, Benji, Chris, Aaron, and Fernando all talked about how important their experience of physical fitness has been in order to be socially successful and attract sexual mates. Moreover, in a 2009 case study included in the literature review (Mosely, 2009), the participant identified feeling the pressure of having to measure up to his buffer friends at school in order to feel a sense of success in an experience marked by seeking external validation that aligns with that of our participants.

However, paradoxically, it seems that the participants in both the Martensnyn, Maguire and Griffith project and our project were uncomfortable with being recognised for their muscularity. According to Masterstyn et al., many of their participants participated in body protection measures and found it difficult to internalise any received praise, theorising that said praise came from a place of pity, therefore signalling a core low self-esteem. Similarly, our participants also struggled with taking praise for their appearance. Chris talked about struggling to run marathons shirtless after having his friends comment on his body appearance and how muscular it was; Aaron struggled with receiving compliments from girls regarding the way he looked and, in fact, cited that the only reason his current relationship worked is because his partner did not see his body when they first met because he wore baggy clothes on purpose. This sentiment was also echoed in several of the case studies reviewed in this thesis. Participants in two of the studies reported engaging in body avoidance measures and being

uncomfortable parading their bodies for attention (Murray and Griffiths 2015; Murray et al. 2012).

Interestingly, it seems that there is a level of recognition among the participants of the Martenstyn study that their low self-esteem, strict dieting, exercise and reliance on external validation may be linked to deeper, core psychological reasons (Martenstyn et al., 2022). In our study, we posit that this core low self-esteem may, in fact, be related to the initial rejection felt at home by the parents and at school by the peers. Our participants were able to link those experiences to a feeling of not being good enough and a lingering low sense of self, which led them to seek muscularity as a measure to give them value and purpose.

This link between early childhood experiences and the development of self-esteem appears to be a universal pattern. A 2015 study showed that family bonding during childhood was directly linked to increased self-esteem among adults in Baghdad City (AlShawi and Lafta, 2014). Inversely, a study based in Turkey showcased that positive childhood experiences, such as being in a positive interactive environment with parents and growing up in a safe environment, foster a sense of psychological resilience directly through positive self-esteem (Kocatürk and Çiçek, 2023). A longitudinal study looking at sibling experiences in childhood and the link to their sense of self as adults found that negative experiences resulted in a low sense of self-competence among the participants independent of their own temperaments (Beardsall and Dunn, 1992). These studies and others like them back our participants' inkling to link their own dysfunctional family dynamics and experiences of peer pressure to their chronic sense of low self-esteem and the desire for muscularity and leanness to gain a sense of self-worth and gain a sense of safety from perceived threats, with Aaron and Harold, Fernando and Ethan all indicating that being big enough would mean that no one will ever dare hurt them again.

Therefore, if we take it then that our participants suffer from low self-esteem, that has been caused by their early experiences and has subsequently led them to physical exercise and dieting as a way to exert a sense of purpose and worth into their lives by living up to highly regimented routines and gaining confidence via receiving compliments from their peers regarding the results of their efforts. Why do these individuals never seem to be satisfied? There seems to me a notion of a "moveable goal post" where no matter what they achieve, there is always room for betterment. There never seems to be the ability to celebrate one's results

without immediately highlighting all the areas that could become better. This chronic sense of dissatisfaction is common among our participants and several of the literature reviewed in this thesis (Martenstyn et al., 2022; Murray and Griffith, 2015; Mosely, 2009; Murray et al., 2012).

To tackle this question, we first look at the work of American psychologist Jeffery E. Young, as highlighted in his 2003 book "Schema Therapy: A Practitioner's Guide" (Young, Klosko and Weishaar, 2003). Schema therapy was introduced by Young in 1990 (Edwards and Arntz, 2012). It is a multidisciplinary approach to psychotherapy that combines elements of cognitive behavioural therapy (CBT), attachment theory, psychoanalysis, and Gestalt therapy (Edwards and Arntz, 2012). It centres around the concept of each individual having deeply ingrained patterns of thinking that are affecting the way they behave as adults, with these patterns being often the result of negative experiences from their childhood, and they are known as schemas or early maladaptive schemas (EMS) (Young, Kolsko and Weishaar, 2003). One of these schemas, as highlighted in Young's work, is the "approval seeking" schema in which the adult is often preoccupied with getting external validation and approval due to early parental emotional neglect, parental conditional love, social comparisons to peers by parents, and peer pressure and bullying (Richard Brouillette, 2023). The person affected, in this case, internalises the need for external validation and develops a need to become a people pleaser, a perfectionist with a harsh reaction to perceived rejection, and one of the areas of focus is indeed physical appearance (Young, Kolsko and Arntz, 2003). This approval provides the individual with temporary relief but does not address the deeper psychological feelings of unworthiness rooted in their early childhood, and it is by its nature unstable because a person may complement one day and not the next and therefore, their own stock may rise and plummet accordingly creating a sense of tension, anxiety and depression (Young, Kolsko and Arntz, 2003). Young's work goes a long way in describing the patterns of behaviour of the participants of this study, with many of them, as mentioned above, stressing the levels of emotional and physical neglect they perceived from their families from a young age and how that, in turn, has led to chronic negative feelings about themselves, and how getting into the gym then has become a route by which they have decided to fulfil their need for external validation and approval. Looking deeper into it, several of the participants in this study exhibit some of the coping styles (schema modes) highlighted by Young et al. that usually come into play when their schema is activated. Individuals often can switch between these modes whenever triggered. All of the participants expressed a sense of internalising the criticisms of their childhood and setting impossible standards for themselves in order to prove to themselves that they are not as bad as they have

become accustomed to thinking, and they also struggle with feeling worthy of love. Benji specifically talked a lot about how he related worthiness and love to look physically fit and that he did not believe he was worthy unless he looked a "certain way" (muscular and lean). This is an example of the punitive parent mode, which is characterised by self-criticism and feeling unworthy, often as a reaction to being harshly criticised as a child and being held to impossible standards (Young, Kolsko and Arntz, 2003). Ethan described feeling angry and frustrated at people and partners when they fail to understand that his gym is very important to him and that, to him, that is the kiss of death in any relationship. This temper could be seen as a manifestation of the 'angry child mode' highlighted by lashing out in response to being emotionally abused, ignored and invalidated (Young, Kolsko and Arntz, 2003). Ethan describes a troubled and neglectful relationship with his father, towards whom he holds a lot of resentment due to feeling abandoned by him as a child. Greg, who by his own definition grew up in a house, describes a sense of emotional numbness and lack of ability to excite himself about things in life, which leads him to adopt extreme hobbies in order to "feel alive". This is a presentation of the 'detached protector' mode, where the individual avoids feelings of pain by evoking a state of emotional numbness, usually due to experiences of emotional neglect in childhood (Young, Kolsko and Arntz, 2003). Interestingly, Greg also mentioned that his current romantic relationship has been a positive influence on him seeking help and trying to get better, indicating that he feels safe within the confines of this relationship so as not to trigger any detached coping mechanisms.

Greg's positive response to his partner's influence in his life, with him mentioning that her loving him has for the first time made him feel worthy of love, a sentiment echoed by several other participants, namely Aaron, Benji, Daniel and Chris. It is worth investigating the value of adult romantic relationships as close bonds of trust against the backdrop of these individuals' behavioural patterns (schemas) as set by their early childhood experiences.

Trust and its lack are important concepts for our participants to tackle. Aaron, Harold and Ethan all shared a sentiment of wanting muscle to protect themselves from being harmed by others around them. This showcases a general sense of mistrust in others' intentions towards them. For them, this stems largely from a past of bullying at school and an emotionally unsafe childhood. Moreover, Aaron and Benji both express mistrust in medical figures and other figures of authority. Benji particularly talked about how, at school, none of the teachers was able to understand his particular feelings about his body or his learning difficulties, and this

extended to medical professionals, who he deems as dismissive of him to the point of him refusing to see them anymore due to a lack of trust in them. Fernando, Chris, Daniel, and Harold all expressed a limited ability to trust in friendships in their lives and a fear of opening up to people because they believe that they will be judged or misunderstood. Fernando particularly described most friendships as "surface-level fun times" and said that very few friendships are "true" to the point of being able to gain his trust and get him to open up. Finally, Greg also displayed a general sense of mistrust in the world and his place in it.

To understand the participants' mistrustful nature, we turn to the work of British psychoanalyst John Bowlby, who, in his 1958 paper "The Nature of a Child's tie to his mother", first coined the term "attachment theory" (Bowlby, 1958). He then went on to further establish the tenets of his theory in his 1969 book "Attachment and Loss" (Bowlby, 2003). Attachment theory, as defined by Bowlby, revolves around the importance of early relationships with caregivers in influencing how the individual forms relationships, handles stress and connects to the world (Bowlby, 1969). The work of attachment theory has evolved and been revisited by several other researchers, such as Mary Ainsworth, who introduced the different attachment styles in her "Strange Situation Experiment", where she observed how infants reacted to their parents leaving and re-entering the room (Ainsworth *et al.*, 1978). Based on her results, she identified three attachment styles: secure attachment, anxious/ambivalent (anxious/preoccupied), and avoidant (Ainsworth *et al.*, 1978). Thirteen years later, in 1991, Kim Bartholomew and Larry M. Horowitz investigated attachment theory and added a fourth attachment style, which they called the fearful-avoidant style (Bartholomew and Horowitz, 1991). According to the theory, these four attachment styles reflect the behavioural manifestations of individuals in response to their early experiences with their primary caregivers in infancy. Table 11 summarises each style and how it manifests itself in adulthood. Few studies have looked into the role of attachment theory in the development of muscle dysmorphia. However, a 2018 study in Italy looking at the correlation between certain attachment styles and the risk of developing MD found that individuals who exhibited the avoidant/dismissive style were more likely to develop MD (Fabris *et al.*, 2018). Moreover, a recent study looking at attachment styles in relation to BDD identified attachment anxiety (anxious/preoccupied) as directly linked to the degree and severity of BDD manifestations (Fassnacht, Ali and Kyrios, 2023). However, it is worth noting that there is a degree of apprehension regarding using attachment theory to reduce psychological conditions into simple typologies, therefore limiting the understanding of them and neglecting how the severity of the condition will largely dictate the level to which these

behaviours manifest themselves, and therefore risking not catching individuals who are not as severely impacted by these conditions (Bonev and Matanova, 2021). This is why qualitative research is important: it highlights the intricacies and details that define every individual narrative beyond the generalised labels attached to each condition. It blurs the predefined boundaries of these conditions to help gain a more comprehensive understanding of the human condition.

It is worth noting that the characteristics of both avoidant/dismissive and anxious/preoccupied attachment styles were evident among the participants. To begin with, all of the participants were detailed and detached from inconsistent parenting styles from their caregivers, and that seemed to be a universal fact amongst them. Moreover, all of them also expressed struggles in opening up emotionally to others due to a fear of being judged and a fear of lack of understanding. Additionally, the participants indicated a choice not to open up to their loved ones about their struggles. This ranged from a need to maintain an appearance of strength to the fear of being misunderstood and a lack of trust in their loved ones to be able to understand them. Interestingly, many of the participants, namely Aaron, Greg, Benji, Daniel, and Chris, all indicated that unlike with their families and most of their friends, it was their romantic partners with whom they were comfortable sharing and for whom they were comfortable changing some of their habits. Both Daniel and Aaron indicate that their need to put their partners first eased some of their preoccupation with their bodies; Chris and Benji both talked about being able to open up to their partners about their struggles. However, there existed a sense of co-dependency in their statements. Daniel stressed how his partner's approval is more important than everything; Aaron mentioned that his partner's happiness is very important to him and how he dreads disappointing her. Chris mentioned how previous rejections sent him into an emotional spiral because of an intense fear of rejection, and Benji highlighted how he could only "keep going" because of his partner and how she changed his mind about women due to his painful past of being rejected. This doubling act of craving intimacy and fearing rejection was present in all of the participants. Fernando went to great lengths talking about how much he desired intimacy but how he hates modern-day dating that allows people to be rejected on the spot with a swipe. The conflicting display is one of the markers of an anxious/preoccupied attachment. Alternatively, Ethan and Harold appear to be more detached and unwilling to let anyone into the sanctum of their exercise habits. They exhibit more of the avoidant / Dismissive attachment style. Ethan stressed how any criticism of his body and exercise habits is grounds for immediate dismissal from his life.

Table 12 – Attachment styles and their manifestations.

Attachment Style	Early Parenting Style	Adulthood manifestations
Secure	Consistent, responsive caregiving. Needs reliably met.	Emotionally available, independent, trusting, communicate their feelings clearly
Anxious / Preoccupied	Inconsistent caregiving oscillates between being present and absent	Craves intimacy and fosters co-dependent relationships where they need constant reassurance from partners
Avoidant / Dismissive	Absent caregiving, detached parental style	Very muted emotionally, does not want to be intimate with others, and may appear cold and detached
Fearful / Avoidant (Disorganised)	Inconsistent caregiving oscillating between loving and neglectful	Conflicted between wanting intimacy and craving approval from others and yet fearing closeness due to a mistrustful nature and fear of getting hurt,

Table 12 summarises attachment styles as defined by Mary Ainsworth, Kim Bartholomew and Larry M. Horowitz.

On the other hand, there is the example of Greg, who described in detail how his relationship has been paramount in untangling his emotional knots. He describes becoming more comfortable with showing vulnerability and feeling for the first time that maybe he was worth helping after all, and all of that led to him booking his first therapy session on the afternoon of his interview. His narrative was the one where his relationship had led him to take tangible steps to improve his situation instead of just scheduling his gym earlier in the day to accommodate his partner's schedule, which was similar to Aaron and Daniel's. Greg said that because of his partner, he is able to believe that he is worthy of love. This sentiment was echoed by Aaron and Benji. Here, it is important to highlight Murray and Griffith's 2012 muscle dysmorphia case study mentioned in the literature review (pp 32) (Murray and Griffiths, 2015). In it, the participant indicated that his symptoms were directly linked to experiencing bullying at his all-boys school and were made worse by being isolated from his family. The treatment suggested for this case heavily involved the participant's family members, who were tasked to educate themselves regarding his condition, help monitor his progress and be active participants in his wellness journey. This led to a marked improvement in his health. Similarly, for our participants, a lot of their troubles stem from their inability to cultivate an emotionally open dialogue with their loved ones, partially stemming from their families' general lack of awareness. Aaron recalls a

very telling reality where his sister's bulimia nervosa overshadowed his own struggles with muscle dysmorphia, his parents being very aware of her condition due to its place in the general consciousness and the public discourse, and so by comparison, his struggles went on undetected. Similarly, Fernando states that his mom knew what eating disorders were but had no idea about muscle dysmorphia. Describing her focus to be only on "skinny problems". This has resulted in the participant's inability to fully trust their family members to understand their struggles. Some of that might be due to their attachment styles. Lack of trust in others is common among people with insecure attachment styles (Ainsworth *et al.*, 1978). However, if we take the example of Greg and see how being able to open up emotionally has helped him make positive steps towards healing himself, and if we look at the case study from 2015, it becomes apparent how important it is to involve families and loved ones in the participants' healing journey. Not only to cultivate a sense of trust but also to heal lifelong wounds that have governed a lot of these individuals' troubles in adulthood. It is our opinion; therefore, that screening tools for MD should pay much more attention to the familial and early academic years history, given how vital they are in establishing the patterns of behaviour among the participants and how ingrained they are in setting up fertile ground for MD to take roots.

Precipitating Factors

Sports and Gyms

According to cognitive, physical and psychological development, a child is indicated to have to be at least 6 years old before being enrolled in competitive sports (Merkel, 2013). It is a part of the collective cultural awareness that children should be active from a young age to encourage better health, beneficial occupation of time, and be taught discipline and responsibility (Guiney and Machado, 2013). Though it is often recommended that the children be taught the value of participation, it is more often than not that parents push their kids to be competitive, instilling in them the importance of winning. (Maffulli, 2000). The participants in this study engaged in sports at school as a means by which to avoid active targeting and achieve a better placement in the social hierarchy. However, for most of the participant, being active and competitive is also an element that was encouraged by their parents. Ethan recalls his mother's sentiment that being on the field or in the gym was a much better use of his time than potentially ending up with the "wrong crowd" and engaging in perceived harmful and destructive activities. This attitude reflects the notion that engaging your kids in sports has an ultimate protective effect on their lives and will

help steer them away from dangerous activities. Of course, there is truth to that sentiment that is backed by research. Suffice it to say that being involved in sports does introduce certain priorities and incentives to stay clean and healthy to be able to perform on the field in a satisfactory manner, which in turn leads to decreased levels of obesity among children and improved physical and social and mental health (Merkel, 2013). Therefore, we find several anecdotes among our participants of being involved in sporting activities from a young age, often encouraged by their families. Aaron's entire family played sports from a young age; Harold was involved in running and rugby, Daniel boxed from an early age, and Greg played hockey. Heavy involvement in sports was echoed by the case studies conducted by Murray and Griffith in 2015 and Mosely in 2009, where the participants engaged in rugby and boxing, respectively and in both cases, attempting excellence in these sports played a major part in shaping their body image (Murray and Griffith, 2015; Mosely 2009). Similarly, Harold mentioned being asked by his coach to hit the gym and build muscle in order to be able to compete in hockey, and Daniel had to put muscle on when he was involved in boxing, while Aaron feels caught between trying to build a body fit for weightlifting while also agile enough to play sports. This fits with research that shows that involvement in lean sports (all sports that rely on a specific muscular composition in order to perform them) increases the odds of developing body image issues in male athletes in comparison to being involved in non-lean sports (Li *et al.*, 2024). Athletes involved in training in order to achieve a certain muscular weight goal in order to compete could be, therefore, at an increased risk of developing muscle dysmorphia symptoms (Skemp *et al.*, 2013). Moreover, participants highlighted the development of an early sense of rejection of being skinny and smaller than their peers due to the failure to be able to compare and compete with them. Early in their lives, one can see that they are already being placed in positions of direct competition and comparison by being involved in competitive sports, and what compounds this issue is that most of the participants started playing sports at school around the ages of 12-14 and they were surrounded by older boys aged 16-17. There is a stark difference in development and physiology that becomes apparent between these two age groups. This was not lost on the participants; Harold and Greg both mentioned – with the benefit of hindsight – that it was possibly damaging to them to have to be directly compared with older boys who are further down the line in their physiological development.

Due to their involvement in sports at a young age, many of the participants found themselves at the gym as adolescents in school (Harold, Greg). Others found the gym at a young age through youth memberships (Aaron, Daniel). And others were encouraged by the media to get involved in weight training at (Ethan). However, is it ultimately safe to introduce impressionable underage boys to the gym environment? What are the risks associated with such a young exposure? Harold shared a story that highlights one of the big dangers of being introduced to the gym at an early age. He recounts going to his first gym as a teenager and finding used anabolic steroid needles in the changing room. This was him commenting about the ease of access to anabolic substances in gym environments. This sentiment was echoed by Aaron, Benji, Ethan, Chris and Greg. After all, Anabolic androgenic steroid usage has been described as a “hidden pandemic”, and its usage has spread beyond specialised athletes to regular gym goers and mostly young men who are in search of gaining muscular definition (de Ronde and Smit, 2020). It goes without saying that we restrict underaged exposure to environments that might introduce them to potentially harmful consequences. You have to be of age to drive or to order alcohol at a pub, yet the gym, with all of what it can expose these young boys to, remains a place that is freely open to them, and moreover, it is a place they are encouraged to frequent. Aaron and Daniel both won memberships as teenagers to become gym members. It might seem drastic to require restricted entry to the gym for teenagers under the ages of 18-21. Exercise, after all, is an important element of life, and young men should be encouraged to partake in it, but maybe there should be more supervision, and more regulations introduced for fitness centres to abide by. It is obvious from the participant’s experience and the literature that steroid use is widespread and unregulated. This is not a safe environment to send young, impressionable men to. Greg mentioned how he, in his capacity as an influencer among his friends, made sure that they all were on a strict and aggressive gym and diet regimen that manifested itself in outrageous displays of comradery from shouting at each other to encourage each other to take their shirts off to compare muscles. This led the school to close the gym and ban them from entering it. Of course, up until then, the gym school was not a supervised area, and those young boys were left to engage in these cult-like practices freely. This is a controversial opinion, especially in the presence of a push on the governmental level to battle what has been deemed as the “inactivity crisis” in the UK (*BBC News*, 2023). According to the 2023 BBC article, the Department of Culture, Media and Sports has vowed to start an initiative to induce one million adults and two million children to be more active by the year 2030 (*BBC News*, 2023). We exist in a cultural moment where

physical exercise's importance and positive benefits seem to be at the forefront of everyone's mind. A review conducted in 2021 by Pierce, Hornsby and Stone highlighted how supervised weight training for young teenagers can mediate the risk of injury while providing great physiological and psychological benefits by increasing self-esteem (Pierce, Hornsby and Stone, 2021). However, this discourse fails to take into consideration the angle of the young individual's self-esteem, which is, therefore, completely dependent on the gym. Their focus on supervision seems to be limited to supervising the functional aspects of training and not the psychological aspects, which are viewed as a by-product of well-planned functional training with minimal risk of physical injury. In other words, this discourse completely ignores the psychological and social consequences of weight training at an early age. An article published in the Guardian (Williams, 2020) retells the story of Charlie, a 13-year-old boy who, over the COVID-19 pandemic lockdown, developed a fixation for muscularity and transformed himself from a Nutella-loving teen to highly motivated, healthy dieting, exerciser (Williams, 2020). The article highlights a trending phenomenon of having adolescents with a high degree of muscularity. Exposure to social media and the social capital gained by improving one's appearance are highlighted as reasons for this push. This is echoed by Benji, Fernando, Aaron, Daniel and Chris, who all associated having a good physique with having more social influence, especially on the opposite sex and therefore identified this desire as part of why they sought after physical fitness. This increasing attitude towards muscularity among children, coupled with the increased levels of steroid abuse among adolescents in association with resistance training (Bahrke, Yesalis and Brower, 1998; Hoseini and Hoseini, 2024), signals warning signs when it comes to early involvement at the gym. Charlie's mom states that she lives in fear of having her child engage in steroids and other enhancing drugs, and she points out the irony of having his dedication to fitness be as worrying as if he was struggling with obesity (Williams, 2020). Therefore, it is important to negotiate the relationship our children have with fitness centres and resistance exercise.

Interestingly, when it comes to steroids, muscle dysmorphia is characterised by steroid use in order to gain muscle. However, the majority of the participants seemed reluctant to use steroids. This aligns with the findings of Martesntyn et al., who also reported that their participants generally (all but one) avoided using steroids due to a sense of awareness and a level of education about the adverse effects of misusing the substance; however, they all suggested that they would potentially succumb and consider using steroids in the future

(Martenstyn, Maguire and Griffiths, 2022). This attitude is highly reflected among our participants. Harold, Greg, Daniel, Chris, Fernando and Benji all indicated that they had never used steroids because they were aware of the damage it caused. However, Harold, Greg and Daniel all indicated that they could have and potentially would use steroids if their circumstances change. Interestingly, involvement in sports also seemed to be a protective factor against steroid use for them. Chris indicated that he wanted to stay natural for gymnastics, Harold had rugby and the army stopping him from engaging, Daniel had his long-distance running, and Aaron, who is the only participant who admitted engaging in steroid use, stated that he mitigates the usage in order not to affect him playing football. This indicates possibly a protective factor for sports engagement in battling the urge to use steroids. The morality of sports is an interesting angle to investigate. The participants indicated that they did not want steroids to interfere with their ability to play their sports fairly and not cheat. There is probable cause to believe that by targeting the angle of morality in sports alongside educating young athletes about the dangers of steroids, the instances of engagement in doping can be reduced (*Teaching athletes about morality in sport can help reduce doping*, 2020). Aaron, much like the participant in the Mosely case study (Mosely, 2009), seemed to justify his steroid use by minimising the medical evidence against using it. It seems that a level of dissociation from facts and embracing their own narratives drives these individuals to defend their engagement with steroids. However, there is Ethan, who seems to be adamant about using steroids with no attention paid to the side effects that he is aware of. For him, the goal of emulating the image of his fitness role models from the media outweighs any risk that can come from using steroids. He stresses that he wants to live a shorter life looking his best than a longer life looking average. With people like him, sheer education alone will not be enough because he seems aware of all the facts of steroid use. He would potentially require a deeper deconstruction of his image values and what muscularity means to him.

However, despite Ethan's example, education is still indicated as a highly effective tool against the dangers of muscle dysmorphia. Universally, the participants all indicated a gross lack of education and knowledge about dieting and exercise at a young age. Many of the participants indicated that in the early years of working out, they did not know what they were doing with their diet and exercise and for some of them, that has led to lifelong injuries. Ethan describes very little awareness of what exercising entailed, and his knees are in constant pain now due to his impractical exercise habits from early on. Chris, Aaron,

Daniel, Harold, and Fernando all shared the same sentiment about going into the gym space with very little knowledge. What has further worsened the situation is the lack of knowledge and awareness in their families and surrounding society. As mentioned earlier, many of the participants were placed in active fitness environments by their parents with the belief that it was good for them. However, it seems that their families were not able to fully understand or pick up on their struggles once those came to the surface. Similarly, other figures of authority seemingly failed to understand what might have been going on. Benji remembers going to his teachers with his struggles once he did not get the understanding he sought at home, and they, too, dismissed him. A study published in January of 2025 looking into the knowledge of gym goers on myths and truths of resistance training in an Austrian sample of 721 (30.1 ± 14 years, 454 males) by having them answer a questionnaire comprised of 14 statements about the methods and practices of resistance training randomly assigned as truths or myth found that the awareness of the scientific facts is low among gym goers (Unger *et al.*, 2025). Moreover, a recent review looking into the level of awareness and knowledge among gym goers regarding the use of dietary supplements found that most of the gym goers get their information from the media and the internet and that, generally, there needs to be an effort to improve the source of information regarding the use of these substances (Hernandez *et al.*, 2025). Another study looking into the general knowledge regarding dietary habits among youth in fitness centres compared to youths in competitive sporting environments by having a sample of 211 youth (age 16.8 ± 1.7 years) fill out three questionnaires (the General and Sport Nutrition Knowledge (GeSNK) questionnaire, a food habit questionnaire and the KIDMED), found that the fitness centres group had markedly less awareness of healthy dieting habits when compared to the youths engaged in competitive sports. This comparison rings true to the relationship between involvement in sports and avoiding steroid usage that was discussed earlier in this section. Similarly, it seems that engagement in sports breeds a healthier attitude towards dieting. Our participants who were involved in competitive sports did not; however, they indicated that sports helped them with their dietary habits. Perhaps a reason for that is that the gym was a priority for them. And so, they were more focused on engaging in dietary habits that they deemed would help them gain muscle. Moreover, they all indicated the usage of dietary supplements in combination with their diet in order to maximise their gains. For instance, Harold, Daniel, and Greg all use creatinine. Creatinine is a supplement used by weightlifters to enhance performance and increase muscle growth (Wu *et al.*, 2022). Greg then mentioned that due to his excessive use of the substance, he had developed

a case of erectile dysfunction as a result (Martin, Sherley and McLeod, 2018). This aligns with the experiences mentioned by the participant in Martenstyn's study when it comes to using supplements (Martenstyn et al. 2022), and more specifically, the participant in Cafri et al.'s case study indicated abusing dieting pills (16) a day in order to lose weight and gain muscle (Cafri et al. 2006). Moreover, a 2013 study found that individuals with muscle dysmorphia did not tend to have professional supervision and insights when it came to nutrition (Contesini *et al.*, 2013). This aligns with the participants' statements about not having much knowledge about diet at the beginning of their journey with fitness and only gaining access to nutritionists later down the line. Similarly, the participant in Mosely's case study also indicated using dietary magazines in order to get dieting tips instead of resourcing information from a professional nutritionist (Mosely, 2009). Education is therefore viewed as a priority not only for the individuals themselves but for their family members as well in order to be able to spot the symptoms of muscle dysmorphia and help guide treatment and improvement (Nicewicz, Torrico and Boutrouille, 2025). Moreover, it is important to spread awareness among clinical and professional settings in order to battle unrecognised muscle dysmorphia (Nicewicz, Torrico and Boutrouille, 2025). A study interviewing seven health and exercise professionals about their awareness of the signs and symptoms of muscle dysmorphia concluded that they found it difficult to discern the symptoms of muscle dysmorphia compared to normal behaviours at the gym and that they needed better systems in place to be able to detect the development of muscle dysmorphia among their clients (Langeland and Sandgren, 2024).

The Media

the media in all of its facets – visual, print, and social- has been playing an integral part in disseminating ideas about the ideal body shape, and that has been historically catered to a measure of increased muscle definition (Thornborrow *et al.*, 2020). Non-gym-going men are more likely to express negative self-image beliefs when subjected to muscular role models as depicted in the media, while gym-goers are more likely to be motivated to further exercise and attain their muscular goals following exposure to the same role models (Halliwell, Dittmar and Orsborn, 2007). The participants' exposure to early images on television of action stars such as Arnold Schwarzenegger and The Rock has played an active role in shaping their image of what a "real man" should look like. More so than anyone else, Ethan fully explained the degree of his attachment to these early images. He viewed these men as the peak of masculinity and the epitome of manhood, and to this day,

he views bodybuilder physique as the ideal body shape for a man. This brings to mind the participant in Mosely's case study who indicated a fixation on bodybuilder physique as advertised in magazines and the media as a source of inspiration for what he wanted his body to look like (Mosely, 2009). Similarly, Ethan, Aaron, Chris, Harold, Daniel, Greg, and Benji all indicated how the depiction of athletic figures in the media directly influences their idea of what an ideal body should look like. Meanwhile, Fernando recalled his impression of the Batman suit and how it highlighted the superhero's muscular features, while Benji talked about Love Island and the celebration of a certain-looking body type as the ideal physical type. It can be seen here that the influence spans a variety of visual media programming, from blockbusters to reality TV, which highlights the pervasive and widespread nature of the influence. Numerous studies have directly examined the evolution of the ideal body image in media and the effect it has had on levels of body dissatisfaction in the general public. Referenced earlier (pp4) in this thesis was the work done by Pope et al., looking at the evolution of toy body dimensions by carrying out waist-to-chest measurements on action figures and concluding that they have become more muscular with the passage of time (Pope et al., 1999). Furthermore, the introduction of popular action figures such as G.I Joe may have precipitated the idea of "outlandish muscularity" in the general public consciousness, leading to the advent of developing body image issues and a reliance on anabolic steroids in order to achieve the desired muscular look (Angier, 1998). Findings suggest that the more time spent in front of the screen, whether it be on TV or social media, the greater the chances of developing muscle dysmorphia symptoms (Ganson et al., 2023). In their study, Ganson et al. established that for men, exposure to social media correlated positively with developing muscle dysmorphia symptoms (Ganson et al., 2023). Among the reasons suggested in the study for this correlation are the presence of pressure to adhere to the body ideals advertised by fitness influencers on social media platforms, the presence of other popular figures such as famous actors who also promote certain muscular body ideals, and finally they highlight how the presence of social media as a platform to share views and opinions about exercise and supplement usage could be influencing impressionable adolescents who lack the maturity to think critically about the advice they are receiving online (Ganson et al., 2023). The advancement of social media and the increased accessibility to these influences from multiple sources may t, therefore, have exacerbated the increased rate of incidence of muscle dysmorphia. In a 2001 study, a sample of eighty-two male college students was split into two groups, with the first group being exposed to a set of advertising slides that included both neutral images and ideal male

body images, while the control group were exposed exclusively to non-human images or human images that did not focus on physicality (Leit, Gray and Pope, 2002). Following the stimulus introduction, both groups were asked to sit through a series of computerised assessments of body perception and body satisfaction, and the results showed that the group of men who were subjected to images of muscular men exhibited a larger discrepancy between the reality of their body composition and their perceived ideal body type compared to the control group (Leit, Gray and Pope, 2002). Furthermore, the advent of online dating has also played a part in creating certain pressures to conform to a certain ideal in order to be viewed as desirable. A study looking into the relationship between dating apps and body dissatisfaction among sexual minority men (bisexual, gay, men who sleep with men) using the Male Body Attitude Scale (MBAS) (Tl, D and Jp, 2005) found that dating app users reported significantly higher degrees of body dissatisfaction compared to the participants who were not on those apps. (Tran *et al.*, 2023). Dating apps breed an environment of direct competition with a focus based directly on physical appearance (Blake *et al.*, 2022). It creates an environment where a person's self-worth and acceptance are disproportionately linked with how they present, and this intensifies the pressure felt to project an "acceptable image" to potential mates. These results confirm the influence of media exposure and peer pressure on the development of unrealistic and potentially harmful body image ideals.

However, inversely, the work done by Nagata *et al.*, published in their 2022 paper, showed that social media usage and overall screen time usage did not influence their participants' muscle-seeking behaviour (exercise habits, supplements usage and dietary change) (Nagata *et al.*, 2022). They recruited a diverse sample of 1,483 young adults (mean age 22.2 ± 2.0 years) from a previous population study and subjected them to questionnaires to examine the association between engagement with three media modalities (social media, screen time, weight-related self-monitoring apps) and five types of muscular seeking behaviours (dietary changes, exercise, protein powder usage, pre-workout drinks, steroids and other enhancing substances) (Nagata *et al.*, 2022). According to this study, only the weight monitoring apps were associated with a change in muscle-building behaviours. However, it is not clear whether the study targeted individuals who are more prone to be sedentary and less likely to be physically active. More importantly, the study did not investigate the content of the social media viewed by the participants, which would add another dimension to the argument. All of the participants in our study talked about how they spend most of their time on social media investigating fitness pages and fitness influencer profiles, which

in turn leads to more of the same being suggested to them in their feeds until they become totally inundated with that type of content. It is, therefore, important to differentiate between the general public's social media usage and those most vulnerable to developing muscle dysmorphia symptoms.

What is fascinating is the dichotomy in approach that some of the participants show when it comes to social media. Both Harold and Ethan were very critical of what they coined as “fake” and “manipulated” fitness content where influencers use “smoke and mirrors” and lighting in order to exaggerate their appearance, and then they use that image to sell their products and fitness plans promoting unrealistic results that will, in turn, help the receivers to develop unrealistic expectations of themselves. To both Harold and Ethan, that seems dangerous. However, despite their awareness of the prevalence of this “fakeness” on social media, they continue to search for inspiration on it, putting time and effort into trying to find “authentic” accounts that offer legitimate advice. What is interesting here is that for both of these men, it is not the seemingly unattainable hyper-muscular ideals promoted on these pages that they reject, but it is the notion of cheating and misrepresentation that bothers them. It is not that attaining such a degree of muscularity is unrealistic and places too much pressure on anyone trying to maintain it, but it is that these people do not show you the “right” way of getting there. Their fixation remains on gaining muscularity rather than negotiating what that need means for themselves. Aaron and Chris both also commented on the falsehood of some of the representations in the media, and despite not directly stating their continued attachment to social media and search for a “true representation of the muscular ideal”, it is apparent that they still do try to attain this ideal and they have not let this awareness of its unattainability stop them. In fact, Aaron comments on his awareness of the unrealistic nature of his goals while indicating a level of obsessive attachment to them that is in direct conflict with his logical understanding of the topic.

Traditional Masculine Values

Traditional hegemonic masculine values are often boiled down to the man's role as a provider and protector. For a man to be able to satisfy these criteria, he needs to be strong, fit, self-assured, emotionally contained, and confident (Connell and Messerschmidt, 2005). It may seem rational to think that these notions are archaic and outdated and no longer hold court in our modern day and age. However, it seems that, to an extent, despite society's

attempt at large to move away from these notions of masculinity, men still do express an attachment to them (Iacoviello *et al.*, 2022). According to Fernando's and Aaron's sentiment, it is evolutionary for men to feel like the protectors and providers as they have been for aeons, and to reprogram this historied social expectation is not going to happen overnight. To the participants in this study, this traditional concept of masculinity seems to hold power over them. Harold clearly stated that for him, being a man is directly translated to being muscular and having that ideal physical look. Ethan does not think he could be a "good man" if he does not have enough muscle mass, Aaron links masculinity directly to a look that is characterised by muscular definition, and Daniel does not want to be "tiny" as a man. For these participants, muscle is the unit of measurement of their manhood. It is tangible and apparent for everyone to see and no one to dispute. In other words, it could be interpreted that if muscularity put Chris Hemsworth in Thor's costume and made him a superstar, then muscularity is what will make successful men out of the participants. Ones that are capable of attracting the right kind of attention, admiration and acceptance.

Where do these values of masculinity come from? According to Alina Morawska, they are societally inherited and passed down from parents to children via gendered parenting (Morawska, 2020). According to her, early parenting styles and attitudes are likely to imprint on children and influence how they view themselves in the world for the rest of their lives (Morawska, 2020). More interestingly, she found out that parents do respond differently to their children based on their gender, using different voices, playing with different toys and socialised differently, which in turn led to differences in the child's development when it came to vocalisation, socialisation, affect display, pain responses and aggression (Morawska, 2020). Masculinity, being a social construct, is often passed down through families as the father or other father figures such as grandfathers, stepfathers, or older brothers teach their sons what it is like to be a man, and alternatively, in the absence of such figures, the media seems to be involved in educating young boys what manhood means in the world they inhabit (Miedzian, 2002; Umamaheswar and Tadros, 2022). For the participants in this study, learning what a man is also stemmed from the familial and societal influences they were surrounded by. Harold describes his father's understanding of masculinity as toxic by today's standards, and he points out that he was influenced by his dad's beliefs. Benji and Daniel meanwhile talk about the emotional constipation they suffer as a result of being told not to express their feelings as boys. This sense of emotional constipation was echoed among the other participants, including Aaron, Chris, and Greg,

who all expressed hesitancy in being open with their emotions out of the fear of being stigmatised for it. However, several of them expressed how they have been putting in the work to change their attitudes about what masculinity means to them. Both Benji and Daniel talked about how critical they are of the values they grew up with. Meanwhile, Chris, Aaron, and Greg all talked about how they have been able to confide in certain people in their lives in recent years to help ease their burdens a little. This ability to reach and establish social connections goes against the notion that masculinity traits are set in stone and fixed and hard to challenge and change. Men are capable of reaching out and establishing social connections that help them tackle their mental health struggles (McKenzie *et al.*, 2018). Therefore, it is important to negotiate the ideas that are held about what masculinity means, especially in relation to body image and muscularity. It is important to reroute how parents teach their boys to be men from a very young age. A young boy not given the tools of emotional self-expression will grow up to be a man incapable of reaching out and communicating their struggles, which will, in turn, exacerbate their emotional struggles (McKenzie *et al.*, 2018).

Behavioural Manifestations

Comparison, Competition and Control

The narrative of comparing oneself to others was important and touched upon when discussing the participants' involvement in competitive sports at a young age. Being entrenched in those environments made it inescapable to look at other boys and compare oneself accordingly. In fact, male comparison is a very common standard behaviour in a hyper-competitive capitalist world where these men feel like they have to always be ahead of their peers in order to survive (Frederick and Haselton, 2007; Shahrier, Kotani and Kakinaka, 2016). It is no surprise that these childhood tendencies get carried through to adulthood, and they find a place for these men at the gym. "You go to the gym for the girls, and you stay for the guys", as proclaimed by both Aaron and Harold independently. Chris craves approval, and Aaron wants to compete with bigger men's muscularity. Fernando, Greg, Daniel and Benji all expressed comparative tendencies that drive their need to improve. Again, we find that their motivation is external. Their standards are set for them by their peers, the media, and the gym goers. Men absorb the ideal body image set for them by the media they consume, and they internalise this image (Hobza *et al.*, 2007). Subsequently, men are then likely to identify the example at the gym that exhibits this ideal and aspire to achieve that level of muscular definition as indicated by our participants. This

attitude was also reflected in the work done by Martenstyn et al., who reported an increased tendency among their participants to actively compare themselves to men they perceived to be bigger than themselves, expressing distress at comparing negatively to these men (Martenstyn et al. 2022). Similarly, our participants echoed similar sentiments. There is, for instance, a sense of frustration and mental decay that is described by Ethan in response to his roommate, who is naturally better built than him, or Fernando, who recognised that his partner's ex was "fitter" than him, or Benji who describes feeling low and unhappy anytime he sees anyone looking better than him, and Chris who similarly described the mental effects of being subjected to men with better physiques than himself.

The need to measure up muscularly to other men stems from the notion of identifying muscles as a unit of manhood. In their work, Ieuan Cranswick et al. identify muscle definition as a manifestation of masculine performance and link it to men's idea of the value of their manhood (Cranswick *et al.*, 2020). For these men, masculinity is built upon the aesthetic and instrumental functions of a muscular build, and therefore, they seek exercise to maintain their masculine identities (Cranswick *et al.*, 2020). The aesthetic and image-focused definition of what it is like to be a man reflects a society that has been leaning more and more towards performative exhibitionism, especially since the advent of social media, as suddenly it is not important to "be" a man but rather to "look" like a man (Munar, 2010; Koskela, 2018). In their work, Martesntyn et al. identified how, for their participants, looking muscular for them superseded any other more inherent values of manhood such as "honesty" and "integrity" (Martenstyn *et al.*, 2022). Similarly, for our participants, looking muscular was seen to be a direct representation of their strength as individuals, and this strength was therefore linked to being successful men, with Ethan and Aaron both highlighting that for them, what matters the most is to look muscular like a man should. Interestingly, however, Fernando relates his adventures at his family's farm growing up, and he goes into detail describing strong men capable of lifting weights that were twice their own and earning their living by working honestly while Greg, on the other hand, links muscularity to developing a better sense of self-worth and becoming a successful man marked by a level of self-assurance and confidence to carry himself within the world, and Chris states clearly that for him being a man is to be strong and through that strength to then be able to provide for his community by being helpful in the best way he can, i.e., through his physical strength. And to Benji, gaining strength is the way by which he will be able to prove to everyone from his past that he is, in fact, a successful man and not the

rejected individual they have made him feel; as for him, being a man, is all about going beyond the limitations that were set for you. While Harold and Chris both talk about how muscularity for them is a result of dedicated and continuous effort at the gym that shows inner qualities of perseverance and strength within an individual. In these examples, muscularity is not the direct unit of measuring the value of manhood. However, it plays an intermediary role in allowing these men to believe that they possess the values they desire for themselves as successful men. This in itself reflects the comments made by Cranswick et al. about the instrumental role of muscularity for men in terms of being representative of traditional values of honesty, control, confidence, and dedication (Cranswick *et al.*, 2020). However, whether focused on the aesthetic or the instrumental value of muscularity, all of the participants related muscle to its value in exhibiting their manhood. Aaron and Ethan want muscle to look big for others to justify their masculinity. Chris, Benji, Fernando, and Harold want muscle to appear strong for others to justify their masculinity, and Greg wants muscle to appear confident in front of others to justify his masculinity. Therefore, it appears that they are all governed by the same impulse, but the way it manifests itself is different from one person to another, possibly depending on their early experiences. For example, Fernando's early experiences of capable, strong and functional workmen at his family's farm helped shape his viewpoint with a focus on showcasing strength and sneering at people who have "show muscles" but no actual strength behind them and, inversely, Ethan's early exposure to bodybuilders and his idolisation of them has shaped him to be more focused on the aesthetic side of the spectrum.

It is interesting to note that the participants do not extend the same muscular expectations to other men. Harold, Greg, Ethan, and Benji all talk about not having to hold other people to the same standards they hold themselves to. It is interesting what Greg has to say about that issue

"I just feel like I have this conception of a man being self-assured and confident. And like I see people that I really admire, and they're not necessarily muscular at all, but they are confident and clear and assured in who they are as people... for me to become a man, I think, or to feel like I'm there, I have to find other ways of doing that and an accessible way of doing that is getting muscular."

- Greg

This proves that muscularity is a means of displaying the qualities that are associated with manhood that he and the others feel they do not inherently possess, and it goes to show that they view themselves differently than they view others around them.

The demand for physical excellence places a lot of pressure on the participants' shoulders. They all indicate how strict they are with themselves and how they place very high expectations on themselves. Aaron, Benji, Chris, Fernando, Ethan, Greg and Harold all talked about how high their standards of workout and expected results are. Interestingly, all of these men also commented on the unattainable nature of these expectations. Harold highlights how his expectations are "rarely met", with one of the reasons being that the participants are never satisfied with their results and are continuously moving the goalpost each time they reach it. Fernando talks about craving "7% body fat once he reaches 9%", and Greg talks about the obsessive need to fixate on small parts of his body but then always find something else to focus on without ever reaching an end goal of being satisfied. Chris talked about never being satisfied with his achievements at the gym and always trying to go back and do something harder. Benji talks about not being satisfied until he reaches the peak physical result, which he then goes on to describe as being akin to the physicality of an Olympian, and he declares that he knows he will never get there, and so he will never be happy. Ethan directly says that he "will never be happy with himself" in terms of his physicality, and Aaron summarises the entire sentiment with a quote from his therapist

"The therapist said to me, he said, do you know, I can't remember, some ancient Egyptian or ancient Roman kind of person. They'll roll this boulder up a hill and then stand at the top of this hill that's 10-foot tall and be like, look what I have done?! He said, but you're not. You're looking at the 20-foot hill, and going well. Why didn't I get it up there? He said you're always trying to be better than that."

- Aaron

Similarly, the participants in Martenstyn et al.'s study also reported a tendency to always want to improve their workout regimen and place high expectations on themselves, constantly moving the goalpost and never being satisfied with their results, while also indicating that they, therefore, are adamant about exercising diligently and are not keen on taking rest days (a sentiment that was echoed by the majority of our participants) and that they plan carefully in order to avoid injuries that would set their exercise routines back

(again something that was echoed by our participants) (Martenstyn *et al.*, 2023). Moreover, participants in both our study and the Martesntyn et al. paper reported feeling high levels of distress and anxiety when failing to meet their daily schedule of exercise (Martenstyn *et al.*, 2023). The Participants in both studies reported that they engage in extreme compensatory behaviours in order to make up for perceived time at the gym or messed up dietary plan. This echoes the concept of realignment narratives suggested by Cranswick et al. in their paper, where participants were likely to engage these narratives in response to perceived threats to their overarching masculine narrative, and accordingly, the men are likely to ignore injuries (similar to Ethan), or push themselves too hard too soon (Aaron and Harold), or engage in self-harming and risk-taking behaviour (Greg, Daniel) in order to maintain their masculine narratives intact (Cranswick *et al.*, 2020). These men exercise to the point of physical breakdown. Aaron, Daniel, Ethan and Harold all scoff at the idea of a rest day to allow for recovery. They have to work hard every day. Greg mentions working out to the point of vomiting, and Harold talks about suffering dehydration as a result of his intense workouts. Fernando talks about his vicious cycle of overworking his body, and Ethan talks about causing himself a permanent chronic knee injury due to doing "1000 squats a day". These are their exercise tendencies when not missing workouts. When they do miss, however, the need to self-punish escalates. Fernando described binge eating in order to elicit feelings of guilt within himself, and so does Ethan; meanwhile, Aaron describes a cycle of feed deprivation followed by binge eating episodes. These acts of disordered eating are designed to self-punish and bring in a sense of guilt that will then drive them back to the gym to work twice as hard to make up for all they have lost. It is a dysregulated response to perceived failure, and it links back to the importance of their fitness to their identity and the massive threat that losing it poses to them to the point where they are incapable of coping with it and resort to some damaging and toxic behaviour to punish themselves for their perceived failure.

Moreover, masculinity and control are directly interlinked throughout a man's life, and they continue to influence each other from one stage of life to the next, whereas the ability to exert control over one's circumstances becomes synonymous with one's sense of masculinity (Canham, 2009). It is therefore expected for individuals who are very preoccupied with the value of their masculinity to be engaged in a continuous effort to display a measure of control over their main activity that defines their masculinity, which is, as mentioned before, exercise, dieting and fitness. The participants in Martenstyn et al.'s

study indicated that exerting control over their exercise and dieting habits is of paramount importance and the cornerstone around which they can organise their day while also maintaining control over the body composition via controlling what they eat and how they exercise (Martenstyn *et al.*, 2023). Interestingly, one of the participants in that study indicated how they struggled during the COVID-19 pandemic due to a perceived lack of control, which led to the worsening of their MD symptoms (Martenstyn *et al.*, 2023); similarly, we had Aaron talk about how during the pandemic he struggled not to have access to the gym which led to developing alcohol dependency and suicidal ideation for him because he could not manage his routine as he did before the pandemic. So, participants in Martenstyn *et al.* paper engage in a highly strict exercise, and they view their work as a "necessary evil", indicating that they have to do it even if they do not want to (Martenstyn *et al.*, 2023), and similarly did all the participants in the case studies reviewed earlier (Cafri *et al.*, 2006, Mosely, 2009, Murray *et al.*, 2011, Murray *et al.* 2011, Murray and Griffiths, 2015). Similarly, our participants also indicated strict adherence to their diet and exercise routines. Ethan stressed how it is not about "loving" going to the gym; in fact, he stated that he wishes he did not have to go but that he has to do it in order to keep on top of his physical progression. A sentiment shared by Aaron. Moreover, the participants in this study expressed elements of social avoidance in order to avoid interacting with their dieting habits, and they may even skip familial and professional engagements so that they do not interfere with their diet or exercise routine. These, of course, are signs and symptoms of muscle dysmorphia as defined in the diagnostic criteria in Table 1. As mentioned before, the participants also describe a reluctance to give up their exercise regimen even when injured. They would choose to work around an injury or avoid it altogether so that they do not skip a workout, fully knowing that these habits are bad for their health. These behaviours also fall within the spectrum of muscle dysmorphia. And so, within their need to control their habits, they display a variety of muscle dysmorphia symptomology.

These behaviours also draw a direct comparison between muscle dysmorphia and eating disorders such as anorexia nervosa, which is marked by a heightened degree of self-control and desire inhibition (Li *et al.*, 2024, (Fürtjes *et al.*, 2022). In addition, anorexia nervosa and obsessive-compulsive disorders, in general, are marked by a constant fear of loss of control and general ineffectiveness (Froreich *et al.*, 2016), and that as well is similar to the participant's fear of slipping in their workouts and not being able to attain their regimen.

Interestingly, it was Fernando who likened his attitude towards his workout to something akin to obsessive-compulsive disorder, using those exact words to draw the comparison. Ethan specifically recalled times when he would stop at a shop on the way home from dinner to get a protein bar to make sure that he had eaten the right number of calories that day, regardless of whether he was hungry or not, and he mentioned that failing to do so would induce a sense of mental anguish within himself. Similar to him, Aaron, Greg, Harold, and Daniel all expressed anxiety regarding sticking to the right routine, which affected their social, familial, and professional lives. However, it is the nature of their anxiety about missing workouts that draws very clear comparisons to obsessive-compulsive disorder and brings forward the comparison made by Fernando. In their explanation of the nature of their fear of losing control and missing workouts, Harold, Greg, Ethan, Daniel, Chris and Aaron all detailed a paranoid belief that even a single missing workout would lead to significant deterioration in their fitness level. It is known in the fitness community that one can miss up to three weeks of weightlifting without any significant loss in muscle mass (McMaster *et al.*, 2013). And the majority of the participants are aware of the unrealistic nature of their fear. Chris, Daniel, Aaron and Greg all directly mentioned that they are aware that, in reality, they will not lose significant muscle mass after one day off, but that they cannot seem to be able to control these obsessive catastrophised thoughts unless by engaging in compulsive exercise habits in order to overcome the feeling of "doom and gloom" as described by Aaron. This pattern of intrusive paranoid thoughts and repetitive behaviours to mitigate these thoughts is directly linked to the symptomology of obsessive-compulsive disorder as defined in the DSM-5 (Administration, 2016a). Moreover, it is also apparent that muscle dysmorphia shares commonalities with body dysmorphic disorders. In this study, Greg identified, in a sentiment shared by the majority of the participants, that he fixates on a certain angle of his body and becomes obsessed with perfecting it and working on it. This is very similar to the classic presentation of body dysmorphia (Bala *et al.*, 2021). Additionally, body dysmorphia reports high rates of suicidality among its sufferers, which is another thing that was highly reported in this study (Bala *et al.*, 2021). It is not within the scope of this study to propose a theory about the nature of the symptomology of the interviewees due to the small sample size. However, the intersection between their narratives and anorexia nervosa, obsessive-compulsive disorder and body dysmorphia on an integral level that goes beyond sheer symptomatology to delve deeper into what initiates these symptoms necessitates questioning the categorical approach to defining muscle dysmorphia, body dysmorphia, obsessive-compulsive disorders and

eating disorders. Instead, we need to focus on an approach that places the symptomatology of these conditions on a continuous spectrum that incorporates their integral intersections and makes better allowance for the existing comorbidities and heterogeneity between them. This, in effect, describes the dimensional approach to diagnosing psychopathologies, which places a person's symptomatology on a continuum where said person can suffer from a varied degree of symptoms (Wright *et al.*, 2013; Luo *et al.*, 2016). It also can utilise approaches to mental illness such as the transdiagnostic-dimensional approach (Bruno, Iannuzzo and Muscatello, 2023; *The Transdiagnostic Dimensional Approach: Another Way of Understanding Mental Illness*, 2024), which focuses on common mechanisms and manifestations between what might otherwise be viewed as separate psychopathologies by drawing focus to the points of conversion between them. With this approach, a future of healthcare can be designed where each individual can have a unique and specific mental health profile combining a mixture of all of their symptoms and manifestations that link back to their unique experience instead of having multiple diagnoses that are further confused by several comorbidities that pay little to no attention to one's own journey. This vision draws as well on the concept of stratified psychiatry, which relies on separating patients into distinct groups depending on their biomarkers in order to gain a better understanding of their underlying conditions and the interplay between them, making psychiatry more personalised and less general (Arns *et al.*, 2022). Classically, there has been a categorical approach to defining psychopathologies; however, in recent years, studies have shown that body dysmorphia and eating disorders would best fit a dimensional approach which would focus more on the core psychological elements of these conditions and help bridge the gap between them and also include all the disorders within the eating disorder spectrum that do not best fit the distinct categories that are currently present (Luo *et al.*, 2016; Bala *et al.*, 2021; *About RDoC - National Institute of Mental Health (NIMH)*, 2024). In light of all of this, it seems simplistic to designate two distinct groups categorically as "normal" and "afflicted". Moreover, obsessive-compulsive disorder has also been summarised to share common genealogy with several other psychopathologies and that its symptoms also exist along a continuum of symptoms, indicating that genetic variants that cause the illness may not always directly correspond to the established diagnostic criteria, further drawing a link between it and the dimensional approach (Strom *et al.*, 2021). Therefore, it is our belief that a categorical approach, though practical in a research setting, does not serve the community in the best possible way, and a more

integrated approach to mental health is needed to truly serve those of us who are in need of help.

The Sense of the Self

A lot of the elements of the participant's sense of self were touched upon and illuminated in previous sections, but in this section, they take centre stage. There is a constant feeling of self-rejection and self-loathing among the participants. Chronic unhappiness with how they look and a deeper reflection on what that says about them. Greg describes himself as inadequate, Fernando believes that he does not have much to offer, and Ethan says that without his muscles, he is "a negative number, not even a zero". Chris talks about not mattering to anyone prior to gaining muscle, and Harold mentions that he does not feel he has anything to offer beyond physicality and muscularity. It seems that the participants are incapable of producing any measure of a positive sense of self on their own. This relates back to their early feelings of rejection from family and peers and therefore internalising this perpetual sense of their own shortcomings, so they develop a reliance on external validation in order to achieve a temporary positive sense of self (Young, Kolsko and Weishaar, 2003, Bowlby, 1969, Ainsworth *et al.*, 1978). Greg is the one participant who directly identified the need for validation as being a direct response to his inability to "cultivate a sense of self-worth". Meanwhile, Harold talked about how he would go to the lengths of disparaging himself on purpose in order to receive compliments or, in other words, to "fish" for them to "scratch and itch" and get his fix of external validation. It is akin to an addict searching for his next hit. For the participants, therefore, exercising and dieting become the tools through which they can gain muscle, and muscles, as mentioned before, are the unit by which they measure the value of their masculine capital (Cranswick *et al.*, 2020). Muscle for the participants defines what a man should look like aesthetically, or it represents the instruments of manhood (strength, confidence, power) according to their understanding of hegemonic masculinity (Connell and Messerschmidt, 2005; Cranswick *et al.* 2020).

In their study, Martenstyn *et al.* identified that for their participants, exercise had become an integral part of their identity and that they had come to rely on it as a major coping mechanism (Martenstyn *et al.*, 2023). This is echoed by our participants, who shared that a

great deal of their identity is attached to their physical appearance. Harold and Chris both used the word "identity" to describe their relationship with exercise and what being fit means to them, and Greg explained that fitness and exercise are "entrenched to who he is as a person". Meanwhile, Ethan describes exercise as one of the biggest things in his life. This fits the fact that they have placed all of their ability to gain approval and self-worth through physical fitness, and therefore, in a sense, their entire identity being encapsulated by their physical fitness is informed by their need for external validation. Aaron shares that if someone were to tell him that he is not in shape, that would drive him "off a cliff". He, in that instance, is not solely responding to his physicality being questioned; he is responding to his identity being placed at risk. Aaron, like all other participants, has built his entire personhood and manhood around his appearance and the approval and attention that he garners. In 2024, Ieuan Cranswick, David Richardson, Matin Littlewood and David Tod published a study looking at the role muscularity plays as an identity capital for a group of eleven weight trainers (8 men and three women) from two different gyms (Cranswick *et al.*, 2024). In this study, three typologies were identified (individualist, illusionist and promoter) that defined the nature of the identity capital being sought after with that being self-empowerment, self-protection and self-promotion, respectively (Cranswick *et al.*, 2024).

The individualist type was identified by two women in this study but no men, and they linked muscularity to a sense of social betterment, independence, self-satisfaction and self-belief (Cranswick *et al.*, 2024). However, in our study, several participants identified reasons for self-empowerment as the motivation behind their exercise. Greg and Chris stand out as both link exercise directly to a need they have to gain self-belief and feel good about their standing as contributing members of society. Chris wants to feel like he is strong and helpful to people around him; meanwhile, Greg needs to feel a sense of self-assurance by building a better body. These are motivations that align with the individualist typology. Meanwhile, the illusionist typology is predominantly preoccupied with the need to use muscle to cover up and hide feelings of inadequacy and allows the individual to mask traits within themselves that do not align with what they aspire to be viewed as so a timid individual can be viewed as more dominant due to their appearance (Cranswick *et al.*, 2024). Harold stated that he feels that he has very little to offer beyond his physicality and that he needs a muscular definition to disguise that fact. It could be argued that he fits within the parameters of the illusionist type. However, it is the promoter type that most of the

participants seem to align with. The promoter type uses muscularity to self-promote the ideas of manhood's intangible qualities (knowledge, dedication, commitment) (Cranswick *et al.*, 2024). As mentioned before, most of the participants in this study (Harold, Chris, Greg, Daniel, Benji and Fernando) all indicated how, for them, looking good is a reflection of the hours spent working hard at the gym and the dedication and commitment that shows. This is a direct representation of the promoter type.

The work of Cranswick *et al.* builds upon previous work looking at masculinity in relation to muscularity. Namely, the work of De Visser *et al.*, who argued that excellence in traditionally masculine health-oriented activities is used by men to gain masculine capital that can then be used to compensate for non-masculine traits (De Visser, Smith and McDonnell, 2009). This links to the sentiments shared by our participants who identified perceived failings in their persons and how muscularity is the way by which they try to override the perceived shortcomings that they have internalised about themselves. It is also important to note that for these men then, the effects of exercise and muscle definition are not just restricted to the gym environment, but rather they carry the benefits into all different social aspects of their lives. It impacts their identity on a wider scope. Muscle building is an activity that can have wide-reaching social influences beyond the confines of the gym (Cranswick *et al.*, 2024).

Additionally, similar to the participants in the Martenstyn *et al.* study, the participants in this study disclosed a reliance on exercise as a coping mechanism. Moreover, it seems that the gym itself in a social setting offers a sanctuary to some of our participants, with Aaron highlighting that for him, the gym is a place for social gathering where he gets to meet like-minded people and feel like he is a part of a community that understands him. For him, a man who experienced a very early rejection by a father who abandoned him, this sense of belonging really matters. It is as important to him as the exercise itself. Daniel, whose father was a non-factor in his life due to his issues with addiction and by whom Daniel felt neglected and overlooked, shared Aaron's sentiment. However, inversely, Inversely, for Ethan, the gym is an anxiety-inducing space where he dreads coming into direct comparison with other gymgoers and appearing weaker next to them. Ethan links their anxiety about comparing himself to others to their early school experiences, which establishes that need that he has carried into adulthood with him. It remains, though, that exercise is a measure of emotional coping. Aaron, Daniel, Fernando and Harold all indicate

that exercise helps them vent out some of their daily frustrations in a perceived safe environment and, therefore, be able to cope. After all, sweating it out at the gym has been shown to help with stress and anxiety ((Childs and de Wit, 2014). Moreover, the participants also indicate that failure to get that emotional release then leads to a short temper, anxiety, and emotional dysregulation when missing out on a workout, which indicates an unhealthy attachment to exercise as a coping mechanism, especially when it manifests itself in extreme reactions. Several of the participants indicated suicidal ideation in relation to their body image. Aaron described struggling during the pandemic with not having access to the gym and exercise, which rings true to the reported rise in body image concerns in men during the lockdown (Mitchell, 2022), and he credits a friend for allowing him to use his gym during that time and he says that he does not think he "would have been here" if that had not happened because he could not cope with feeling his body wasting away. Greg describes the gym and looking muscular as the one thing that stood between him and utter despair and depression, and describes a time when he did not have access to the gym as a time when he "did not find joy and pleasure in life". Chris reports feeling suicidal after a gruelling breakup where he felt that he was not good enough because he did not look good enough; he did not project the qualities he thought made him successful enough to be worthy of his partner. And Benji suffered from depression and suicidality in relation to being bullied at school for his appearance. The fact that four out of the eight participants interviewed suffered from deep depression and suicidal ideation in relation to their muscularity and image highlights the severity of their condition and makes it more urgent to give more attention both in research and clinically to the issue of body image disorders and disordered eating in men, as it has long been trivialised socially and in research (Swami, 2022).

The Addiction Narrative

. It is apparent from what has been mentioned already that exercise and dieting for the participants have become habits to be adhered to and over which they exert little to no control. This statement brings to mind comparisons to addictive behaviour. In fact, muscle dysmorphia has been described as an addiction to body image. (Foster, Shorter and Griffiths, 2015). It is hypothesized that muscle dysmorphia can be redefined as an addiction because the individual continues to be compulsively engaged in harmful behaviour to get their desired results (Foster, Shorter and Griffiths, 2015). The participants of this study display some classic signs of addictive behaviour. Chris, Daniel, Ethan, Fernando, Greg,

and Harold all describe the relationship with the gym as a compulsory habit to be adhered to. Greg interestingly mentions that his fear of using steroids is because he is worried about getting addicted to their effect on his body image and, therefore, being unable to quit. In this example, Greg displays a direct association with an addiction to body image, validating the research cited above.

When looking at the details of the participants' experiences at the gym, there was a strong sense of euphoric release attached to exercise for them. Aaron mentions ardently the visceral reaction he experienced when he first got back to the gym after lockdown. He talked about the sound of dumbbells clinking, the feeling of blood rushing through his body, of his body coming back to life. The language used was reminiscent of an addict describing a sensorial reaction to getting a fix on the substance of their addiction (Administration (US) and General (US), 2016). He was describing a state of mental and emotional high. Ethan describes working out as the "purest form of happiness", and Daniel drew on the analogy of bottling the feeling he gets when he experiences the peak of his physicality as a drug to make millions. Daniel specifically is very open about his addictive nature, which he says he has inherited from his father, and he believes that not unlike his dad, he is an addict too, but instead of the alcohol, he is addicted to the gym. We often hear about the endorphin release as a result of physical exercise; however, studies have shown that endorphins do not cause the feeling of euphoria post-exercise as they are incapable of passing the blood-brain barrier (Siebers *et al.*, 2021). However, there is another substance produced by the body that is suggested as a strong candidate for inducing the state of euphoria post-exercise, and that is Endocannabinoids (eCBs) (Siebers *et al.*, 2021). Endocannabinoids are naturally produced compounds, similar to cannabinoids found in cannabis, that (among other functions) bind to the cannabinoid receptors to regulate mood, pain and memory (Matei *et al.*, 2023). The release of eCBs has been linked to the feeling of "runners high" of relaxation and euphoria in relation to endurance exercises however work has been done to link the release of eCBs to resistance training in rats, and they have also been suggested as a prime candidate for the feelings of euphoria humans experience post strength exercise as they are shown to be released in response to resistance exercise (Galdino *et al.*, 2014; Siebers *et al.*, 2021; Matei *et al.*, 2023; Gupta *et al.*, 2024). In addition, with exercise being linked to dopamine (feel-good hormone) release as well, which in turn improves mood and lowers anxiety (Marques *et al.*, 2021), it is logical to understand how these different elements can come together to influence the neural pathways that then could lead to the formation of an

addictive attachment to exercise in the participants (Dietrich and McDaniel, 2004; Gupta *et al.*, 2024).

The sense of euphoria related to exercise combined with the generalized anxiety and inability to cope emotionally with missing the fix at the gym draws parallels to the behaviour of an addict (Administration (US) and General (US), 2016). Moreover, several of the participants indicated engaging in secretive behaviour in regard to fitness and diet. On the one hand, this draws a comparison with several eating disorders that are also characterized by secretive eating habits (Boggiano *et al.*, 2013; Lydecker and Grilo, 2019). On the other hand, it is similar to addict behaviour of hiding their addiction's manifestations from loved ones (Burns, Walsh and Smith, 2021). Aaron described secret morning runs during the holidays to justify hearty meals later in the day, Ethan talked about surreptitious calorie checking using his phone under the table at restaurants so that he can keep track of his numbers and not overeat, and Daniel took great pride in describing how he sneaks out of work secretly in order to go to the gym, despite claiming that he only does it during his break time and that he is within his right to do it, yet he still chooses to be secretive. This further draws a line, bringing our participants closer to the narrative of addiction in relation to their symptoms.

Drive for Muscularity vs Muscle Dysmorphia

The Drive for Muscularity (DFM) is defined as the persisting desire to gain muscular definition due to internalized societal ideals -mesomorphic (lean and muscular)- for body shape for men (McCreary and Sasse, 2000; DeBlaere and Brewster, 2017). Meanwhile, Muscle Dysmorphia (MD), as per the DSM-5 definition, is a mental disorder and a form of BDD categorized by an obsessive belief that one's body is not sufficiently muscular (Administration, 2016b). The relationship between the two terms and what they represent is not conclusive in literature; however, it has been proposed that DFM is related to manifesting MD symptoms, and moreover, DFM was even described as a cardinal symptom of MD (Maida and Lee Armstrong, 2005; Robert, Munroe-Chandler and Gammage, 2009; Terhoeven *et al.*, 2023). However, it is possible to exhibit signs of DFM without clearing the clinical criteria for MD (Terhoeven *et al.*, 2023). Where the line between DFM and MD remains unclear. However, it is argued that, ultimately, the presence of DFM is viewed as a precursor and indicator of the risk of developing MD (Cuadrado *et al.*, 2021, 2024).

One of the popular elements about individuals with MD is that they tend to present as muscular because they happen to be engaging in continuous efforts to increase their muscularity, yet they are often plagued by the notion that they are smaller than they actually are (Olivardia, 2001). However, that does not mean a person has to be muscular in order to be at risk of developing MD. Body mass is crucially indicated with MD, and BMI (Body Mass Index) is used to indicate whether someone is likely to have MD or not (Ganson *et al.*, 2023). However, people on both ends of the BMI spectrum could be relevant to the MD discourse as they both could be aiming to achieve a better muscle ideal (Ganson *et al.*, 2023). In other words, weight within itself is not enough to offer a conclusion on whether someone is likely to develop MD, despite the fact that individuals with MD do often present with muscular body composition and, therefore, have higher BMI. People with low BMI indicated smaller bodies could be aiming to build their bodies up via building muscle, and people with high BMI are likely to be suffering from weight stigma, so they too could develop a desire for muscularity and be at risk of developing MD (Ganson *et al.*, 2023). Moreover, BMI was shown to have no association with the development of BDD in a 2022 study (Lasma Aritonang and Vinantius Munthe, 2022), under which umbrella MD is categorized. So, with DFM being interlinked with MD on one hand. BMI, while indicating the presence of MD, is apparently not designed to distinguish the two firmly and conclusively. We must turn to the diagnostic criteria we have available to us to investigate the legibility of the participants of this study as potential MD patients.

As mentioned in the Methodology section, all of the participants in this study scored above the threshold score of 39 on the MDDI; however, they did not all present as muscular body type. Aaron, Chris, Ethan, Harold and Greg all presented a "muscular" body type. Daniel said that he has had to lose muscle in order to be able to run competitively (despite still struggling with the notion of being small and desiring to continue to put on muscle), and Fernando and Benji were both to be considered on the heavier side of the scale, and they scored the lowest on the MDDI. T

The following table illustrates every participant's relationship with the classic presentations of muscle dysmorphia, as proposed by Pope *et al.*, to better elucidate their individual connection to the disorder and potentially highlight the degree to which they are at risk of developing it.

Table 13: Participants' relation to MD's diagnostic criteria

Participants	Preoccupatio n with insufficient muscularity	Fear of bein g too small	Excessive/persiste nt exercise (Continuous training and ignoring injuries)	Extreme / persisten t dieting (rigid protein- focused, avoiding food)	Body Protectio n measures (avoiding mirrors, avoiding exposure)	Steroids and other suppleme nt use	<i>Avoidance behaviour (social or professiona l)</i>	Anxiety related to muscularit y	MDD I Score s
Aaron	✓	✓	✓	✓	✓	✓	✓	✓	53
Benji	✓	X	X	X	✓	X	✓	✓	40
Chris	✓	✓	✓	✓	✓	X	✓	✓	52
Daniel	✓	✓	✓	✓	✓	✓	✓	✓	56
Ethan	✓	✓	✓	✓	✓	✓	✓	✓	59
Fernand o	✓	X	X	X	✓	X	✓	✓	41
Greg	✓	✓	✓	✓	✓	✓	✓	✓	49
Harold	✓	✓	✓	✓	✓	✓	✓	✓	52

Table 13 shows how each participant's story aligned with MD's diagnostic criteria as described by Pope et al. in 1997 (Pope et al. 1997) and also shows their MDDI scores for reference.

Looking at the table, it becomes evident that Benji and Fernando do not exhibit the same amount of MD symptoms as the other participants, even though they do exhibit some of the classic symptoms. It is also evident in their having the lowest MDDI scores of 40 and 41, respectively (the threshold is set at 39). Therefore, taking the MDDI score into consideration, these two present the lowest risk of having/developing MD. However, we think it would be unwise to dismiss them altogether because they still present a risk of developing MD. An example that proves this statement is the case study work done by Murray et al. in 2012 (Murray et al., 2012). The case represented an adolescent with a history of obesity, reaching a weight of 120kg and a body fat percentage of 45%, which was then followed by a period of rapid weight loss and a developing fixation on gaining muscles and several other classic MD symptoms (Body protection, preoccupation with size, social anxiety due to lack of muscularity, extreme dieting) (Murray et al., 2012). Moreover, it is interesting that both Benji and Fernando have a preoccupation with muscularity. We did not ask the participants to fill out the DFM questionnaire; however, it is evident that all of the participants (including Benji and Fernando)

have a drive for muscularity, which, as mentioned above, is a precursor to developing MD. Therefore, despite not presenting with all the signs of MD, both Benji and Fernando are at risk of developing MD (similar to the participant in the case study) due to their past history, current attitudes toward muscularity, and feelings about themselves.

The other participants all seemed to exhibit the majority, if not all, of the signs of MD, and therefore, they all warrant their inclusion in this study. It is of note, though, that Chris never engaged in any performance-enhancing substances or any other supplements due to his gymnastics background and the focus on clean training. However, it is also interesting that of the participants, only Aaron admitted to past and current usage of steroids. All the others only admitted to using other supplements, and all (with the exception of Ethan, who said he would likely use it in the future) said that they would not use steroids due to their knowledge of their negative effects on the body. This attitude again reflects what Martenstyn *et al.* observed in their study in regard to their participants' resistance to using steroids due to their knowledge of its side effects (Martenstyn *et al.*, 2022).

Finally, it is worth noting that the participants' MDDI scores reflected how many MD symptoms they exhibited. Aaron and Harold scored much higher than Fernando and Benji. The MDDI is a good screening tool for individuals who are already exhibiting the signs and symptoms of MD as per the diagnostic criteria. We do believe, however, that the screening tools should extend beyond the current symptoms in order to truly investigate an individual's vulnerability to develop a certain condition. As mentioned above, Benji and Fernando are both at risk of developing MD, though they do not exhibit many of its classical symptoms as of yet. We believe that a more comprehensive screening tool that extends the scope of the investigation beyond the current presentation and into some of the common elements shared between all the participants of this study in relation to their past traumas and current feelings about themselves could aid in being able to detect many people at risk of developing MD even before they begin to show the classical symptomological profiles (i.e., muscular body, intense exercise, etc etc).

Proposed Screening Tool

As mentioned above, one of the purposes of this project was the suggestion of a new and expanded screening tool for people at risk of developing MD. We believe this tool should cover

elements of the current presentation but also touch upon past elements from the individual's past that could place them at risk of developing MD. As we have seen from this study, Benji and Fernando were barely picked up by MDDI despite being vulnerable individuals and presenting with a risk of having MD in the future. Many individuals like them could therefore be missed altogether. We believe a good screening tool should not only pick the people who are currently presenting the signs and symptoms of a condition but also pick up individuals who are at risk of developing those symptoms before they manifest. Benji and Fernando share an overwhelming similar childhood profile and body image attitudes as the rest of the participants, with the only difference being that they have not begun to implement the physical changes that the other participants have been implementing in terms of gaining muscularity. However, they should not be ignored because of that. If anything, they should be looked after now before they potentially start to engage in extreme exercise and dieting habits that may put them at risk of injury.

The following is a blueprint of what this more detailed screening tool could look like, separated into different subscales and sections that reflect the findings of this research. We have included a selection of statements utilising the Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Further development and testing of this model will be the focus of future studies. For instance, it is imperative that people score significantly regarding exercise and diet habits. Therefore, it was proposed that the screening tools should be divided into several sections and that there should be a score for each section and an overall score. This way, assessors can investigate the presence of classic MD symptoms while also not neglecting more nuanced elements related to its profile. This way, everyone can be placed accurately on the spectrum of MD.

The first section relates to **childhood family dynamics and emotional neglect** in relation to developing low self-esteem and body image issues.

To measure severity, each item could be rated on a **Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).**

1. As a child, I often felt emotionally neglected by my parents.
2. My family was not supportive or understanding of my struggles with body image.
3. I was frequently *criticized* for my appearance, weight, or body size by family members.
4. Growing up, I felt that my emotional needs were ignored or dismissed.

5. One or both of my parents were emotionally distant or unavailable.
6. My father was either physically absent or emotionally disconnected from me.
7. I sought validation outside of my family because I felt misunderstood at home.
8. My parents were either overly critical or completely indifferent to my achievements and struggles.

The second section is dedicated to early **school experiences** and how they led to body image concerns, exasperation of a low sense of self and early involvement at the gym

To measure severity, each item could be rated on a **Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).**

1. I was bullied or teased because of my physical appearance at school.
2. At school, I noticed that boys with more muscular or athletic builds were more popular, especially with girls.
3. I felt pressure from *my* parents, teachers, *and* peers to participate in competitive sports.
4. I often compared my body to older boys who were more physically developed.
5. I felt the need to build muscle early on to compete with stronger, older boys.
6. I started going to the gym at a young age without proper supervision or guidance.
7. I lacked knowledge about proper dieting and exercise when I first started training.
8. I was exposed to gym culture at an early age, including discussions or influences related to steroid use.

The third section relates test **self-perception, low self-esteem** and reliance on external validation to attain self-worth

To measure severity, each item could be rated on a **Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).**

1. I often feel like I am not good enough unless my body looks a certain way.
2. I believe my physical appearance is the only thing that makes me valuable to others.
3. Being muscular gives me the confidence I feel a man should have.
4. I see my strict workout routine as proof of my dedication, willpower, and discipline.
5. Without external validation for my physique, I struggle to feel good about myself.
6. Even when I reach a fitness goal, I quickly feel dissatisfied and set a higher standard for myself.
7. I feel like I can never truly reach my ideal body, no matter how hard I train.
8. I believe that being in great physical shape is the only way to be respected as a man.

This section examines *the romantic partner's* involvement in negotiating self-worth and emotional regulation. To measure severity, each item could be rated on a Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

1. I feel a deep need for love and approval from my romantic partner.
2. Being in a relationship makes me feel safe and more complete as a person.
3. I sometimes adjust my workout or diet to accommodate my *partner's* needs and expectations.
4. I become very emotionally attached in relationships, sometimes more than I expect.
5. If my relationship is struggling, it affects my self-worth more than it should.
6. When a relationship ends, I feel like it confirms my personal inadequacy.
7. I have had intense emotional reactions to breakups, sometimes feeling lost or unworthy.
8. I tend to seek validation from my partner in ways I *don't* fully recognize.

This section examines **exercise intensity and dietary habits** while also examining coping mechanisms, or the lack thereof, in response to disturbances to established routines.

To measure severity, each item could be rated on a Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

1. I follow a strict workout routine focused on building muscle definition.
2. I feel that I have to exercise more to become the best version of myself
3. I structure my training around bulking and cutting cycles.
4. I push myself to complete workouts even when I feel exhausted.
5. If I get injured, I try to work around it or return to the gym before *I'm* fully healed.
6. I am highly committed to eating enough protein every day, even if it means eating when *I'm* not hungry.
7. I have woken up in the middle of the night or eaten extra meals just to meet my protein goals.
8. Missing a workout or a planned meal makes me feel anxious or irritable.
9. I fear that skipping a workout, even for one day, will result in muscle loss.
10. I have experienced moments of panic or distress when I *couldn't* train or follow my diet properly.
11. When I miss a workout or fail to meet my diet goals, I sometimes lash out at those around me.

This section will test how adherence *to* exercise and diet can cause **social and functional impairment** in daily life. Each item could be rated on a Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) to measure severity.

1. I feel anxious about family gatherings because they may involve foods I usually avoid.
2. Before big meals or celebrations, I engage in compensatory behaviours (e.g., fasting, extra exercise).
3. I have skipped social events with friends because I was worried about eating or drinking outside my usual plan.
4. I *don't* enjoy my diet, but I feel I must follow it regardless.
5. The idea of breaking from my routine (diet or exercise) makes me feel panicked or out of control.
6. I have left work or skipped responsibilities to fit in a workout.
7. I have taken professional risks (e.g., sneaking workouts during work hours) to maintain my exercise routine.
8. I feel that my fitness habits sometimes interfere with my ability to live a normal life.

The last section will investigate the value of trust and emotional support in recovery efforts. To measure severity, each item could be rated on a Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).

1. I find it difficult to trust my loved ones with my struggles.
2. I feel like my family and friends do not fully understand what I am going through.
3. I often keep my feelings about my body and fitness habits to myself.
4. If my loved ones understood my struggles better, I would feel safer opening up to them.
5. Having a strong support system would help me work through my issues.
6. I believe that my childhood experiences still affect how I see myself today.
7. I wish I had a safe space to openly talk about my fears and insecurities without judgment.
8. If my family were more involved in my journey, I think it would help me heal.

Furthermore, all of the questions listed above could then be followed with more detailed investigation in the form of open-ended questions designed to further elaborate upon the information gleaned from the questionnaire. Following is a proposed list of these questions

Open-ended questions

1. Can you describe how your family responded to your concerns about your body or appearance when you were growing up?
2. In what ways did you feel emotionally supported (or unsupported) by your parents?
3. How would you describe your relationship with your father figure?
4. Did you ever feel pressure from your family regarding your physical appearance? If so, how?
5. Looking back, how do you think your childhood experiences with family have influenced the way you see yourself today?
6. Can you describe how your self-esteem is affected by your body image?
7. How important is external validation to the way you feel about yourself?
8. Have you ever felt like no amount of training is enough? How does that affect you emotionally?
9. Do you believe you would still feel confident without your physique? Why or why not?
10. What would achieving your "perfect" physique mean to you? Do you think it would make you feel truly happy?
11. How do romantic relationships influence the way you feel about yourself?
12. Have you ever changed your workout or diet habits because of a relationship? If so, how did it make you feel?
13. What role does validation from a partner play in your self-esteem?
14. How do you typically handle rejection or the end of a relationship?
15. Do you think your emotional attachment to partners is different from how others experience relationships? Why or why not?
16. *Can you describe your workout routine and what motivates you to train?*
17. *Have you ever ignored an injury to keep working out? Why?*
18. *How does missing a workout or meal affect your mood and emotions?*
19. *Do you feel pressure to follow a specific body ideal (big, lean, or defined)? If so, where does this pressure come from?*
20. *What would happen if you had to stop working out for a prolonged period? How do you think you would feel?*

21. *How do you feel about eating at family gatherings or social events?*
22. *Have you ever changed or avoided plans because of your diet or exercise routine?*
23. *Can you describe any compensatory behaviours (extra workouts, fasting) you engage in to manage your diet?*
24. *Has your fitness routine ever interfered with work, school, or personal responsibilities? If so, how?*
25. *Do you ever feel trapped by your routine but unable to change it? Why or why not?*
26. How easy or difficult is it for you to open up to loved ones about your struggles?
27. Have you ever felt misunderstood when talking to family or friends about your concerns?
28. What role do you think a supportive environment plays in dealing with body image and fitness-related anxiety?
29. If your loved ones were more involved in your journey, how do you think it would impact you?
30. What kind of support do you wish you had from your family and friends?

We believe that through investigating all of these sections in a screening tool, including aspects of childhood and early school experiences and the bigger ideas of self-esteem and self-worth and how that affects interpersonal relationships, we will be able to better pick out individuals at risk of developing MD even before they may begin to exhibit the classical MD muscular appearance or the accompanying exercise and dieting symptoms.

Reflexive Notes

I must begin by stating that my passion for this product comes from my experience with muscularity-related issues. While I do not identify with the severity of my participants' experiences, I do have a kernel of understanding of what they are going through. I had times when I placed extensive pressure on myself to look good. Luckily, it was due to my awareness of these patterns and the presence of a supportive group of family and friends around me that I did not fully surrender to these notions. In a dimensional approach, it could be said that I was much lower on the spectrum of symptoms than my participants. However, despite this distinction, I was aware of the challenge of not letting my experiences influence my reception of the participants' narratives. Of course, my interpretation of what they said will be coloured by my own experiences and knowledge; however, there is a fine line

between that and using my own stories to fill in any perceived blanks in their stories. I reminded myself that my analysis needs to extend directly from what they said. That had to be the cornerstone of all of my analytic building blocks.

An example was when Chris discussed his parents' focus on academic success. I had personal identification of that. Although I never personally felt unseen or unloved by my parents at times, I have felt a sharp sense of being compared unfavourably to a sibling doing better. It does not take much for these thoughts to root themselves in your head, especially when you are younger, and your parents' opinions are the most important element in your life and shape how you see yourself. Perhaps because of those moments, I have been very dedicated to academic excellence despite having other passions in life that were sometimes neglected. While talking to Chris, I began to make these connections, and I had to stop immediately because they threatened to take my focus away from him. In a casual conversation, you can afford to go elsewhere in your head, but not in an interview. However, I took a note to revisit this thought later. It was imperative to me to tackle any emotional issues brought on by my interviews. I had a conversation with my mother about it. I wanted to cleanse my brain as much as possible for my next interview and when I started to analyse Chris's accounts. I could not let his story become analogous to mine. He had to be the focus and at the centre of his narrative. Again, there is a difference between accepting that your naturally formed interpretation will be influenced by your background and hijacking your participants' stories to tell your own.

Another challenge during the interviews was refraining from giving advice and toeing the line between establishing rapport and overly identifying with the participants. At times, when a participant said something, I disagreed with, it was hard for me not to offer an alternative. I, however, was aware that this was not a therapy session and that it was beyond my authority to advise them in the interview setting. I had disclosed that to them from the get-go. We, of course, offered added help if asked, and my supervisor, Prof. Paul R., had made himself available in the case of an emergency; aside from that, it was not my job to guide and advise. For instance, Daniel said at one point that he was using the interview as a practice therapy session, and I had to reiterate that he was not. But it was a concerted effort. Another aspect was over-familiarisation with the participants. It seemed Benji and Daniel were both interested in me. I am of similar age to most participants, and you can tell by looking at me that I exercise. It became obvious that these two men's style of conversation involved including the other person, so for instance, to make a point about

growing up in the 90s, they would ask me how old I was and deduce that I must understand what they meant about what growing up in the 90s was because I did too. Of course, this example is harmless, but I felt uncomfortable when asked to offer personal identification with their struggles. I did not want to inform them that their stories pollute their accounts with mine and become the subject of their sympathy. I usually brushed off these hinted invitations with a general statement that telegraphed understanding and a sense of identification and moved on swiftly. Again, I felt I needed to toe the line between being someone they trusted and were comfortable to open up. That entailed showing that I understood what they talked about on a deeper level without having to then detail this understanding. They just had to understand and believe that I did. I found that general encouraging statements such as “Yeah, we have all suffered that from time to time”, “I understand what might have been difficult”, or “As someone at the gym, I understand the culture and pressures of it” helped in that regard. As well as non-verbal gestures, from nodding to vocalising understanding with non-verbal sounds.

Finally, I initially felt overwhelmed by the notion of bringing all of these accounts into a singular narrative that makes logical sense. There were a lot of convergence points between the participants’ accounts and similar experiences and notions that made the task easier, and some divergence points that offered fun opportunities to dig deeper and discover the hidden commonalities among those. But the process was arduous and time-consuming, and I was unsure I was delving as deeply as I should have. It was not until I finished writing my notes and then putting the analysis section together that I discovered the common threads that brought these accounts together cohesively. However, the challenge of condensing eight sprawling narratives full of rich insights into this thesis without sacrificing any important analysis was daunting.

Limitations and future research

One of the main limitations of using the IPA approach is the limited number of participants per study. I adhered to the advice given in Johnathan Smith’s book (Richard Brouillette, 2023)second edition). The advice is to limit the number of participants for a PhD project to below ten. The rationale given is that to delve deep into each narrative, it is not recommended that the researchers involve themselves with a higher number of participants. However, that brings forward the question of the ability to generalise the findings and

theories from this study. The answer to that question relies on the notion of the connectivity of research and follows two principal concepts.

1. This study will ideally form one part of an evolving network of qualitative work looking into muscle dysmorphia in men. Together, the findings of the growing list of studies and participants will come together to form a larger picture of the specifics of the experiences shared.
2. This study will inform future quantitative work that will help test the suggested theories on a larger scale and help generalise any findings that are found significant in a large cohort.

Furthermore, we intend to include a surveying questionnaire informed by the findings of this study to be used in future research against the standard existing muscle dysmorphia questionnaires with the hope of it covering wider ground and being able to identify people suffering from or at risk to suffer from muscle dysmorphia who would otherwise not have been picked up by the available tools of detection.

Another limitation of the study is that it is seen through the eyes of the researcher and analyser. However, I made sure to share my results, findings and evolving theories with my supervisors at all stages to make sure that there was a consensus and that I was not losing any valuable information due to any potential blindspots based on my own experiences. My supervisors were very helpful in drawing some connections that I may have missed. For instance, they suggested I look more into the possibility that the participants were projecting their need for approval onto their partners. That was an angle that I had missed, and when I went back to the transcripts, I could see the signs embedded in the language the participants used to describe their relationships, as I highlighted earlier in the analysis section. Incidentally, this angle of projection is one that might benefit from future research efforts. Are romantic partners a positive influence on men suffering from muscle dysmorphia, or are they a temporary distraction and a new target for their intense approval-seeking tendencies? In other words, are these men replacing one addiction with another? I believe the answer to be somewhere in the middle. We saw in the case of Greg that due to his partner's acceptance of him, he started steps to seek therapy and begin a journey of internal healing. So, it is possible that we could use this shift in priorities as a window of opportunity to elevate the men's sense of self and persuade them that seeking help is not beyond them. This is why having a supportive circle of loved ones is of major importance.

More qualitative work is needed in order to add to this project and further deepen our understanding of the manifestations of muscle dysmorphia. Furthermore, those studies will then help yield enough ground to devise new screening tools that fully cover the wide breadth of muscle dysmorphia, which could then be tested using larger-scale quantitative experiments in order to test their reliability and validity. These screening tools could potentially better our ability to accurately detect the possibility of the presence of muscle dysmorphia and, therefore, improve our diagnostic methods so that fewer people will have to suffer in silence

Other possible future studies would include looking into the link between early exposure to competitive sports and fitness centres and the development of muscle dysmorphia, The role of absentee fathers in the development of muscle dysmorphia, a look at muscle dysmorphia image manifestation beyond the bodybuilder ideal. What does muscle dysmorphia actually look like? It might be that it does not represent solely in the form of a bodybuilder's physique. It could be limited to only expect that. Finally, a study to look at commonalities between muscle dysmorphia, eating disorders, obsessive-compulsive disorders, body dysmorphia and addiction disorders in utilising a transdiagnostic-dimensional approach that will be better able to map a course of drawing a comprehensive image of these conditions in relation to each other as a whole but not separate entities.

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Appendix A: Topic Guide for Interviews

“The Lived- Experiences of Men with Muscle Dysmorphia; an Interpretative Phenomenological Analysis Study”

Interview Guide

Hello! As you may know, we are here to discuss your experience with Muscle Dysmorphia. I am Omar Aga, a PhD student at UCL. I work in a team of three consisting of myself and my

two supervisors. We want to do this work to better understand Muscle Dysmorphia from the perspective of people who have experienced its symptoms. So, in other words, trying to answer the question “How did you experience living with Muscle Dysmorphia?”. Before we start, I want to reassure you that there are no right or wrong answers. I am here simply to listen to and learn about your story, and therefore, I am very appreciative of you for agreeing to share with me today. I believe that this research is very important, and through it we will take a step closer to making the world a safer place for men suffering from Muscle Dysmorphia. Naturally, given the topic, this interview might touch upon personal and intimate topics. We will only continue according to your wishes. If you have any concerns you like to raise during the interview, please feel free to do so, and we will work together in order to resolve them. We are in this together. This is a safe space.

- - Information sheet reminder (including running through the pertinent confidentiality information)
- - Consent form reminder

Is there anything you would like to ask before we begin?

Q- Tell me about your history with Muscle Dysmorphia?

- - When, Why and How did it start?
- - How has it affected your life?

Q- How does vigorous physical exercise play a part in your life. How does it relate to Muscle Dysmorphia?

- Feelings about exercise / missing it / adhering to it (Elation, Anxiety, Depression)

Q- People who are diligent about physical exercise often accompany that with strict dieting, how has that element influenced your experienced in relation to your MD?

- Feelings about food (anxiety, stress, control, enjoyment, guilt)

Q- Did drug use come into play for you? If so, how? Supplements? Steroids? Laxatives? Other drugs?

- - Why did you start taking them?
- - If so, what were your feelings regarding using drugs at the time? (Need them to keep up and achieve goals)

Q- How do exercise and muscularity play a part in your sense of masculinity?

- - How does being muscular relate to your feelings about your manhood?
- - How does make you feel in relation to other men around you?

Q- How have your personal relationships been affected by your exercise, diet plans?

- - How does being muscular influence your role in your personal relationships (Family, Friends, Romantic Partners)?

- - How does MD influence your own self-worth in relation to your desirability? (do you feel more desirable when muscular?)

Q- What is your experience with sharing your feelings and thoughts about your struggles with family, friends and healthcare providers?

- What did you think about opening up to others about your feelings? Whether loved ones or professionals

Q- If you have sought out professional help at any point, what are your feelings about that experience?

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- - To what extent did you feel that there was a true understanding of your experience throughout the process? Did you feel you had the chance to share everything you wanted to share?
- - How did this process affect your life? How did it change things for you?

Q- Where are you on your journey now, and what are your future hopes?

Q- And lastly, is there anything else you think I should know about your experience of your muscles and body?

Thank you so much for talking to me today. So, as you many know, this interview will be transcribed and held safely in a protected UCL server, where no one outside of myself and my two supervisors will have access to it. Any quotes from you or conclusions taken from this interview will be ascribed to a pseudonym in any published material. None of your directly identifiable information will be used. We might include general information such as your age or your industry (but without giving specifics in regards to your position or place of work). You can contact me directly at any time with any questions you may have, you also can ask for your information not to be used without having to provide a reason. You have 2 months after the interview to request for your interview not to be used and you can pull out of the project at any time

I really appreciate the personal knowledge you shared with me today. This will help greatly in better understanding the relationship between men and their body image and help us provide better care for those in need of help. You are now a partner in that effort, so thank you

I will provide you with a copy of your consent form and information sheet for you to keep, and your amazon gift card will be sent to your email (provide email) within three days.

Any further questions? Again, thank you so much?

Appendix B: Muscle Dysmorphia Disorder Inventory

Subscale 1. I think my body is too skinny/slender. -DS-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

2. I wear loose clothing so that people can't see my body -AI-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

3. I hate my body -AI-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

4. I wish I was heavier -DS-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

5. I find my chest to be too small -DS-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

6. I think my legs are too thin -DS-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

7. I feel like I have too much body fat -AI-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

8. I wish my arms were stronger -DS-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

9. I am embarrassed to let people see me without shirt or t-shirt -AI -

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

10. I feel anxious when I miss one or more days of exercise -FI-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

11. I cancel social activities with friends (eg: watching football, invitations to dinner, going to the movie theatre, etc) because of my workout/exercise -FI-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

12. I feel depressed when I miss one or more days of exercise -FI-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

13. I miss opportunities to meet new people because of my workout schedule -FI-

1- ☐ 2- ☐ 3- ☐ 4- ☐ 5- ☐

Note: DS = Drive for Size, AI = Appearance Intolerance, FI = Functional Impairment

Appendix C: Example of Interview Notes -Interview 7- (colour coded to match the quotes from the transcript that inspired them)

Page 1

- The desperation around exercise directly linked to it being needed as a crutch to provide mental relief. And to cope mentally
- An existing conflict and struggle between seeing exercise as a fun activity to be enjoyed as per its public image but also viewing it as a crutch, as an element that exerts power, stress and pressure in their life that they feel compelled to comply with in order to satisfy the needs it serves in terms of mental coping. Reconciling the two concepts is tricky.

- Reliance on exercise to provide an external source of self-worth that cannot be internally generated (they have little faith in themselves and need these outlets to build their self-worth around) (success in exercise equates to success as a person)
- There seems to be a discrepancy between their awareness of their level of fitness and their irrational notions of losing conditioning upon missing a minimum number of exercise, highlighting the separation and struggle between rational thinking and irrational notions regarding exercise for them.
- A negative reaction to being too skinny and therefore lesser than and not enough just because he does not have enough body mass to convey that he is enough as a person therefore linking their worth to how much actual space they occupy
- Muscularity to compensate on other perceived shortcomings in other aspects of life
- Playing sport competitively at a young age creates breeding ground for comparison with other kids and therefore builds unrealistic expectations of oneself. Therefore it needs to be discussed at what age should kids be exposed to these highly competitive and comparative environments.

Page - 2

- Being exposed to the gym at a young age also fits with the narrative of the gym being an adult space and the problematic nature of exposing young kids to this environment. But also gym for him is a big part of a routine, and a structure he can exert some control over his life through and he feels that it is one of the few things in his life he has a measure of control over and therefore he uses it that to measure his success as a person in a sense of “you are an inadequate in so many other ways, but this is one area where you have proved your worth as a human being” which makes the gym a marker of his success as a human and a man who is supposed to be in control with confidence over aspects of his life.
- Being exposed to the gym at a young age breeding ground for establishing problematic connections. However as an adult there is an attempt to better the relationship but the struggles still persist indicating the persistent nature of MD symptomology
- Inability to function socially and enjoy his life indicating the addictive reliance on exercise in order to achieve a sense of emotional regulation (also a comment on the persistence of exercise obsession into adulthood)
- Gym and fitness priorities may change with time. MD does not necessarily mean chasing muscle mass and achieving that big frame. It could be geared towards a more lean look. The idea is that the result can be altered depending on where the person is in their life and what they deem an appropriate look for them to seek to get the benefit they want but the concept of having a goal to try and achieve and then what THAT says about you is the main driver of the attachment. (second comment on page also befits the point about problematic gym relationship at young age)
- The detailed aspect of routine exhibiting the importance of tightly controlling this routine for reasons established in previous page note (also comment on changing body image desire from mass to lean)
- Developing an unhealthy obsession with fitness due to young age of exposure to the gym leading to trouble within school and inability to function within the system
- The notoriety of steroids and the presence of awareness regarding it, serving to dissuade him from abusing it because of his own knowledge of steroids side effects and seeing the friends struggle. But still the fact that he considered it showcasing how dangerous a space the gym could be for young impressionable adults who go into it without any awareness or preparation to handle the pressure and temptations if he

with all his knowledge was strongly tempted. But also comment on importance of raising awareness

Appendix D: Excerpt of the personal narrative devised for interview 7 to present its story

Interview 7 Greg's Narrative

Greg's story starts in his childhood home, as the circumstances of his upbringing ultimately played a significant role in various key aspects of his life including but not limited to his relationship with his own body. Greg grew up in what he has described as an "emotionally cold" household. He details that he was never told he was loved, never hugged. To this day it puzzles him as to why his parents treated him as such. He describes them as rational, sensible people but certainly emotionally distant. Between the two he describes a relatively closer relationship with his mom than his dad. The latter, according to Greg, was only ever interested

in lecturing to him. He never felt a commonality, he never felt that they shared anything growing up and he never felt seen or understood. Greg has grown up to deem himself unworthy of love. He sees himself as grossly inadequate, despite having had academic success and currently being engaged in doing a graduate degree at a top university, and despite the constant reassurance he receives from his friends and romantic partner. His low sense of self value and worth are deeply embedded in his psyche. It can certainly be linked back to his early experiences with his parents. As young children, we often value ourselves through our parents' eyes. Their acceptance, their approval is the metric by which we judge ourselves. For Greg he never felt that acceptance nor did he feel the approval. This has left him with a persisting notion of being unworthy of being accepted, nor loved, of being lesser than, of being inadequate. He has therefore carried those notions of low self-worth throughout his childhood and into his adulthood. That is how his childhood set the ground for him to develop his MD symptoms as he links his MD directly to his low self-esteem...

Appendix E: Excerpt from the list of generated themes for interview 7

1. Emotional and mental illiteracy

- They live in a state of emotional detachment bordering on the numbness and seem to be unwilling not able to confront any emotional and mental baggage they may have accumulated throughout the years and always feel it is more proper to close off because they do not deem their emotions worthy to take space in a discussion which links to their low self esteem

[on growing up in family] *"I think the process was that I felt pretty emotionally isolated, and, like, had very low self-worth, and like a lot of self like, I wouldn't say necessarily hatred, but very low confidence in myself and no belief that I was worth anything, right"*

[On being in touch with his emotions] *"It's like, through my whole life, I haven't been used to doing that, and it hasn't been, like, a pathway that I feel like I can easily jump into. And, it's not that I'm scared of doing that or opposed to doing that. It's just that it's just difficult and quite draining and uncomfortable sometimes"*

"I've always felt like that was my role. To bring excitement to people and bring madness and bring chaos. in a way that's fun for a while. That's my job. I've always thought that my job has never really been to connect on an emotional-feelings level, and it's just because I've just developed mechanisms for behaviour that are so far detached from that. And when you develop mechanisms for behaviour, they are very hard to break down"

"I think it's just because when, like, being emotional or dealing with emotions when, when it is not part of your life. I think you begin to kind of develop behavioural mechanisms, right? So when you are not really fine with that stuff, and you are not encouraged to, you design mechanisms to behave around where you believe you are, and where you should be. And I guess that there's that expectation that I'm not the person that should be emotional"

"I guess it was like again it was like a thought that was on my mind but I was thinking I probably can't be voicing these sorts of thoughts all the time because it's not healthy for people around me."

"I think, maybe sometimes that I've always been quite uncomfortable in normal social situations. Not that I'm awkward or that, but I've always felt like I can't really be satisfied or feel comfortable in like normal calm environments."

"And coming to this uni, this year, where people are, I don't know, like I think the people I've been around, my course mates, they're far more like, sensible and normal, and the things they talk about are so just like standard and I'm really struggling with it because I don't find it that interesting"

"I'm realising this is actually what it is like to be happy. You have to be comfortable with normal things"

"If my friends and I meet up and, let's say, we meet up to go for like 2 pints in the pub and go home. Or let's say we meet up in the park to go for a walk. Not that I really ever do that. Most of my social activities are all around drinking and drugs. Well, they did. I'm not doing drugs anymore, but I still drink and when I drink, I go mental. But. When I meet up with my friends, I can't feel satisfied. It's great to see my friends, and I have a nice time, but I can't feel satisfied. I can't feel comfortable having a nice relaxed time. I always have to push it to the next level. I always have to say let's go and climb this rooftop or let's

get some spray paint and go and spray paint the walls or let's go and get black out drunk. we would wake up on a park bench at 6:00 in the morning covered in vomit. There's that drive and need to really, really push it to make me feel comfortable, I think. For some reason it's that I feel far more comfortable in extreme situations like precarious situations than I do in normal, like, sedentary pedestrian situations."

"I think it was just because I just don't really have the tools to dive into my mind really because I don't really. I was never really emotional. And I've never learned to think about my emotions, or I was never taught to be introspective at all, so it's like, looking within my mind, and looking within what makes me behave in the way that I do like, it's not something that I'm used to doing and it's quite difficult for me to do it."

- The thrill seeking tendency for engaging extreme and trouble chasing behaviour as a which is exhibited in several aspects of his life, to combat what he describes as a state of emotional numbness from years of emotional neglect within his family and so he feels like he always needs to go to the extreme in order to make himself feel things at a level that cannot be denied or repressed. As a maladaptive response to his upbringing

"I think I just look for happiness through excitement, and I'm always chasing like extremity and stuff to find happiness"

"I've always been the person like, running schemes, like, breaking the rules at school, like, doing drugs, like, you know, kind of going mental and stuff. And I think I've always felt like there's some kind of distance there and that perhaps they don't understand me. But then again, that could also derive from a lack of emotion that could also be me looking for something to feel"

"I think that I needed extremities, because I've always felt that distance. And I've always felt that emotional inadequacy, so I've always looked for extreme frameworks in which I am needed, or in which I am perceived as being someone that's worthwhile having around, I guess, yeah."

"I feel most comfortable in chaos, and when there's madness and when there's risk taking and rule breaking"

"I think I was just trying to generate excitement, and risk. Danger has always been something I've really, really craved and enjoyed. And I think that's what at the gym is too, because it hurts, right? And It's intense. If you would, if you wanna put really aggressive music on your earphones, and just walk into a gym, and just destroy yourself, you can. I think that's why I quite enjoy it"

"I suppose I was always looking for craziness. I was always looking for intensity. I was always getting really fucked up, like I'd always deliberately broken the rules. I was always deliberately being the

person that was like the ringleader, breaking the rules at school, getting people in trouble, running schemes and stuff.”

[Exercise being a venue to engage in extreme behaviour] “When I talk about exercise, when I talk about the gym, it's quite intense. So like, If I'm running, I'll be running often until I'm throwing up right. Over Christmas I went home, and I didn't have a membership to the gym at home. I was there for about a week, and I was running every day over exam season. When I did that I'd push myself to throw up at least once every other day when I was running, you know, cause I think my mind was just telling me, like, you gotta push it and you gotta just blast it. I think when I talk about the gym, whether it's cardio stuff or whether it's like weightlifting stuff”

[On creating extreme environments at the gym] “I had this big speaker, like a big, like, massive speaker, and I started bringing that in, and just started playing it in the gym. Just started playing, like, really like, uh, like aggressive electronic music and stuff. And then we were turning off, I was turning off the air conditioning unit so the whole gym would steam up... we'd always get our tops off and scream in the changing rooms and scream down the gym for like 5 minutes... You'd get people like people doing their max reps and stuff, and you have like 10 people around the bench just screaming at them, like going mental. They would go out of control”

“It is because I'm a bit of a thrill seeker, and I crave excitement and I crave danger and risk. And I do lots of things to push the limits a lot. And that's because I'm just looking for excitement, and that feeling of like, danger and excitement because that's kind of one of the few things that I'm comfortable with all that I know very well”