



**UNIVERSIDADE FEDERAL DA BAHIA
INSTITUTO DE SAÚDE COLETIVA
PROGRAMA DE PÓS-GRADUAÇÃO EM SAÚDE COLETIVA
DOUTORADO EM SAÚDE COLETIVA**

**IMAGEM CORPORAL, ESTÉTICA E "*BODYBUILDING CULTURE*" EM
TRÊS ACADEMIAS BRASILEIRAS: UMA ANÁLISE QUALITATIVA.**

(Body Image and Bodybuilding Culture in Three Brazilian Gyms: a qualitative analysis)

AZENILDO MOURA SANTOS

Salvador-BA

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Tese apresentada ao Programa de Pós-Graduação em Saúde Coletiva do Instituto de Saúde Coletiva da Universidade Federal da Bahia como requisito parcial para obtenção do grau de Doutor em Saúde Pública (Public Health PhD), área de concentração Ciências Sociais da Saúde.

Prof. Dr. Jorge Alberto Bernstein Iriart
(Orientador)

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A Comissão Examinadora abaixo aprova a Tese, apresentada em sessão pública ao Programa de Pós-Graduação Em Saúde Coletiva do Instituto de Saúde Coletiva da Universidade Federal da Bahia.

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Aos nossos pais.

"A palavra impossível foi inventada por quem desistiu."

Will Felix

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To Michael S. Bahrke, MVDF, who showed me in real life what Richard Bach once wrote "There's no such place as far away", my tribute and honour. And all those who took part in the development of this project.

RESUMO

Este estudo apresenta os resultados da tese intitulada "Imagem Corporal, Estética e "Bodybuilding Culture" em três academias brasileiras: Uma Análise Qualitativa", o qual relata, dentro de uma perspectiva etnográfica, a cultura do *bodybuilding*. Os objetivos específicos são expressos em forma de artigos, que, em conjunto, compõem a tese, requisito parcial da avaliação do doutorado em saúde pública. O presente estudo foi conduzido por princípios etnográficos. Os dados foram coletados por meio da "participação observante", como proposto por Loïc Wacquant (2002). Em outras palavras, ao mesmo tempo em que o autor estava observando o ambiente, ele também estava treinando nas academias. As três academias foram selecionadas após a aprovação do projeto de pesquisa e de acordo com os diferentes padrões sócio-econômicos dos indivíduos e das academias. Os três ginásios selecionados localizam-se em Recife, estado de Pernambuco, Nordeste do Brasil. O primeiro artigo intitula-se "*Anabolic Androgenic Steroid (AAS) Use, Body Image and Brazilian Culture: The Perfect Storm!*" A partir de uma revisão não sistemática, esse artigo discute e revela aspectos da imagem corporal, o uso de esteroides anabolizantes e da cultura do corpo dentro da cultura brasileira, de valores da estética do corpo, apresenta novas evidências desse entrelaçamento e as consequências da busca de uma estética do corpo dentro de um novo padrão "aesthetic", como uma tempestade perfeita entre os praticantes de musculação. O segundo artigo, intitulado "*Motivations for Body Construction, and Bodybuilders Lifestyle: An Ethnographic Study*" teve por objetivo descrever e investigar a busca do corpo ideal por meio de uma mudança do corpo, o estilo de vida do *bodybuilder*, e do relacionamento social no âmbito da cultura da musculação. O terceiro artigo intitulado "*Pattern of anabolic steroid use within Brazilian bodybuilding culture: controversial issues*", teve por objetivo investigar como os esteroides anabólicos androgênicos (EAA) e ergogênicos se inserem na cultura dos fisiculturistas em sua relação com a estética e a imagem corporal e o risco à saúde.

Palavras-chave: imagem corporal, cultura da musculação, etnografia, anabolizantes.

ABSTRACT

This study presents the results of the thesis entitled, "Body Image and "Bodybuilding Culture" in Three Brazilian Gyms: a qualitative analysis", which reports an ethnographic perspective and the bodybuilding culture. The specific objectives are expressed in article format, which together comprise the thesis, a partial requirement for the evaluation doctorate in public health. The present study was guided by ethnographic principles and was the approach chosen to explore the research question. Data were gathered by means of "observant participation" - as proposed by L  ic Wacquant (2002). In other words, at the same time the author was observing the environment, he was also training in the gyms. Three gyms were selected following the approval of the research project and according to different socio-economic standards of the individuals and the gyms. Data collection was based upon obtaining approval from the gym managers and owners. The three gyms selected were in Recife, state of Pernambuco, Northeast Brazil. The first article entitled, *"Anabolic Androgenic Steroid (AAS) Use, Body Image and Brazilian Culture: The Perfect Storm!" is a non-systematic review, and this article discusses, argues, and reveals aspects of body image, the use of anabolic steroids, and the culture of the body within the Brazilian culture of values of body aesthetics, and presents new evidence of this interlacing and the consequences of the search for a body aesthetic within a new "aesthetic" pattern - as a perfect storm among bodybuilders.* The second article is entitled, *"Motivations for Body Construction, and Bodybuilders Lifestyle: An Ethnographic Study"* and the purpose of this study was to describe and investigate the pursuit of the ideal body through a body change, the bodybuilder lifestyle, and the social relationships within the culture of bodybuilding. The third article, entitled, *"Pattern of anabolic steroid use within Brazilian bodybuilding culture: controversial issues"*, investigated how anabolic-androgenic steroids (AAS) and ergogenics are included in the culture of the bodybuilders in relation to aesthetics, body image, and health risks.

Keywords: body image, bodybuilding culture, ethnography, *anabolic steroid*.

LISTA DE ILUSTRAÇÕES**Artigo 3**

Figure 1. Fake Durateston®, without embossing, and no barcode.

Figure 2. Authentic Durateston®, with embossing, and a barcode.

LISTA DE TABELAS**Artigo 2**

Table 1. Table of participants, with occupation, level of education, age, years of training, and years of use/non-use of AAS. Names have been changed to protect individual identities.

Artigo 3

Table 1. Table of participants, with occupation, level of education, age, years of training, and years of use/non-use of AAS. Names have been changed to protect individual identities.

LISTA DE ABREVIATURAS

AAS - Anabolic-androgenic steroids

ADE - Emulsifiable injection containing vitamins A, D, and E

AIH - The Hospital Admission Authorization

ANVISA - Agência Nacional de Vigilância Sanitária

APEDs - Appearance and Performance-Enhancing Drugs

BID - Body image disturbance

BDD - Body Dysmorphic Disorder

CEP - Ethics Committee

CNS - National Health Council

CREF - Regional Council of Physical Education

CONFEF - Federal Council of Physical Education

DSM-IV (Diagnostic and Statistical Manual of Mental Disorders 4th ed.)

EPI - education/prevention/intervention

EPSs - Performance-Enhancing Substances

FDA - Food and Drug Administration

IBGE - Instituto Brasileiro de Geografia e Estatística

PESs - Performance-Enhancing Substances

MD - Muscle Dysmorphia

OCD - Obsessive Compulsive Disorder

RMR - Metropolitan Region of Recife

UNIVASF - Universidade Federal do Vale do São Francisco

WADA - World Anti-Doping Agency

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INTRODUÇÃO

O presente trabalho corresponde ao estudo a partir de uma abordagem antropológica que teve como objetivo compreender a construção da imagem corporal entre homens praticantes de musculação, e identificar os fatores que estão relacionados nesta construção. A proposta foi abordar as motivações para a busca do corpo ideal e os cuidados com o corpo, que, por vezes, torna-se o centro da vida desses praticantes, aspectos da vida cotidiana e as relações sociais em que estes estão inseridos, além das estratégias para a construção da imagem do *bodybuilder* (ou aquele que constrói seu corpo, também chamado de fisiculturista).

Uma pesquisa de orientação qualitativa e etnográfica relacionado ao tema proposto, ainda não havia sido feita no Recife, Pernambuco, exceto um estudo piloto sobre o uso de anabolizantes e imagem corporal desenvolvido por mim (Santos & Serejo, 2012). O estudo etnográfico da cultura do *bodybuilding*, proporciona uma visão e análise mais próxima do pensamento e o real estilo de vida do *bobybuilder*. Acredita-se que o levantamento desses dados pode servir de novas bases para pesquisas comparativas como as de cunho etnográficas já desenvolvidas por outros pesquisadores em Salvador e no Rio de Janeiro (Sabino, 2000; Iriart & Andrade, 2002, Iriart, Chaves & Orleans, 2009). Essas cidades, juntas com a cidade pesquisada trazem em sua cultura, clima e proximidade com litoral, a marca da corporeidade estampada em suas características.

Como natural do Recife, a experiência de ter nascido, sido criado, trabalhado na área de preparação física e iniciado minha carreira de atleta do atletismo em provas de velocidade nessa cidade, tive a motivação de realizar a pesquisa por conhecer as particularidades dentro da cultura esportiva da cidade. Isso trouxe uma boa inserção no campo por ter vivido a cidade, onde normalmente uma abordagem antropológica, sem conhecimento prévio do campo, são enfrentadas algumas barreiras dentro da cultura da musculação, pelo "tabu" do uso de anabolizantes. A ideia da pesquisa emergiu da experiência acumulada da minha prática como professor de educação física, de musculação e preparador físico com

especialização em fisiologia do esporte. Neste contexto, observei diferentes técnicas e recurso utilizados para a (re)construção do corpo e alteração da aparência.

Schilder (1980:11) afirma que "... entende-se por imagem do corpo humano a figuração de nossos corpos formada em nossa mente, ou seja, o modo pelo qual o corpo se apresenta para nós". A insatisfação com o próprio corpo, ou melhor, com a imagem que se tem dele, talvez seja um dos motivos principais que levem as pessoas a iniciar um programa de atividade física (Damasceno, Lima, Vianna, Vianna, & Novaes, 2005, Barros, 2005, Conti, Frutuoso, & Gambardella, 2005). A busca incessante por uma melhor aparência física dos praticantes de exercício físico é um fenômeno sociocultural muitas vezes mais significativo do que a própria satisfação econômica, afetiva ou profissional. Nesse aspecto, a atenção dada pelo discurso da saúde que visa o controle do sedentarismo por meio da prática regular de exercícios e a mudança dos padrões estéticos têm levado indivíduos a buscarem a prática do exercício físico.

Nesse sentido, as preocupações com a aparência física são enormes entre as mulheres, mas essas preocupações também parecem estar em alta entre os homens. Considerando que o campo da imagem corporal foi uma vez a preocupação com o foco sobre o "ideal de magreza", hoje os pesquisadores estão cada vez mais interessados na área da muscularidade e o corpo masculino passou a ter uma outra forma de atenção diferente do homem provedor (Thompson & Cafri, 2007). A partir do contexto do corpo do homem, a adoração ao corpo masculino pode ser observada na cultura ocidental refletidas nas estátuas gregas e romanas como a estátua de Hércules, Sísifo, o Discóbolo, etc. No Brasil, pode-se observar, na cultura do corpo para o brasileiro, que para muitos homens o objetivo é parecer musculoso e definido, e das mulheres perder peso e aumentar coxas e glúteos. Assim, investigar a população de homens chamou a atenção pela presença crescente do corpo masculino exposto na mídia. Existe uma forte publicidade sobre a imagem de corpos cada vez mais musculosos e definidos. E, ainda, pelos recursos e estratégias que os homens utilizam para atingir esses objetivos. Os meios de comunicação terminam por influenciar e lançar padrões estéticos sobre a

aparência e a imagem corporal. Atualmente, pode-se sentir o reflexo da mídia nas academias de ginásticas e nas revistas que circulam entre os “malhadores”.

Nas últimas décadas, tem havido uma compulsão pela busca da forma física perfeita nos “templos” do corpo, segundo alguns autores, lugar de culto ao corpo (Iriart, Chaves & Orleans, 2009, Estevão & Bagrichevsky, 2004, Iriart & Andrade, 2002). A insatisfação corporal pode estar diretamente relacionada com a exposição de “corpos ideais” pela mídia. Segundo Pope, Phillips e Olivardia (2000) essa insatisfação com a imagem corporal pode levar a distúrbios da imagem corporal, especialmente relacionado à muscularidade, chamado inicialmente de Complexo de Adônis, ou dismorfia muscular - subtipo do Transtorno Dismórfico Corporal (TDC) de ocorrência, na maioria das vezes, em homens que, apesar de bom desenvolvimento muscular, se veem pequenos e fracos.

Noutro aspecto, a prática de musculação é algo muito difundido na mídia, normalmente por interesses estéticos. No entanto, a musculação, ou em linguagem mais precisa, o exercício resistido, é muito utilizada entre os atletas para o condicionamento físico e em programas de reabilitação na fisioterapia. Atualmente, o exercício resistido tem sido mais valorizado e indicado pelos profissionais da área da saúde como auxiliar no tratamento de diversas patologias como osteoporose, sarcopenia, cirurgias articulares, depressão, etc. A mídia escrita e falada tem, de várias formas, mostrado à camada jovem quanto é importante cuidar da saúde, mas o estímulo tem recaído muito sobre a estética, aparência e o corpo “sarado”- um corpo livre de gordura, de rugas, musculoso, definido e um corpo que não envelhece.

Featherstone (1991:177), em seu estudo sobre a *Cultura de Consumo*, afirma que

“A nossa era é obcecada com a juventude, saúde e beleza física. A televisão e o cinema, a mídia dominante visual, a produção de ídolos persistentes que o corpo flexível e gracioso, o sorriso com covinhas definido em um rosto atraente, são as chaves para a felicidade, talvez até sua essência”.

Por isso, vivemos em uma sociedade de consumo de imagens. Dentro da cultura de consumo, anúncios, a imprensa popular, imagens da televisão e dos filmes, proporcionam uma proliferação de imagens de corpos estilizados. Além

disso, a mídia popular constantemente enfatiza os benefícios da manutenção do corpo (Featherstone, 1991:170).

Em uma pesquisa realizada a partir das matérias de capa da edição brasileira de uma revista de grande visibilidade nas academias dirigida ao público masculino, percebe-se o quanto o homem vem sendo bombardeado com chamadas de capa do tipo: "Tchau, barriga; Mais Músculos; Fique mais forte para o sexo; Aumente os músculos agora!; Perca a barriga já; Acabe com os pneus!; Troque gordura por músculos". Por trás da busca pelo corpo estampado em propaganda, existe um "mercado da aparência" entre os homens para se atingir o corpo que é valorizado na capa da revista (Guimarães *et al.*, 2012).

Neste sentido, Featherstone analisa que o mercado de imagens, onde "a vasta gama de dieta, emagrecimento, exercício e produtos de manutenção do corpo que são atualmente produzidos, comercializados e vendidos, apontam para a importância da aparência e da preservação do corpo dentro da sociedade do capitalismo tardio." - minha tradução (1991:170).

Um dos produtos mais consumidos para alteração da imagem, dentro das academias, além dos suplementos nutricionais, são os anabolizantes esteroides. O abuso de anabolizantes configura-se como um problema de saúde pública em diversos países e também no Brasil (Kicman, 2008; Sjöqvist, Garle & Rane, 2008; Frizon, Macedo & Yonamine, 2005; Kanayama, Pope, Cohane, & Hudson, 2003, Iriart & Andrade, 2002). Mesmo cientes que o Esteróide Anabólico – Androgênico (EAA) é uma substância proibida, muitos jovens não atletas e praticantes de musculação não competitivos estão fazendo uso de EAA, com o objetivo de "melhorar a aparência física" com um discurso de que a imagem do corpo hoje é algo muito importante e valorizado. Na conjuntura esportiva-amadora ou profissional, a meta é o resultado, desempenho, feitos olímpicos e a aparência não é um desígnio, ela apenas apresenta uma imagem do corpo moldado pelo

treinamento, e o uso de qualquer recurso, agente ou auxílio ergogênico¹ é apenas mais uma ferramenta integrada à cultura do esporte. Não obstante, o uso de esteroides anabólicos ou de qualquer outro recurso ergogênico foi observado, nesta tese, como o maior meio para modificação corporal e melhoria da aparência pelos praticantes recreativos – aqueles que não possuem metas esportivas ou um estilo de vida dedicado à cultura da musculação. No entanto, esses discursos não estão bem claros; os motivos e o que de fato existe por trás dessas modificações corporais e o corpo idealizado pela mídia. Estas substâncias têm provocado casos de morte e amputações nos indivíduos que tem utilizado de forma abusiva, ou seja, dose acima do que é recomendado terapeuticamente (Iriart, Chaves & Orleans, 2009, Santos, 2007, Bhasin *et al.*, 1996), podendo acarretar sérios distúrbios à saúde física, mental e social do indivíduo. Por estes aspectos este tema pode servir de várias bases de intervenção no campo da saúde coletiva.

De acordo com alguns autores, o uso de substâncias dopantes, particularmente EAA, deixou de ser um problema restrito ao esporte para tornar-se uma preocupação para a saúde pública, e os EAA são um problema maior na sociedade do que até agora tem sido reconhecido (Sagoe, Molde, Andreassen, Torsheim, & Pallesen, 2014, Sjöqvist, Garle & Rane, 2008).

O arcabouço metodológico do trabalho foi baseado, na abordagem etnográfica, utilizando as ferramentas dessa abordagem como a entrevista, participação observante e diário de campo. A escolha dessa metodologia foi inspirada nas pesquisas desenvolvidas por Loïc Wacquant (2002) que vivenciou o Boxe, e relatou sua experiência em seu livro *Body and Soul*, pela imersão aprofundada na cultura desse esporte. Wacquant afirma que “assim, como no boxe, não é possível aprender a ser atleta “no papel”. Desta forma, foi possível realizar a análise “vivendo”, da sociologia do “vivido”. Dessa maneira as impressões, observações e

¹ Segundo Santos (2007:205), em *O Mundo Anabólico*, os ergogênicos têm várias definições segundo muitos pesquisadores, mas de maneira básica e simples é qualquer recurso, técnica ou substância capaz de melhorar a capacidade de trabalho físico ou desempenho atlético. Esses recursos podem ser classificados e aplicados de diversas formas, como no aprimoramento da força, na velocidade, em um procedimento nutricional, psicológico ou farmacológico que podem ir desde as técnicas aceitáveis de concentração até o uso ilegal de esteróides anabólicos-androgênicos.

descrições foram formadas a partir da relação "face-a-face" com as pessoas. Portanto a proposta metodológica proporcionou analisar e investigar de forma muito peculiar a cultura do *bodybuilding*, a partir da visão do próprio *bodybuilder*. Apesar dessa cultura, em alguns grupos envolver uso ilegal de substâncias, não foram feitos julgamentos baseados nos preceitos acadêmicos ou das leis. No *bodybuilding*, o uso de EAA existe e se apresenta de várias formas. Os conceitos pré-concebidos acerca do *bodybuilder* e o uso de EAA, normalmente colocam todo o *bodybuilder* como usuário de anabolizantes, por sua vez compactuando com o mundo ilegal do uso de drogas. Entretanto, essas particularidades não foram o foco deste trabalho, mas uma análise de dentro para fora, em outras palavras como o *bodybuilder* vive o *bodybuilding*.

Deste modo, para alcançar essa análise foram estudados os discursos que permeiam homens praticantes de musculação sobre as modificações corporais e os recursos utilizados para construção de uma nova imagem corporal, as motivações para construção do corpo ideal, o uso ergogênico do EAA na cultura do *bodybuilder*; e, como essa construção corporal está imbricada nas relações sociais e no estilo de vida do *bodybuilder*. Procurou-se dessa maneira verificar o ponto de vista do *bodybuilder* em relação às suas próprias práticas e estilo de vida por meio da experiência etnográfica.

Este estudo é apresentado em três artigos em acordo com os objetivos específicos de examinar a imagem corporal e os ideais do corpo de homens fisiculturistas; identificar como a busca do corpo ideal e cuidados com o corpo são influenciados pelo treino e dieta, e como isso afeta a vida cotidiana e das relações sociais; identificar e examinar as consequências e as motivações para o uso de AAS; investigar os significados relacionados ao uso de AAS por fisiculturistas e como AAS e do padrão de uso de desempenhar um papel no estilo de vida musculação.

Esses artigos, em conjunto, compõem a tese, e encontram-se escritos na língua inglesa pelas influências do estágio de pesquisa durante o doutorado, realizado em Londres, no Departamento de Sociologia, na Goldsmiths College University London, ter trazido novas contribuições em relação à escrita em forma de artigos, novas referências e discussões a cerca do tema, e projeção para a

publicação/divulgação dos artigos de forma global. Uma vez que o Programa de Pós-Graduação em Saúde Coletiva/UFBA é um Programa de Pós-graduação Internacional, com cooperação e convênio com outros país, Nível 7 na Capes, e preza pela excelência nas publicações, fomos motivados à publicação nessa perspectiva. Não obstante, por serem conhecidas as particularidades e idiosincrasias características da cultura do local em foi realizado o estudo, com seus símbolos, linguagens, lugares e contextos, foram conservadas as expressões locais em português, e uma tradução livre para o inglês. Destarte, além de viabilizar o formato de publicação em jornais/revistas científicas, e apresentar resultados de forma concisa, a apresentação da tese em forma de artigos é uma das propostas sugeridas e aceitas pelo Programa de Pós-Graduação em Saúde Coletiva, do Instituto de Saúde Coletiva, para todas as linhas de pesquisa.

Os artigos estão apresentados na seguinte ordem e conteúdo. O primeiro artigo intitulado "*Anabolic Androgenic Steroid (AAS) Use, Body Image and Brazilian Culture: The Perfect Storm!*", corresponde a uma revisão não sistemática que discute e revela aspectos do entrelaçamento da imagem corporal, o uso de esteroides anabolizantes e da cultura do corpo dentro da cultura brasileira, de valores da estética do corpo, e as consequências da busca de uma estética corporal dentro de um novo padrão de "estética", como uma tempestade perfeita entre os *bodybuilders*. O segundo artigo, intitulado "*Motivations for Body Construction, and the Bodybuilders Lifestyle: An Ethnographic Study*", narra a busca do corpo ideal por meio de uma mudança do corpo, o estilo de vida do *bodybuilder*, e as relações sociais dentro da cultura do *bodybuilding*. O propósito do terceiro artigo, intitulado "*Pattern of anabolic steroid use within Brazilian bodybuilding culture: controversial issues*", por fim, investiga como os Esteroides Anabólicos Androgênicos (EAA) e ergogênicos estão incluídos na cultura do fisiculturismo em relação à estética, imagem corporal e os riscos à saúde. Alguns aspectos relacionados à masculinidade, narcisismo, e o padrão de uso dos EAA também são observados.

Na intenção de fomentar mais material de prevenção e intervenção ao campo da saúde coletiva, apresenta-se reflexões para programas de políticas públicas que podem servir como programas de educação sistemática com parceria entre órgãos

governamentais e não governamentais da saúde, da educação e do esporte como secretarias, conselhos federais, federações esportivas, ginásios e escolas.

Introduction

This work corresponds to the study from an anthropological approach that aims to understand the construction of body image among male bodybuilding practitioners, and to identify factors that are related in this construction. The purpose was to address the motivations for the pursuit of the ideal body and body care, which sometimes becomes the center of life of these practitioners, aspects of everyday life and social relations in which they are inserted, in addition to strategies for building the image of bodybuilder.

A research of ethnographic and qualitative orientation related to the proposed topic still had not been done in Recife, Pernambuco, except a pilot study on the use of anabolic steroids and body image developed by me (Serejo & Santos, 2012). The ethnographic study of the culture of bodybuilding, provides insight and analysis closest to the thought and the real lifestyle of the bodybuilder. It is believed that the survey of these data can serve as a new basis for comparative research such as ethnographic nature already developed by other researchers in Salvador and Rio de Janeiro (Sabino, 2000, Iriart & Andrade, 2002 Iriart, Keys & Orleans, 2009). These cities, together with the city surveyed bring in their culture, climate and proximity to the coast, the mark of corporeality emblazoned on its features.

As a native of Recife, the experience of having been born, growing up, working in fitness and starting my athletic career in track and field sprint events in this city, I had the motivation to search because of my knowing the particularities within the sports culture of the city. These conditions brought a successful access into the field for having lived in the city, where usually an anthropological approach, without prior knowledge of the field, facing some barriers within the culture of bodybuilding, with the "taboo" of AAS use. The idea of the research emerged from the accumulated experience of my practice as a teacher of physical education, fitness and conditioning coach specializing in sports physiology. In this context, I observed different techniques and feature used to (re)build the body and alter appearance.

Schilder (1980:11) defined body image as the "... figuring of our bodies formed in our mind, i.e., the way in which the body presents itself to us." Dissatisfaction with their own bodies, or rather the image one has about it, is perhaps one of the main reasons which lead the people to initiate a program of physical activity (Damasceno, Lima, Vianna Vianna, & Novaes, 2005, Barros, 2005 Conti, Fruitful, and Gambardella, 2005). The tireless search for a better physical appearance of practitioners of physical exercise is often more meaningful than their own economic, emotional or

professional satisfaction and a sociocultural phenomenon. In this respect, the attention given by the discourse of health that seeks control the sedentary lifestyle by regular exercise and the changing of aesthetic patterns have led individuals to seek physical exercise.

Concerns about body image in this particular aspect of appearance are huge among women, but these concerns also appear to be higher among men. The field of body image was once concerned with a focus on the "thin ideal", whereas today, researchers are increasingly interested in the area of muscularity (Thompson & Cafri, 2007). Preliminary from the context of the body of the man, worship of the male body could be observed reflected in Western culture in Greek and Roman statues such as the Statue of Heracles, Sisyphus, the Myron's Discobolus, etc. In Brazil, it can be observed in the culture of the body to the Brazilian, where for many men, the aim is look muscular and defined, and for women, it is to lose weight and increase the thighs and gluteus. Thus, to investigate the population of men drew the attention by the growing presence of the exposed male body in the media. There is a high publicity on the image of increasingly muscular and defined bodies and the resources and strategies that men use to achieve those goals. The mass media end up influencing and launching aesthetic principles on appearance and body image. Currently, one can feel the reflection in the gyms on the media and magazines that circulate among the "malhadores" (popular slang for the recreational bodybuilding practitioners).

In recent decades, there has been a compulsion to pursue the perfect physical shape in the "temples for the body" and "places of worship to the body", euphemisms for gymnasiums (Iriart, Chaves, & Orleans, 2009; Estevão & Bagrichevsky, 2004). Body dissatisfaction can be directly related to exposure to "ideal bodies" presented by the media (Featherstone, 2010). According to Pope, Phillips & Olivardia (2000) dissatisfaction with body image can lead to body image disorders, particularly related to muscularity. Initially called the "Adonis Complex" or muscle dysmorphia – this is a subtype of Body Dysmorphic Disorder (BDD) occurring most often in men, despite extensive muscle development, who see themselves as small and weak.

The practice of bodybuilding is well documented by the popular media, usually for the aesthetic interest. However, bodybuilding, or more precisely, resistance training exercise, is also widely used by athletes to improve fitness levels and in physical therapy rehabilitation programs. Currently, resistance training exercise is recommended by health professionals as an aid for the treatment of various diseases such as osteoporosis, sarcopenia (loss of muscle tissue with aging), following joint surgery and for the treatment of depression, amongst others. Television has shown youth how important preventive health care is, but unfortunately, the message has been understood by the masses as emphasizing the importance of aesthetic appearance and body "sarado" (slang used in Brazil to describe a body in very good physical shape, free of fat, with defined muscles, and a body without the "no exercise

disease"). In other words, a body free of fat and wrinkles, muscular, well-defined, and a body that does not age!

Featherstone (1991:177), in his study on the Consumer Culture states,

"Our age is obsessed with youth, health, and physical beauty. Television and movies - the mainstream visual media, present persistent ultimatums that the flexible and graceful body, the dimpled smile set in an attractive face, are the keys to happiness, perhaps even its essence!"

We live within of the Consumer Culture, advertisements, the popular press, television images and movies, that all provide a proliferation of stylized images of bodies. In addition, the popular media constantly emphasizes the benefits of maintaining the body (Featherstone, 1991:170).

In a survey conducted from the raw of the cover of a Brazilian edition magazine of great visibility at the academies addressed at the male audience, it is noticeable how much man has been bombarded by calls from cover like "Bye, Belly, More Muscles, Stay stronger for sex; Increase muscles now!; Lose belly now!; Defeat the "tires"(tires" is, as well, a slang in Brazil for the fat around the waist)!; Replace the fat with muscles". Behind the pursuit for the body plastered in publicity, there is an " market of appearance" among men to achieve the body that is valued on the cover (Guimarães et al., 2012). According with Featherstone (1991: 170)

"the vast range of dietary, slimming, exercise and cosmetic body-maintenance products which are currently produced, marketed and sold point to the significance of appearance and bodily preservation within late capitalist society. "

To facilitate the change of the body image, one of the most consumed products within the gyms, besides nutritional supplements, are anabolic steroids. According to many authors, the abuse of anabolic drugs is a public health problem in many countries, including Brazil (Kicman, 2008; Sjöqvist, Garle & Rane, 2008; Frizon, Macedo & Yonamine, 2005; Kanayama, Pope, Cohane, & Hudson, 2003, Iriart & Andrade, 2002). Even though they are aware that AAS are prohibited substances, many young non-athletes and non-competitive bodybuilders use AAS, with the goal of "improving physical appearance". Use of AAS is defended with the rationale that in today's world, body image is something that is very important and highly valued. In sports – amateur or professional - the target is the result; the performance, and Olympic ideals and regulations are not part of the plan. It is only a vision of the body, shaped

by training, with the use of any resource, agent, or ergogenic aid², as additional tools integrated into the culture of the sport. Nonetheless, it is our observation that the use of AAS and other ergogenic aids are the most effective means for body modification and improvement of appearance by practitioners – most of whom lack specific sport goals (Santos, Rock & Da Silva, 2011). However, these discourses are not well understood, the reasons, and what really exists behind these body modifications and a “perfect” body idealized by the media. These drugs and substances have caused multiple adverse health effects to the physical, mental, and social health of the individual and even death among individuals who have misused them, i.e., doses far above the therapeutic dose (Santos, 2007; Bhasin et al, 1996). For this reason this thesis' theme can be used as base for intervention in the field of public health.

According to some authors, the use of doping substances, particularly AAS, is no longer a problem restricted to sports and have thus become of interests for public health; the AAS are a greater problem in society than has so far been recognized (Sagoe, Molde, Andreassen, Torsheim, & Pallesen, 2014, Sjöqvist, Garle & Rane, 2008).

The methodological framework of the study was based on ethnographic perspective, using the tools such as the interview approach, observant participation and field diaries. The methodology was inspired by the history of Loïc Wacquant (2002) in boxing (Body and Soul), since "as in boxing, you cannot learn to be an athlete 'on paper'". Wacquant (2002) who, as a boxing apprentice, whose experience led him to compete in the ring with thoughts of leaving his academic life. In this way, it was possible to perform the analysis by "living through", from the sociologic "lived through". The impressions, observations, and descriptions were formed from "face-to-face" relationships with the study participants.

Therefore the methodological proposal afforded analyze and investigate the very peculiar form of the culture of bodybuilding, from the perspective of the bodybuilder himself. Although this culture in some groups involve illegal use of substances, no judgments were made based on academic principles or laws. In bodybuilding, the use of AAS exists and performs in various ways. Preconceived concepts about the bodybuilder and the use of AAS, usually place all the bodybuilders as users of anabolics, in turn according with the world of illegal drug use. However, these characteristics were not the focus of this study, but an analysis from the inside out, in other words how the bodybuilder lives the bodybuilding.

² According to Santos (2007:205), in *The World Anabolic*, there are various types of ergogenics aids, but simply they are any resource, technology, or substance capable of improving physical work capacity or athletic performance. These features can be classified and applied in various ways, such as improvement in strength, speed, in a nutritional procedure, psychological or pharmacological, and can range from the acceptable technical advantage to the illegal use of anabolic-androgenic steroids.

Thus, to reach this analysis, the narratives were studied that permeate male fitness practicing on body changes and the resources used for the construction of a new body image; the motivations for building the perfect body; the ergogenic use of the AAS in the bodybuilder culture; and how that body construction is embedded in the social relations and in the bodybuilder lifestyle. We sought to verify the bodybuilder view in relation to their own practices and lifestyle through an ethnographic experience.

This study is presented in three articles in accordance with the specific objectives of examining body image and the ideal male bodybuilder's body; identifying how the pursuit of the ideal body and body care are influenced by training and diet, and how it affects everyday life and social relations; identify and examine the consequences and motivations for using AAS; investigate the meanings related to AAS use by bodybuilders and how AAS and the pattern of use plays a role in bodybuilding lifestyle.

These articles, in combination, comprise the thesis and are written in English combining the influences of the research internship during a sandwich doctorate in the Department of Sociology at Goldsmiths, University of London, United Kingdom, which have brought new contributions in relation to the writing in the form of articles, new references and discussions about the topic, and projection for the publication / dissemination of articles globally. As the Graduate Program in Public Health/UFBa is a Postgraduate International Programme, with cooperation and agreement with other countries and the highest level (level 7) of the Coordination for the Improvement of Higher Education Personnel (Capes), and is committed to excellence in publications, we were thus motivated to publish this perspective. Nevertheless, known for being the particular characteristics and idiosyncrasies of the culture of the place where the study was conducted, with its symbols, languages, places and contexts, local expressions were preserved in Portuguese, and a free translation into English. Hence, besides allowing the format in newspapers/scientific journals and present results in a concise manner, the presentation of the thesis in the form of articles is one of the suggested proposals and accepted by the Graduate Program in Collective Health of the Institute of Collective Health, for all research lines.

The articles are presented in the following order and content: The first article entitled "Anabolic Androgenic Steroid (AAS) Use, Body Image and Brazilian Culture: The Perfect Storm", corresponds to a non-systematic review which discusses and reveals the interlacing aspects of the body image, the use of anabolic steroids and the body culture within of the Brazilian body culture, the aesthetic values of the body, and the consequences of the pursuit of a body aesthetics inside a new standard of "aesthetics" as a perfect storm among bodybuilders. The second article, entitled "Motivations for Body Construction, and the Bodybuilders Lifestyle: An Ethnographic

Study," chronicles the pursuit of the ideal body through body change, the lifestyle of the bodybuilder, and social relations within the culture of bodybuilding. The purpose of the third article entitled "Pattern of anabolic steroid use within Brazilian bodybuilding culture: controversial issue" finally investigates how anabolic steroids (AAS) and ergogenic aid are included in the culture of bodybuilding regarding the aesthetic side body image, and health risks. Some aspects related to masculinity, narcissism, and the pattern of use of AAS are also observed.

Summarily, with the intention to foster more material to prevent and cause intervention in the public health field, to present reflections to public policy programs that could serve as systematic education programs with partnership between governmental and non-governmental of health, the education and sport as secretariats, federal councils, sport federations, gymnasiums and schools.

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THE OBJECTIVES (Objetivos)General

- Analyze the construction of body image among male bodybuilders.

Specific

- Examine the body image and body ideals of male bodybuilders;
- Identify how the pursuit of the ideal body and body care are influenced by workout and diet and how this affects daily life and social relationships;
- Identify and examine the consequences and the motivations for using AAS;
- Investigate the meanings related to AAS use by bodybuilders and how AAS and the pattern of use play a role in the bodybuilding lifestyle.

"One step ahead and you are not
in the same place"
(Chico Science,
Brazilian Popular
Composer).

"Um passo frente e você não
esta mais
no mesmo lugar"
(Chico Science).

Theoretical framework of the study

1.1 Perspective about the body

In the *Body Taboo (Tabu do Corpo)* (2006/1983), Rodrigues (2006:48) concludes that "[...] each society elects a number of attributes that make up what man should be, both intellectually and morally, and the physical point of view." And, from the beginning of his work, that "like any other reality in the world, the human body is socially conceived, and that the analysis of the social representation of the body offers one of the numerous pathways access to the structure of a particular society." (idem)

Rodrigues performs an analysis that includes the body manifestations of a consumption society where body image is another image which is formed - a point also emphasized by Featherstone (1991) in the *Body in Consumer Culture*, analyzing consumption society images. Regarding this aspect, Rodrigues says, "[...] we recognize in our body and in the people's body who relate to us, one of the many indicators of our social position and carefully manipulated depending on that charge. We see in our own day-to-day lives the body becoming increasingly laden with connotations physically and sexually liberated in advertising, in fashion, in movies and in novels; cultivated hygienic, dietetic and therapeutically; objects of obsession of youth, elegance, and care" (2006:49). It is evident how appearance is relevant as a pattern of behavior in social life by assigning its value to man, for the "culture dictates standards in relation to the body". And, "these rules tended the individual at the expense of punishments and rewards to conform, to the extent that these patterns of behavior, if you submit such as natural, as the development of beings alive", says Rodrigues (2006:49), in congruence with Schilder, who previously stated this in his "The Image and Appearance of the Human Body"

(1953). We are interested in this congruence because, from the study of images of the body, we can analyze appearance in a society that consumes images (Featherstone, 1991:179) and that, "[...] in anthropology, two things can often be the same thing and that is a fact, usually two or more, according to the variation of cultural systems." (Rodrigues, 2006:51).

According to Rodrigues, "considering all modeling suffered, we can see that the body is little more than a mass of modeling to which society prints forms according to their own rules: ways in which society projects the face of its own spirit" (2006:62). The statement seems simple in Rodrigues' reductionism, but in the culture of the academy, it seems that the body can be modeled to the desire of the "client". This is an important point in practice to be confronted.

1.2 Body and customer society

According to Cesar Sabino (2002: 157), "the body besides/also represents the truth of the individual, it is also a showcase. The image that the individual presents is exposed, and an alleged route to success or failure. Given the imperative to stay forever young, strong, lean, beautiful, and healthy-looking, we often do not hesitate to use drugs, exercise, and products - with the aim of improving this showcase - the "machine" [...] as well as the physical form that is raised to a new object of worship in the consumer society of the body, as content becomes the mere object of monetary exchange". This aspect is also well discussed by Featherstone (1991) regarding consumer culture and consumption of images, in his study of the body in consumer culture. He says that, "In fact, the internal logic of consumer culture depends on the cultivation of an insatiable appetite to consume images. The perception of the body in consumer culture is dominated by the existence of a wide range of visual images" (Featherstone, 1991:178).

1.3 Identity

Sabino (2004), in his thesis "*O peso da Forma*", sought to understand the worldview and social organization of bodybuilding gyms in Rio de Janeiro. In an ethnographic interview study among 310 male and female bodybuilders (Sabino's definition of those who devote much of their time developing muscle mass much

above average, but do not always participate in competitions), Sabino sought to understand the meaning of drug use (primarily anabolic-androgenic steroids), other drugs, diets, and the health market. He also sought to understand (document) items involved in the construction of the personal bodybuilder through rites of passage. This study is a point of reference for the richness of the testimonials and the experience of the present author, who uses the knowledge that Loïc Wacquant experienced (2002:121) in boxing (*Body and Soul*), since "as in boxing, you cannot learn to be an athlete 'on paper'".

Even in the studies by Sabino (2000), he states that "the construction of identity 'marombeiro' is realized through a learning process of socialization" in what he called the field of bodybuilding. However, in the research environment where the present author worked, a synonymous term that is often used is "blacksmith", because he/she is an "iron lifter". Sabino uses the category "field" in accordance with the theory of Bourdieu (1984, 1989). For the present author, "field" refers to the space in which the relations symbolically express power. The field is organized, from the unequal distribution of capital and the amount of capital (economic, social, body, or cultural competence) that an individual holds; it determines his/her position in the hierarchy of the field.

Goldenberg (2002:20) notes that "in a particularly unstable and changing and historical social context, in which the traditional means of production of identity - family, religion, politics, work, among others - are weakened, it is possible to imagine that many individuals or groups are appropriating the body as a means of expression (or representation) of the self". And, he also notes "the widespread ideology of bodybuilding - one's own call to the "culture of fitness" - which is based on the concept of beauty and fitness products as a work of the individual over his body, [...that] seems to rely on this type of ownership " (Goldenberg, 2002: 21).

1.4 Motivations

Sabino (2002:157) points out "The 'imperfection' physics of ordinary individuals confronted at every turn, with images of 'perfect bodies', screens in cinemas, TV, computers and outdoors, such images of models, carefully selected, retouched and enhanced by techniques of computer graphics and photography, tend to lead to the

perseverance of such a perfect body under the aegis of happiness. Thus, exaltation of development culture in cultures that hyper-invest in physical construction, leading millions of people to consume daily all types of raw products and symbolic drugs, films, magazines, exercises, diets and dietary supplements, moving the huge and growing industry of healthy bodybuilding gyms forward as production plants of a sort, making bodies to be consumed by the logic of the market".

To Sabino (2002:157), "Individuals who take 'bombs' (steroids), as they say, usually do so out of a desire to integrate into the dominant culture. Diversion is accomplished through a process that constitutes an attempt to frame the dominant social system. [...] The use of prohibited drugs to build a muscular body is not in order of systemic subversion, but as an attempt to harmonize with the prevailing aesthetic standards in the dominant culture, which allows tuning the acquisition of status, not only within the group, but in general society".

The individual in the organization of the field of bodybuilding, according to Sabino (2000), has to adjust the body according to these social roles and, as the process is fast and effective, it frequently requires the use of drugs.

1.5 Body Image and Identity

David Le Breton and Ortega & Zozarnelli, through their research and discussions on the theoretical framework, also support our reflections and discussions about the topic of body image formation as a social influence and identity formation in this context. Another highlight is author Gilles Lipovetsky, the French philosopher, who brings important contributions to the debate on "narcissism and spectacle". Le Breton (2011:9) writes that "The West body is the place of the caesura, the objective grounds of sovereignty of the ego. It is the unending part of individual, the "factor of individualization³" in communities where the social division is permitted."

³ "For Durkheim (1989), the body is the individualizing factor, since bodies are not only distinct from each other as well, to occupy different points in time and space, are the medium in which the collective representations come to be colored differently."

Le Breton advances his analysis and states that "In our Western societies, the body is therefore the sign of the individual, the place of their difference, their distinction, and at the same time, paradoxically, it is often decoupled due the dual heritage that always weighs on its western characterization" (2011:11).

In analyses by Le Breton, it may be noted that the image of this beauty is strongly linked to the physical self, health, and a perception of what the individuals themselves perceive but, in fact, this individual is trapped in this body shell, healthy in the sense that it points out that "If there is a 'liberated body' [legacy of dualistic formulation], it is a young, beautiful, physically flawless body. Only there, in that sense, does 'body release' occur when the preoccupation with the body has disappeared. And we are far from it" (Le Breton, 2011:11).

These pictures are of a beautiful body of a young, healthy, flawless body, and within the symbolic aspect of the beautiful body, are the representations of the body made in present times: "Social representations give the body a certain position within the general symbolism of society" (Le Breton, 2011:17). And, "The representations of the body, and the knowledge that is reached, are tributaries of a welfare state, a worldview and, within the latter, a definition of the person. The body is a symbolic construct, not reality itself" (Le Breton, 2011:18). Within this perspective we "Today we are witnessing an acceleration of social processes without the accompanying cultural level. A divorce is often detectable between the social experience of the actor and his ability to symbolic integration" (Le Breton, 2011:19).

1.6 Culture of bodybuilding

Regarding the culture of bodybuilding, Le Breton (2003:41) states that "to the bodybuilder, this only concern of acquiring muscle mass, your eyes, and fat is a parasite that mobilizes a permanent elimination strategy. [...] Feeding outlines an overall discipline that takes time, hours of the day, training to become the ascetic form of a life dedicated to muscles and appearance, a liturgy of the body to be

modeled without respite." Perspective also operates according to Lipovetsky (2005).

In this analysis about appearance, the author (Le Breton) goes beyond and notes that "the bodybuilder builds his body the way a meticulous anatomist will look just at his subcutaneous appearance." (Le Breton, 2003:42). Body image is always built before the mirror of the weight room, his/her appearance in the mirror, because "the rooms have mirrors." There is a price to be paid for the construction of this new identity: "the pain as a symbolic confrontation to the limit and temporary stop - an identity to be built." (Ibid, 2003:43).

The search is for an identity that seems to set up a possible suffering, in search of an image of a different body that the individual possesses. However, it seems that "the more you suffer, the more the muscles develop and are valued" (Le Breton, 2003:44). The pain appears as a "symbolic confrontation to the limit and temporary stop, an identity to be built" (Ibid, 2003:41). Thus, "the pain becomes diffuse joy that bodybuilders often compare with the sexual act" (as a way of pleasure) (Ibid, 2003:44). One justification is that "the will is the concern of changing the look of themselves and looking at others in order to feel full existence. By changing the body, the individual intends to change life, change the sense of identity" (Le Breton, 2003:30).

The practice of body modification, also called "self-management" by Le Breton, "are voluntary modes of production itself, modeling of personal identity [...]", which are not only restricted to "the fact of resorting to psychopharmacology to get a "prosthesis of the senses", but revealed in other social practices because they are using vitamins, body shape modeling, schemes, etc. (Ibid, 2003:66).

In the analysis by Courtine (1995), the body requires the culture of muscle, which is a central element to the culture of the body in the United States, and we can also see today, the massive growth of this culture in Brazil. A unique, critical point of the analysis is the notorious Courtine language of strangeness related to the bodybuilding event, when he speaks of "bodies of swollen men, artificially tanned ...", "the rambling of anatomies", "unusual muscle masses that do not serve to race

nor to throw, and so with that, break everything within the sports logic, associated with muscles that are used to move." In the hard and deep critical analysis of a culture, sometimes the "temples" of academic knowledge are labeled as a subculture. Even in the case of a division, the "sub" seems to disregard the value of this culture, as in the speech of Courtine (1995), or even common sense, or even other ethnographies made trying to access and describe the world of bodybuilding culture (Monaghan, 2002, Monaghan, 2001).

However, each culture is a unique case, and in this particular case what can be seen is the ascetic dedication to the culture of muscle. In this respect, the culture of the muscles of bodybuilders in the U.S. is, for example, how the image is strongly valued and ritualistic: the competitions analyzed by Courtine, where there is a duel, and images, placed in this context are "pure appearance fights".

We see that physical appearance has been strongly valued in our society, and what makes us observe new types of consumption in postmodern society. The ideal today is massively widespread and what is valued by mankind is the muscular type, defined, fat-free, with controlled diets, use of specific cosmetic and practical exercises, almost in a religious way. A way, at last, a body asceticism. Discipline that requires training and elimination of what "sin" is, in this sense here, in a theoretical- philosophical approach, is the elimination of "dirt", and of the "sick body".

The practice of bodybuilding gives the practitioner the chance of, or the opportunity to enter the social space where the body is worked, molded within the standards of bodily perfection as part of this universe. A universe that values the culture of appearance, and therefore there is entanglement between spending and consumption. Even if there are pressures from the media for triggering, culminating in a subject's dissatisfaction with the body they have, the reflection in this essay is not on dissatisfaction with the body image and, weight practitioners who use anabolics, but the acquisition of a new identity to enter bodybuilding in the universe. For this form of consumption, being intertwined within this universe, involves control of calories, protein compounds, and the use of vitamin supplements, an ascetic discipline, hedonistic behavior, the fighting of fat and

obesity, and steroid use. These are the messages passed on by the culture of appearance that hits the practitioner, and are absorbed by those who undergo the practices of bodybuilding in order to acquire a new identity. Certainly not all of them are in the practice of bodybuilding, and who actually are in this analysis a new identity, but they were led, and seduced by the desire to enter this universe, seduced by the "consumer body" society.

1.7 Body Image

In another analysis, in the aspect of body image and its interaction with the social, psychological and cultural aspects, according to Bryan S. Turner, and like for us, the work of Paul Schilder was in a significant way an integration of psychological, sociological, and a cultural understanding of body image as a fundamental aspect of personalization and social interaction (1992:56). In this context, and according to Turner, Schilder, in his original work, "*The Image and Appearance of the Human Body*" (1953), expanded the field of study for this present study.

Schilder (1980:94) has stated that the "vision" has a huge stake in our relationship to the world and "has a major role in body image." But, the visual experience he refers to is experienced through action, and thus it is "through actions and determinations, that we give the final shape to our bodily self."

In the study by Schilder, "bodily images are never isolated. They are always surrounded by the body images of others. [...] Our body image and body image of others does not depend primarily on one another. They are equally important and cannot be explained by another. There is a continuous exchange between parts of our image and the body images of others. There is projection and personification. [Furthermore] We hold in all the body image of another person (identification) or deliver our body image as a whole." (Ibid, 1980:208-9).

Thus, "body image is present in every experience" (ibid., 1980:242). About embodiment, Schilder is emphatic in relation to body image, because "no body image is without personality. But, the full development of the personality of the other and its value is possible only through the body and body image. So, preservation, construction, and structuring of body image become this other sign, a

sign and symbol of the value of its integrated personality" (Ibid., 1980:243-4). Schilder confirms, saying that "we can take parts of the body from other people and to our body image, incorporate them [customization] "and we can also identify with the people, to enter fully into the role of them (Ibid, 1980:259) (emphasis added).

1.8 Subjectivity

Within a theoretical perspective, but in support of a socio-cultural approach, Ortega & Zorzanelli, in *Body of Evidence*, on the "cultural context of the bodily ascension" discuss the ways contemporary subjectivity are undergoing a process of somatization and externalization (leaving our "inner space" a source of individuality) and suffering a process of modification where it moved to "define key aspects of the body and subjectivity in biomedical terms" (2010:63). As a result, the forms of subjectivity are mainly composed by the experience of making visible to others. The new relationships with the body began to take on a medical vocabulary to replace our aspirations and fear. This includes the practice aiming to reform and improve the body from diversity, (psycho) pharmacological, and mechanical (Ortega & Zorzanelli, 2010:64).

Somatization and the externalization of subjectivity have trends in normality and pathology. In this perspective, the man considered normal / healthy develops various physical and aesthetic concerns, such as a "search for aesthetic standards", and pathology that feature new forms of physical and mental "suffering" (Ibid, 2010:66). In this context, Ortega & Zorzanelli report that it can be said that the search for aesthetic standards is seen as linked to the pursuit of health and is a result of outsourcing and somatization of subjectivity in bodily and biomedical ??, resulting in terms of the modus operandi of contemporary subjectivity.

"The context of excessive emphasis on an optimal health standard establishes new relationships within themselves and with each other..." (Ibid, 2010:74). "On the horizon of this process, the optimization of body patterns becomes a parameter of measure and value for the man usually known as the modern man. Ideal models are created based on the subject of physical performance and set new parameters of merit and recognition whose bases are hygienic rules. Individual actions shall be

directed in order to obtain better fitness, longevity, or more prolonged youth" (Ibid., 2010:75).

Ortega & Zorzanelli reflect on the "have and be" and "look and be," recalling Guy Debord in the *Society of the Spectacle*, that "in the contemporary utopia of perfect health, there has developed an equivalence between essence and appearance, and bodily attributes are no longer guardians of an inner identity, they are the very identity of the individual" (Ortega & Zorzanelli, 2010:76).

1.9 Body Modifications

The term body modification refers to a long list of practices that include piercing, tattooing, branding (marking with an iron), cutting (reduction or incision), binding (moorings) and implants to change the look and body shape. But the list goes on, including gymnastics, bodybuilding, anorexia, bulimia, and fasting (Featherstone, 2000:1).

The authors (Ortega & Zorzanelli) explore, with technological developments, and the industry feeds the body changes as it "limits how the body can be modified and rebuilding expanded, with the help of the biotechnology industry." "But in somatic culture, body changes are a case sui generis body customization. In contemporary times, the practices of body modification [...] provide us with a broad spectrum of uses that have been admitted to the body as performance stage" (Ortega & Zorzanelli, 2010:80).

The bodies that project the consumption of images, impersonation, and individualization assume new shapes to suit the ascetic standards. Such that "These new definitions of body force us to understand that" [the] same way you cannot say that the body and the experience that makes it become less true with silicone, or that good psychic being is less authentic under the effect of antidepressants, and it cannot be said that intimacy, built in the artificiality of communication technologies, is less authentic and true. All these instruments and devices assist the contemporary individual for which the new standard to be met seems to be autonomy and self-responsibility" (Bruno, 2004: 119 *apud* Ortega & Zorzanelli, 2010:82).

"The ideology of perfect health suggests that a body outside the standards of self-control stems from a lack of character, lack of management in itself." "Thus, individuals are driven to self-reproach for the minimum deviation of rules of self-control, but are socially compelling ways to waive the responsibility for the lack of it" (Ortega & Zorzanelli, 2010: 95). Analyses by Ortega & Zorzanelli, along with the studies of Schilder, within the aspect of body modifications, endeavor to observe the motives of these changes to adapt to a contemporary standards body and, speak of somatization and body customization. These analyses also explore how the body became the capital within a "spectacularized society."

"The ideology of perfect health suggests that a body outside the standards of self-control stems from a lack of character, lack of management in itself." "Thus, individuals are driven to self-reproach for the minimum deviation rules of self-control, but are socially compelling ways to waive the responsibility for the lack of it" (Ortega & Zorzanelli, 2010: 95).

Likewise, Lipovetsky extends aspects of body image in a post-narcissistic moral context and brings a focus on performance and the forms used in the product sport-like body worship and marketing. For Lipovetsky, "The sport got rid of the lyricism of the virtues and entered the cadence of post-moral logic of narcissism and spectacle. Essentially, mass sport is today an activity centered on the pursuit of pleasure, the energetic dynamism, experience yourself." And, "It is not the concept of virtue that guides the sport, but the body emotion, pleasure, good physical and psychological feelings" (Ibid, 2005:89).

In competitive sport appearance (not including bodybuilding) there is no plan. Our thesis is that an ergogenic aid is a method of body modification and improvement of the appearance of recreational practitioners. An ergogenic aid has various definitions according to several researchers, but in a manner basic and simple, it is any resource, technical or substance, capable of improving the physical work capacity or athletic performance (Santos, 2007). These features can be classified and applied in various ways, such as improvement in strength, speed, in nutritional

procedures, psychological, or pharmacological, that can range from the technical to an acceptable concentration of illegal use of anabolic-androgenic steroids.

Lipovetsky is even more critical and writes that "After the utilitarian goals, the products of clearance of cultural industrialization, the sport itself ends up being conquered by the wave of the ephemeral, the marginal hybridity, by the lure of novelty. No longer the aristocratic origins of the sport, but the fashion of sport to suit every taste; accelerated promotion of 'product - sport'; marketing of optional versions that match the narcissistic cult of the body and the stimulus" (2005: 91). "The post-moralist moment of sport corresponds to the phase of the hyperbolic cult show, with the strategies of brand communication, with personalization and professionalization of champions" (Lipovetsky, 2005:92). This assertion of Lipovetsky is in congruence with what Debord has analyzed and what we are currently witnessing.

In the same aspect that the use of anabolics have been used in sports culture, they have been used by the recreational practitioner, and this is taken into account in both analyses, because it is a break with ethical distinction, but connected through fair and moral play. Therefore, the same author (Lipovetsky) warns that "To dope is not a joke! Before, the sport was designed as a vehicle for moralizing, an instrument for the achievement of a higher ideal purpose. [...] The sport is no longer displayed as a school of morality, on the contrary, it is the sport that needs to be buoyed by itself" (Lipovetsky, 2005:95).

In this respect, in the constitution of the use of anabolic steroids, according to Keane (2005:192), it is viewed not as a problem of drug use, but as a symptom of cultural disorder or psychopathology that is a crystallization of culture. Paraphrasing Bordo (1999), and in accordance with Roberts (2006:64), Thus, "[...] men do not lose the opportunity to make use of these resources to approach the ideal of aesthetic body that society sets, highlighting, concealing, or diminishing particularities of their appearance: they undergo special diets, practice physical exercises, paint themselves, or lie down on surgical operating tables - because they believe that doing so will increase the vitality of its organic and social constitution".

Body image appears, in contemporary readings, as a goal of social projection of body and self-representation. That is, the individual is responsible for the maintenance and construction of self, and if the individual is not in this role, it demonstrates a character flaw.

1:10 Masculinities and Body Image

Some researchers have emphasized the significant number of young AAS users who do not participate in competitive sports yet, for these users, it is important to improve their appearance, muscularity, and masculinity as reasons for using AAS (Keane, 2005:194). Apparently, a muscular man is related to power and masculinity that, according to Pope et al. (2000:79), is associated with an "erosion of conventional notions of male identity."

According to Connell and Messerschmidt (2005), the concept of masculinity is related to the male group whose representations and practices are socially legitimized in the reference to the experience of the male. It is a way of thinking about a certain "social organization of masculinity". The idea of hegemonic masculinity, formulated two decades ago, has considerably influenced recent thinking about men, gender, and social hierarchy (Connell & Messerschmidt, 2005) and provided a link between the growing research field of studies of men (also known as studies of masculinity and critical studies of men), popular anxieties about boys and men, and feminist accounts of patriarchy, gender, and sociological models.

According to Connell (2005), "to the extent the term can be briefly defined at all, is simultaneously a place in gender relations, the practices through which men and women engage that place in gender, and the effects of these practices in bodily experience, personality, and culture."

In this context of masculinity, Miguel Vale de Almeida (2000) in *Senhores de Si*, discusses an anthropological interpretation of masculinity and selected points about "being a man " and says that "being a man", day-to-day, in social interaction, in ideological constructions, is never reduced to sexual characteristics, but to a set of moral behavior attributes, socially sanctioned and constantly reassessed, traded,

remembered, [...] always under construction. " Almeida (2000:150) argues that masculinities are constructed not only by power relationships, but also by interrelationships with the division of labor and patterns of emotional connection. Finally, in this context, it is evident that many men want more muscle definition than slimness, and that is not new. But more recently this phenomenon has been described as "The masculine ideal of muscularity" (Ricciardelli & McCabe, 2004).

Sabino (2000), in her ethnographic study, *Apollo's Drugs: The consumption of Anabolics in Bodybuilding Gyms (As Drogas de Apolo: O Consumo de Anabolizantes em Academias de Musculação)*, calls our attention to a kind of ethical masculinizing where there is a growing appreciation of the muscle and hierarchy of reality from values related to this cultivation, "also seems to occur both in men and women, enhanced searching of a masculinizing ethics that rebates not only in the attitudes, practices, but also in the symbolic dominion." What Sabino observed in such valuation, called hegemonic masculinity by Connell and Almeida (*op cit*), often relates to the use of specific drugs associated with physical exercise and the cult of the body.

Pope, Phillips & Olivardia (2000) have observed that existing messages in the media and in modern society exert a social pressure on developing the image of a "supermale" (supermacho) that hardly any man can achieve it. And, in this sense, the symbolism of the culture produces the male body as spectacle and commodity that will interfere with what Keane (2005) calls the experience of masculinity.

Romeo Gomes (2008) has called to our attention, in his study on *Male Sexuality, Gender and Health*, the remarkable approach and interlacing of a conceptual framework - in his words - about sex and gender toward how the cultural context will influence the understanding of male and female. Thinking that masculinity is associated with the word man, leads to "thinking about being a woman", because to define male gives rise as to what is opposed to female. In this concept, gender is a cultural attribute, where the male and the female take their features from multiple cultures. And, the gender models are built on a relational perspective. These are some of the points highlighted by Gomes in his analysis of several authors of reference.

Alan Klein (1993) discusses the construction of masculinity while investigating the "subculture" of bodybuilding in what he calls "hyperbolic subculture" (p.3). Klein, refers to "sexual dimorphism", a term which is used to describe the differences between men and women controlled by culture. Klein says that "although masculinity is socially, not biologically determined, use is made of certain biological conditions, and in this case, the male physical form as a means of assisting in the determination of masculinity" (1993:4). The author highlights two axes in his discussion: the most traditional and primitive forms of masculinity have always been assigned a high value to muscular men, less for those who do not possess such characteristics. Attractiveness, virility, courage, and other "manly" attributes have been weighted along these lines to form the first axis and the second axis is at one end, and masculinity and femininity on the other. Musculature and what it connotes - power, domination and virility - again focuses on the masculine side, with their opposite traits on the female side.

What draws attention to Klein's approach is that the author considers, historically, bodybuilding as the study of men, not only because men make up the vast majority of bodybuilders or because they control every niche of power of sport, but because the muscles - and building them - are standard in that men feel compelled to strive to rationalize and repudiate. Women simply do not have to deal with this in a mandatory (1993:6) way.

In 1993, Alan Mansfield and Barbara McGinn drew attention to a strong cultural association between muscles and masculinity. "Growing muscles" is an important aspect of male body contouring. The relationships of muscularity have been made in some studies, marking the historic connection between muscle - man - power, as a sort of embodiment of the power of the muscles (Santos, 2008:108).

1:11 Anabolic Androgenic Steroid (AAS) Use

Background: What are AAS and how do they work?

Several reports document the complete history of the male hormone, testosterone, including the early endocrine and biochemical research leading to the creation of anabolic-androgenic steroids (Freeman, Bloom, & Mcguire, 2001, Hoberman & Yesalis, 1995). The pioneers of hormone research could not have imaged what

changes their "new therapy" would bring to the world. In 1848, Arnold Berthold (1801–1863) discovered the link between the physiological and behavioral changes resulting from castration and a substance secreted by the testes. In 1889, Charles Edouard Brown-Séquard (1817–1894), a French physiologist, reported and promoted to the world his "Elixir of Life", a substance he claimed had increased his physical strength, mental abilities, and appetite following self-injection with an extract derived from the testes of dogs and guinea pigs (Freeman, Bloom and McGuire, 2001, Hoberman & Yesalis, 1995). This information, even without evidence, encouraged researchers worldwide to pursue a new field known as "organotherapy" (Santos, 2007, Bahrke & Yesalis, 2002, Hoberman & Yesalis, 1995). In 1902, when William Bayliss (1860–1924) and Ernest Starling (1866–1927) suggested that chemical secretion rather than nervous control was responsible for the physiological occurrences they observed, these substances were ambiguously referred to as "chemical messengers". Later, William B. Hardy (1864–1934), proposed the name 'hormone'. Testes proved to contain a more powerful androgenic factor, when in 1929 researcher Adolf Butenandt isolated 15mg of androsterone. Later, in 1935, these studies served as the basis for two groups, A. Butenandt and G. Hanis of the Schering Corporation in Berlin and Leopold Ruzicka and A. Wettstein of Ciba, shared the 1939 Nobel Prize for the synthesis of testosterone (Freeman, Bloom, & McGuire, 2001, Hoberman & Yesalis, 1995).

Anabolic-androgenic steroids (AAS), also known as "steroids", include hormonal drugs or substances that are chemically related to testosterone, the primary male hormone (Kuhn, 2002, Yesalis, 2000). Testosterone is responsible for the androgenic (masculinizing) and anabolic (tissue-building) effects that are observed during puberty and aging (Clark & Henderson, 2003, Yesalis, 2000). There is never a complete separation between the anabolic and androgenic effect of AAS (Santos, 2007; Yesalis, 2000). However the appropriate name for this class of hormones is anabolic-androgenic steroid hormone (Yesalis, 2000). AAS are substances with therapeutic purposes and were originally developed for the treatment of erectile dysfunction, hypogonadism in males, delayed onset of puberty, and to promote muscle growth. AAS continue to be used in the treatment

of chronic conditions such as HIV/AIDS, cancer, major burns, anaemia, liver and kidney failure, breast cancer, and muscular dystrophy, among others (Clark & Henderson, 2003, Talih, Fattal & Malone, 2007).

Anabolic steroids have been used for many years for non-therapeutic purposes (Kanayama, Barry, Hudson, & Pope, 2006, Kanayama, Pope, Cohane, & Hudson, 2003). The use of anabolic steroids among high performance athletes is well-known as a form of doping, with penalties for violating the Code of the World Anti-Doping Agency (WADA, 2009). AAS increase physical strength, endurance, athletic ability, and muscle mass because they enhance protein synthesis. AAS have admittedly been used for decades by professional and non-professional athletes, Olympians and college students. Today, with a higher incidence of use and a greater emphasis among bodybuilders, young people and adults to improve their physical appearance, more adolescents than ever before are interested in the cosmetic benefits of AAS (Kickman, 2008, Clark & Henderson, 2003).

Even with the focus on identifying the reasons for using AAS, the survey conducted by Parkinson and Evans (2006), among 500 users of AAS, revealed that almost four out of five study participants were non-athletes using AAS for aesthetic reasons. Almost 100% of AAS users reported subjective side effects. Adverse health effects reported for AAS include acne, insomnia / sleep disturbances, fluid retention / edema, mood changes, gynecomastia, testicular atrophy, stretch marks (streaks), sexual dysfunction, and pain at the injection site (Kickman, 2008, Santos, 2007, Parkinson & Evans, 2006, Yesalis, 2000). Parkinson and Evans (2006), in an investigation into the habits of drug use among 500 users of AAS, found among these users over 78% were non-competitive bodybuilders and non-athletes and that nearly 60% used 1000 mg of testosterone per week, a dose considered supraphysiological and abusive because it is far above the normal, daily production of testosterone in men (Pope, Kouri & Hudson, 2000, Bhasin et al, 1996).

1:12 Relationship between use of AAS and body image

The relationship between use of AAS and body image in male bodybuilders was analyzed by Blouin and Goldfield (1995) who found that the greatest concerns with body image were among those who were below the average weight for height,

which may cause serious problems of low self-esteem and social inadequacy. As a result, males who find themselves with low weight can pursue bodybuilding, use of male hormones, and AAS to obtain an exaggerated visual "*hipermersomórfico*". These trends of cultural ideals for the ideal body image may contribute to psychopathology (Leit, Pope, & Gray, 2001).

In psychiatric and popular texts that identify the emergence of disorders of body image in males, the use of steroids and bodybuilding are linked to eating disorders and other body practices predominantly seen in females, such as plastic surgery. These disorders and practices are interpreted as reflections of some of the "core evils of contemporary Western culture, especially its obsession with the body and its rigid attachment to the ideals of embodiment (Bordo 1997: 139).

Regarding body image, an individual may develop a distorted body image. A distorted body image comprises the perception of one's own body as heavier or as larger than it really is, especially after comparison with models of beauty in the media (APA, 2000). Concerns about body image in this particular aspect of appearance are greater among women, but these concerns also appear to be high among men. Whereas, the field of body image was once concerned with the focus on the "thin ideal", today researchers are increasingly interested in the area of muscularity (Thompson & Cafri, 2007). Male AAS users often report concerns with body image. Two seminal studies have reported cases of a syndrome originally called "reverse anorexia nervosa" with use of AAS (Pope, Gruber, Choi, Olivardia, & Phillips, 1997; Pope & Katz, 1994). The use of AAS in men appears to be analogous to food restriction among women with eating disorders, since both represent the adoption of extreme behaviors to achieve a particular body ideal (Cafri, Thompson, Ricciardelli, McCabe, Smolak, & Yesalis, 2005).

According to Pope, Phillips & Olivardia (2000), dissatisfaction with body image can lead to body image disorders, particularly related to muscularity. Initially called the "Adonis Complex" or muscle dysmorphia - this is a subtype of Body Dysmorphic Disorder (BDD) occurring most often in men, despite extensive muscle development, who see themselves as small and weak. Individuals with this syndrome (which generally appears, but not always, in males) become

preoccupied that they do not look sufficiently muscular, as opposed to becoming preoccupied with a more specific body part such as the nose or hair (Kanayama, Brower, Wood, Hudson, & Pope, 2009; Pope, Gruber, Choi, Olivardia, & Phillips, 1997; Pope, Katz, & Hudson, 1993). This disorder was first described in a seminal study as 'reverse anorexia' in 1993 (Pope, Katz, & Hudson, 1993) and was based on the observation that men with this condition perceived themselves in the mirror as small and weak, even though they were actually large and muscular.

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Article 1.

***Anabolic Steroid Use, Body Image and Brazilian Culture:
The Perfect Storm!***

Anabolic Steroid Use, Body Image and Brazilian Culture: The Perfect Storm!

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Abstract

The relationship between Appearance and Performance-Enhancing Drugs (APEDs), such as Anabolic-androgenic steroids (AAS), and "Body Image Construction" or construction of the "Ideal Body", is the basis of this thesis which posits that the most common behavior associated with APED use is the pursuit of weight gain/loss appearance strategies to improve the body. From a non-systematic review, this article discusses, argues and reveals aspects of body image, the use of anabolic steroids and the culture of the body within the Brazilian culture such as values of body aesthetics, and presents new evidence of this interlacing and the consequences of pursuit for a body aesthetics within a new "aesthetic" pattern that can best be described as a "perfect storm" brewing among bodybuilders. The combination of factors discussed include: the extensive use of appearance-enhancing drugs/substances (APEDs and AAS) in Brazil; the great Brazilian beaches with warm, sunny weather, media worship of the "worked body"; lack of enforcement of Brazilian laws regarding purchase of AAS and APEDs; and the overwhelming emphasis on the fit, healthy, sun-baked body; and a weak system of education/prevention programs, all combining to forecast a "Perfect Storm" in Brazil! Methodology and limitations of the study are also discussed.

Keywords: Body Image, Body Culture, Appearance and Performance-Enhancing Drugs, Aesthetics.

Introduction

Anabolic-androgenic steroids (AAS) and other drugs, such as human growth hormone and amphetamines, are very well known and used to improve athletic performance and appearance (Santos, Da Rocha & Da Silva, 2011, Bahrke & Yesalis, 2004). Bodybuilding is a lifestyle incurring emotional attitudes that go far beyond the required physical training and associated high levels of pain threshold and pain tolerance; it is a highly disciplined sport where a strict diet and intense physical training are core elements. The relationship between Appearance and Performance-Enhancing Drugs (APEDs), such as AAS, and "Body Image Construction" or construction of the "Ideal Body", is the basis of this thesis which posits that the most common behavior associated with APED use is the pursuit of weight gain/loss appearance strategies to improve the body. *From a non-systematic review, this article discusses, argues and reveals aspects of body image, the use of anabolic steroids and the culture of the body within the Brazilian culture of values of body aesthetics, and presents new evidences of this interlacing and the*

consequences of the search for a body aesthetics within a new "aesthetic" pattern that can best be described as a "perfect storm" among bodybuilders.

Body Image/Appearance Aspects

Aspects of Body Image in "everyday life"

Paul Ferdinand Schilder (1886-1940), considered by several authors (Gleeson & Frith, 2006; Tavares, 2003; Cash & Pruzinsky, 2002; Turner, 1992) as one of the pioneers in the study of body image and, responsible for bringing the study of body image beyond the exclusive domain of neuropathology, in his book, "The Image and Appearance of the Human Body" (1935/1950), divides the study of body image into three parts: the physiological basis of body image, the libidinal structure of body image, and the sociology of body image. Originally, Schilder (1980:11) defined body image as the "... figuring of our bodies formed in our mind, i.e., the way in which the body presents itself to us." Schilder (*ibid*) goes further stating:

"The body schema (körperschema) is the three-dimensional image that everyone has of themselves. Call it body image. This term indicates that we are not dealing with a mere sensation or imagination. There is an apperception of the body. It indicates also that although we have come through the senses, it is not a mere perception. There are figurations and mental representations involved, but it is not a mere representation "(emphasis added on körperschema).

For Nettleton & Watson (1998), what they contribute is discussed in their work, "The Body in Everyday Life", and might explain what we call lifestyle from a point of view of how the body has been used in this kind of context of aesthetics. Everyday life concerns "fundamentally the production and reproduction of bodies. Given the centrality of the body to everyday life, and the fact that it is something that all humans share,...", this point expresses how ordinary men and women talk about their bodily experiences.

Body image, according to Pruzinsky and Cash (2002), consists of four dimensions: cognitive, affective, behavioral, and perceptual with the perceptual dimension often used in healthcare in an attempt to assess how the individual perceives the

shape and/or size of the body. For Schilder (1980:11), "our body image only acquires its possibilities and existence because our body is not isolated. A body is necessarily a body between bodies. We need others around us." However, according to Adami, Fernandes, Frainer, and Oliveira (2005), exaltation of the current body, or "body celebration" can lead an individual to move away from their "own subjectivity, model, and bodily experiences, reaching the extreme point of causing a self-alienation process and the construction of an uncritical consciousness concerning body perception and lifestyles".

Gleeson & Frith (2006:80) argue that body image is a hypothetical construct, as well as the term "attitude", coined by psychologists to explain patterns of behavior and psychological phenomena. Current thinking assumes that, although people cannot take a "precise" picture of their own body, it is axiomatic that they have an image and use reflection on their own bodies and incorporate it into guiding their own behaviors.

Blond (2008), in a review of experimental studies exposing men to advertisements or commercials featuring idealized male bodies and the impact on body dissatisfaction, calculated and evaluated the effect sizes from 15 studies. Blond's review suggests that a young man's body dissatisfaction increases when he views images of attractive muscular men. The effect sizes indicate that exposure to images of idealized male bodies has a small but statistically significant negative impact on men's body dissatisfaction. Three of the studies reviewed suggest that young men, who are dissatisfied with their bodies, are at increased risk for negative self-evaluations when exposed to idealized images. Two of the studies reviewed suggest that men, who are satisfied with their bodies, may be protected against the negative impact of seeing such images.

We note that there has been a significant increase in research on body image during the past 20 years. This increase is evident in the significant number of references related to dissatisfaction and satisfaction with body and body image published in PsychInfo and PubMed between 1980 and 2000 (as described by

Cash, 2004); development of a dedicated journal, *Body Image: An International Journal of Research* in 2004; with an increase in the number of symposia relating to body image and health psychology in international health conferences and; the establishment of centers of research and development with a focus on body image and research related to health and appearance such as the Centre for Appearance Research at the University of the West of England, UK (Grogan, 2006: 528). To Grogan (2006:524), body image, perceptions, feelings, and thoughts of a person are usually conceptualized as corporal body size estimation, assessment of the attractiveness of the body, and the emotions associated with body shape and size. Notwithstanding, in our point of view and in a straight-forward definition, Body Image is concerned with the mental image which the individual has of himself in his mind.

In the context of the present review, body image is not a simple social "print", but a body image fetched. That is, even in a culture of images and presentation of "ideal bodies" in the media, it does not suggest an automatic membership of individuals searching for these body images. Several factors such as race, income, education, and ethnicity intersect in this process. The individual is not a blank slate, where the media prints ideals quickly and inexorably. So, this is a correlation, not a simple cause-effect relationship.

Body Image Disturbance and Body Dissatisfaction

In psychiatric and popular texts that identify the emergence of disorders of body image in men, the use of steroids and participation in bodybuilding are linked to eating disorders and other predominantly female body practices such as plastic surgery. These disorders and practices are interpreted as reflections of some of the "core evils" of contemporary Western culture, especially Western culture's obsession with the body and its rigid attachment to the ideals of embodiment (Bordo 1997: 139).

Individuals may develop a distorted body image. A distorted body image comprises the perception of one's own body as heavier or as larger than it really is, especially after comparison with models of beauty seen in the media (American Psychiatric

Association, 2000). Concerns about body image in this particular aspect of appearance are significant among women, but these concerns also appear to be important among men. Many authors have documented the consequences of the different pressures placed on women and men (Thompson & Cafri, 2007, Olivardia, 2007, Cafri, Thompson, Ricciardelli, McCabe, Smolak, & Yesalis, 2005, McCabe, & Ricciardelli, 2001, Pope, Gruber, Choi, Olivardia, & Phillips, 1997, Pope & Katz, 1994,).

Whereas the field of body image was once concerned primarily with the "thin ideal", today researchers are increasingly interested in the area of muscularity (Thompson & Cafri, 2007). Male AAS users often report concerns with body image. Two seminal studies have reported cases of a syndrome originally called "reverse anorexia nervosa" among AAS users (Pope et al, 1997, Pope & Katz, 1994). The use of AAS by men somehow seems to be analogous to food restriction among women with eating disorders, since both represent the adoption of extreme behaviors to achieve a particular body ideal (Cafri et al , 2005).

Also, in association with the phenomenon of *Muscular Dysmorphia*, we can observe the negative effect and influence of the media, where some groups agree that the media and the perception of the ideal male body is one of becoming a "superman" that is unattainable without using chemical help (Leone & Fetro, 2007).

It is also important to understand the meaning of the use of substances (anabolic steroids, amphetamines, etc.), medicines, diets, and the health market. Items involved in the construction of a person's bodybuilding routine are identified through the rituals of special diets, intense resistance training, the use of supplements, and the bodybuilder lifestyle.

What is the "new" lifestyle?

In 2011, Russian bodybuilder Aziz Sergeevich Shavershian, also known on the Internet as "Zyzz", suffered a fatal heart attack at the age of 22 in a sauna while vacationing in Bangkok Thailand. Shavershian was not afraid to exhibit his strength and his physique, and had even launched his own brand of protein. Shavershian had a growing community of over 80,000 fans on the Internet.

Illustrating the power of social media, one year following his death his Internet page had more than 300,000 fans! It is interesting to note that Thailand is well-known as a place to take a "Steroid Vacation"⁴ (Duff, 2012). The current concept of the level of importance to which appearance has been raised can be summed up by the "worship" of a generation that idolized Zyzz as the "King of Aesthetic"! There is now a new ideal of the "ripped body" among the adolescent community.

Notwithstanding, the facts define a very particular *lifestyle*, that the "Era of Aesthetics" proclaims: "*live your life all you can*". According to a memorial posted on zzyzcentral.com (MSN NZ, 2011), "It is a sad day for all of those whose lives Zyzz inspired and motivated. The best way we can cherish his memory is by living life to the fullest, by training hard, getting aesthetic, and not taking life too serious."

Despite all of the risks, adventures, and adrenaline this type of "*lifestyle*" provides, these factors do not appear to instil concern or a movement to halt the pursuit of this "lifestyle". We know that scare tactics and education/prevention programs that focus primarily on the consequences of drug use and the lifestyle such as "live all you can" have failed (Santos, 2012, Goldberg, 1991). Weeks prior to Shavershian's death, one of his friends wrote in the social media, to "slow down". He said: "R.I.P Zyzz... This is a warning for any of you boys coming to Thailand. Thailand is a country with it all: girls, steroids, and growth hormone. It's all here and it's all cheap. I spoke to him the other day and he looked like a kid in a candy shop" (MSN NZ, 2011).

Reporting on the death of the "God of Aesthetic", 'Ten News' stressed that an obsession with body image is dangerous, especially once young men have been pressured to get fit and, to have such a body; it comes with a price (Denny, 2011).

⁴A "Steroid Vacation", is a period of time during which many young bodybuilders from Europe and other countries – where AAS access is extremely controlled, travel to countries such as Thailand where access to buy and use AAS is easier than in many European countries. Following training and use of AAS, bodybuilders then return to their home countries.

The "new" body, in the new aesthetic body, is in accordance with "the body in everyday life" and, the living body is presumed therefore to be both a construct and to be constructed by life in the world (Nettleton and Watson, 1998). The quote from Leder (1992), also cited by Nettleton and Watson (1998), reveals how the living body is an intentional entity that gives rise to this world:

In a significant sense, the living body helps to continue this world as experienced. We cannot understand the meaning and form of objects without reference to motility, language, and desires. The living body is not just one thing *in* the world but a way in which the world comes true (Leder, 1992: 25).

Body Image Disturbance and APED

When it comes to body image, it is possible that an individual may develop a distorted body image. A distorted body image comprises the perception of one's body as heavier or larger than it really is, especially after comparison with models of beauty presented by the media (APA, 2000). Concerns with body image in this particular aspect of appearance are significant among women, but these concerns also appear to be significant among men.

Body image disturbance is perhaps the most robust and reliable psychiatric disturbance associated with APED use among adolescents and, body image disturbance is theorized to be a specific risk factor (Hildebrandt, Lai, Langenbucher, Schneider, Yehuda, & Pfaff, 2011, Hildebrandt, Alfano & Langenbucher, 2010).

In recent decades, there has been a compulsion to pursue the perfect physical shape in the "temples for the body" and "places of worship to the body", euphemisms for gymnasiums (Iriart, Chaves, & Orleans, 2009; Estevão & Bagrichevsky, 2004). This has been described by Featherstone (1991:177) as a reflection on the power of the mass media, which imposes models of the ideal body. Body dissatisfaction can be directly related to exposure to "ideal bodies" presented by the media (Featherstone, 2010, Ricciardelli & McCabe, 2004, Leit, Gray, & Pope Júnior, 2002; Leit, Pope Júnior, & Gray, 2001).

According to Pope, Phillips & Olivardia (2000) dissatisfaction with body image can lead to body image disorders, particularly related to muscularity. Initially called the “Adonis Complex” or muscle dysmorphia – this is a subtype of Body Dysmorphic Disorder (BDD) occurring most often in men, despite extensive muscle development, who see themselves as small and weak. Individuals with this syndrome (which generally appears, but not always, in males) become preoccupied that they do not look sufficiently muscular, as opposed to becoming preoccupied with a more specific body part such as the nose or hair (Kanayama, Brower, Wood, Hudson, & Pope, 2009; Pope, Gruber, Choi, Olivardia, & Phillips, 1997; Pope, Katz, & Hudson, 1993). This disorder was first described in a seminal study as 'reverse anorexia' in 1993 (Pope, Katz, & Hudson, 1993) and was based on the observation that men with this condition perceived themselves in the mirror as small and weak, even though they were actually large and muscular.

Moreover, there are cultural differences in certain syndromes common in the West that may be almost unheard of in countries with non-Western traditions (Kanayama, Hudson, & Pope, 2011). For example, to date, researchers have been unable to find and confirm any references to muscle dysmorphia in the Japanese scientific literature, likely indicating that muscularity does not seem to be so important in the Japanese body culture.

Although the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders 4th ed.) has been the reference used to diagnose BDD, the existing DSM-IV criteria for substance dependence, which were designed primarily for acutely intoxicating drugs, as discussed by Kanayama, Brower, Wood, Hudson and Pope (2009), do not apply precisely to AAS. Furthermore, there is no formal category for AAS or APED misuse in the DSM-IV (Hildebrandt et al., 2011).

We suggest that some criteria defining AAS or APED misuse and substance dependence should not obscure the fact that AAS have documented psychoactive effects, including the potential for addiction, which is likely underestimated because attention has been focused on the drugs' muscle-building properties. In

addition, the DSM-IV does not explicitly recognize a dependence syndrome and this omission could be rectified in the DSM-V by offering these proposed interpretations for AAS dependence in the substance dependence section. This modification, initially only for research purposes, would improve recognition.

The practice of bodybuilding is well documented by the popular media, usually for the aesthetic interest. However, bodybuilding, or more precisely, resistance training exercise, is also widely used by athletes to improve fitness levels and in physical therapy rehabilitation programs. Currently, resistance training exercise is recommended by health professionals as an aid for the treatment of various diseases such as osteoporosis, *sarcopenia* (*lost of muscle tissue with aging*), following joint surgeries, and depression, among others. Television has shown youth how important preventive health care is, unfortunately, the message has been understood by the masses as emphasizing the importance of aesthetic appearance and body "*sarado*" (slang used in Brazil to describe a body in very good physical shape, free of fat, with defined muscles, and a body without the "no exercise disease"). In other words, a body free of fat and wrinkles, muscular, well-defined, and a body that does not age!

As Featherstone (1991:177), in his study on the consumer culture states, "We live in a society of consumer images", argued and confirmed, "Our age is obsessed with youth, health, and physical beauty. Television and movies - the mainstream visual media, present persistent ultimatums that the flexible and graceful body, the dimpled smile set in an attractive face, are the keys to happiness, perhaps even its essence!"

Inside the consumer culture, advertisements, the popular press, television images and movies, all provide a proliferation of stylized images of bodies. In addition, the popular media constantly emphasizes the benefits of maintaining the body (Featherstone, 1991:170).

AAS exposure during adolescence may have a number of unintended consequences on biological behavior. Specifically, a perception of personal security may involve the use of AAS and this perception of security is promoted by the availability of AAS, especially through pharmacies on the Internet. The use of AAS by individuals who have begun bodybuilding and have “aesthetically changed” tends to stimulate their consumption by providing a false sense of health, with users often becoming a bit invisible, therefore resulting in what might be labelled as a “silent epidemic” (Santos, Da Rocha & Da Silva, 2011). Perception of acceptance is reflected in the current cultural *ethos* that no longer condemns cheating in order to achieve personal fulfilment and success. Lumia & McGinnis (2010) conclude that the prevailing view is: despite being illegal, AAS are not really bad. Reducing the availability of AAS for teenagers requires dedicated legislative and law enforcement intervention. However, there could be a “boomerang effect” or increase in AAS consumption – once teenagers have used “black market” steroids and after they have been taken advantage of by charlatans using the system to sell them counterfeit and adulterated AAS.

Brazil's concern about AAS use: the current situation

According to Brazilian law, the use of AAS without a prescription is strictly prohibited and illegal. In Brazil, the use of AAS, stimulants, and narcotics are considered doping in sport according to the Health Ministry and Sport Ministry (Santos, Da Rocha & Da Silva, 2011, Resolution no. 2, on May 5, 2004; Brasil, 2004).

It is estimated that in the United States over 1 million Americans, mostly young people, including between 4% to 7% of male high school students, have used illicit AAS to improve athletic performance and/or personal appearance (Yesalis et al, 1993; Buckley et al, 1988). Although there is not a nationwide estimate of AAS use in Brazil, there is great concern, on the national level - about AAS use.

Unlike the U.S., in Brazil, there is a gap in health research studies, with no epidemiologic and/or qualitative surveys investigating the use of AAS and the relationship with body image or with sports participation. There are a few studies estimating the use and profiles of AAS users in some states of Brazil, with reports

from researchers in Amazonas (Lucas et al, 2006), Bahia (Schwingel, Cotrim, Junior, Salles, Almeida, & Zoppi, 2012, Iriart & Andrade, 2002, Iriart, Chaves & Orleans, 2009), Pernambuco (Santos, Rocha & Da Silva, 2011), Rio Grande do Sul (Silva et al, 2007, Frizon, Macedo & Yonamine, 2005, Macedo *et al*, 1998), Sergipe (Santos et al, 2006), São Paulo (Silva & Moreau, 2003), Rio de Janeiro (Palma & Assis, 2005), Paraná (Chiapetti & Serbena, 2007), and recently, Pará (Abrahin, Souza, de Sousa, Moreira, & Nascimento, 2013). These studies are not representative enough to provide an accurate estimate of AAS use in Brazil, only how often the phenomenon occurs locally in each region. Sadly, there is a dearth of information in Brazil documenting the relationship of body image and of body image disorders associated with the use of AAS.

Unfortunately, with these studies it is only possible to have a general concept, since in Brazil, no specific survey in this area exists nor is there a federal agency responsible for the collection of such data. These are regional studies; they are not representative of the country as a whole. Brazil has five different regions, 26 states, and one federal district – which has more than 193 million people. In addition, more people are concentrated in the Southeast and the Northeast (more than 127 million people) (IBGE, 2012). The most populous cities are São Paulo and Rio de Janeiro (11.37 million and 6.39 million inhabitants, respectively) (IBGE, 2012). So, data from these regional studies underestimate representative statistics for the entire country.

The abuse of anabolic drugs is a public health problem in many countries, including Brazil (Sagoe, et al 2014, Kicman, 2008; Sjöqvist, Garle & Rane, 2008). Even though they are aware that AAS are prohibited substances, many young non-athletes and non-competitive bodybuilders use AAS, with the goal of "improving physical appearance". Use of AAS is defended with the rationale that in today's world, body image is something very important and highly valued. In sports – amateur or professional, the target is the result, the performance, and Olympic ideals and regulations are not part of the plan. It is only a vision of the body,

shaped by training, with the use of any resource, agent, or ergogenic aid, as additional tools integrated into the culture of the sport.

Nonetheless, it is our observation that the use of AAS and other ergogenic aids are the most effective means for body modification and improvement of appearance by practitioners – most of whom lack specific sport goals (Santos, Rock & Da Silva, 2011). However, these discourses are not well understood, the reasons, and what really exists behind these body modifications and a “perfect” body idealized by the media. These drugs and substances have caused multiple adverse health effects to the physical, mental, and social health of the individual and even death among individuals who have misused them, i.e., doses far above the therapeutic dose (Santos, 2007; Bhasin et al, 1996).

Comparing data, obtained by Perry, Wright and Littlepage (1992), on the use of AAS in West Glamorgan, UK with data obtained by us here in Brazil, we note that UK authors detected significant use among non-competitive recreational athletes in private gymnasias (non-local reference). With a methodology similar to that used by Perry, Wright and Littlepage (1992), we (Santos & Bezerra, 2010), found significant use of AAS among non-competitive recreational athletes – despite the fact that some of the privately owned gymnasias expressed a wish *not* to participate in our study. This fact was also a limitation to our own research.

Aspects of Brazilian culture

"Aesthetics" within the young Brazilian male culture

In Brazil, the problems among young male bodybuilders continue, especially with beginners pursuing the "ideal body". In the poorer regions of Northeast Brazil, bodybuilders often have easy access to animal drugs. They are "sculpted by oil" (e.g., ADE - an emulsifiable injection containing vitamins A, D, and E used for cattle, horses, pigs, goats, and rabbits), used as a "body filler" (Santos, Rocha and Silva, 2011), instead of "paying the price", and "feeling the pain" required of the successful bodybuilder who has worked hard with dedication, intense physical training, dieting, discipline, and pain. It is important to draw attention to the fact that the mass media is not the major source of information about what are known

as "body fillers". What mass media provides are just cases. There is no scientific information nor any physiological explanations that can be taken from these reports but they still alert us to the real cases.

The Unique Brazilian Environment

The use of AAS by recreational bodybuilders – with the objective to look good, is not the same as the use of AAS by serious bodybuilders. Serious bodybuilders have a very disciplined lifestyle with dieting, training, use of supplements, and "paying the price" in the gym to obtain, promote, and defend their lifestyles. The dangers of appearance- and performance-enhancing drug use include adverse effects such as amputations, disfigurements, other serious health problems, and even death and these have increased in Brazil every year - just before the beginning of and during the summer months. Brazil is a very hot, sunny country with a well-defined beach culture. A beautiful, tanned body is highly emphasized and prized. The admiration and influence to acquire this type of body are highlighted by the media in soap operas, fashion weeks, male and female magazines, television programs, and music throughout the country.

The beach acts as a stage or platform to show off the sculpted body, especially in the cities along the coast. In Recife, where I conducted my research, we can see this part of the culture. The 1960s song, "*The Girl from Ipanema*", is a reflection of a famous girl from Rio, where the bikini became famous and where usually Brazilian beach girls wear even smaller models of the bikini! It is not a representation of all women, but an example of how the objective to look good exists in the cities alongside the warm beach water. Consequently, the beautiful body on the beach became even more important as the media focused on this kind of marketing (Featherstone, 1991).

The aesthetic aspect is highly sought after, with much time spent on the beaches during the summer and increased attendance in gyms during the winter to "improve" the body because there is not enough time to get fit for carnivals during just a few weeks of summer! So, why not to use the "fast path" to achieve

the 'target'? The use of APED appears to be the "best way" to achieve the "summer body". It is not difficult to see why so many young males flock to the beaches with "symptoms" of oil injection, or with a huge "round aspect" (swelling, bump (of various body parts – buttocks, breasts, biceps). This type of recreational bodybuilder differs from the type we conducted our ethnographic research with and in which we analyzed the serious bodybuilder who defends bodybuilding as not only a sport but also as a lifestyle. This type of practitioner is not considered a serious bodybuilder, because they do not belong to the culture of "*no pain, no gain*". It means they don't pay the price to be big and they don't take part in the processes to become a serious bodybuilder. This type of bodybuilder is not considered to be serious and, during carnivals and on the beach, their lifestyle doesn't represent the serious bodybuilder, because they do not respect the dieting and the discipline necessary to belong to the true bodybuilding world.

Most of the principal capitals and largest cities in Brazil are near the coast, and the emphasis on being physically fit is overwhelming. This is especially true in the northeastern section of Brazil where summer seems to extend for the entire year! The "beach law" sometimes is not so fair with some women and some men, and when on the beaches, many celebrities and photo models have "paparazzi" trying to get the best shot of their new brand of bikini or, in other words, these celebrities attend to the "fit beach law", where all are enticed and coerced to show off their good shape on the beach! The tenets of "beach law" require one to have a body free of fat, "ripped", "cut", and "shredded" (well-defined muscularity), with good muscle mass, and beautiful to see in swimwear or in a very small Brazilian bikini for the women!

Regardless of what is fashionable and the desire for a "summer body", the purchase of APEDs is against Brazilian law. This fact was very clear during our ethnographic research in three gyms in northeastern Brazil. The "black market" remains very strong and involves physicians, coaches, fitness instructors, gym owners, bodybuilders, and drug company representatives. Even with the laws, despite the efforts of the National Agency for Sanitary Surveillance (ANVISA),

aiming to control and track the sales of controlled medicine, with the launch of the National System of Management of Controlled Products—SNGPC, the sales of such substances – without medical prescription – are still significant (Santos, Rocha and Silva, 2011).

We acknowledge the failure of some drug education, prevention, and intervention programs (those using negative or “scare tactics”) that have occurred in Brazil and accept the Brazilian reality that exalts the “good shape” and the “sculptured body” on television and on the beach! Brazilian women and men are influenced by the pressure of the “summer time body” to demonstrate their health with a physically fit body. Public health officials must work together with the understanding that, in Brazil, there is a sociological context different from that found in other countries. Understanding how it works, together with professionals from all areas of health, is the first step to proper education/prevention/intervention programs.

These programs are very important to prevent adverse health effects, including death resulting from AAS and APEDs (See here, AAS is singular and APEDs is plural). The impact of these problems has already been presented by the media with many cases of amputations, other permanent adverse health effects and even death (caused by oil injections resulting in fibrosis and necrosis), especially in the rural areas of northeastern Brazil and among recreational bodybuilders (with no intention of competing). These are events of concern and alarm. Many adolescents are using these products intended for animal use without any information and primarily for the reason of remaining large and muscular. However, what is impressive is the fact that these are not isolated cases, that this represents a serious, country-wide public health problem. There must be a reduction in the availability of veterinary products (e.g. ADE, animal hormones), prescriptions issued by a veterinary doctor, and recording of the prescription, as is done for AAS. Lastly, such sales restrictions and oversight require dedicated legislative and legal intervention.

Discussion

The influence and importance/impact inside the Brazilian body culture and the relationship with body image, aesthetics pattern, and AAS use have come together to produce what can be termed the “perfect storm” within the body image culture. An aesthetic body is worshiped on the beach, on TV, in magazines, on soap operas, and in propaganda. The use of AAS differs in terms of sports performance or bodybuilding culture as a lifestyle, when the use of AAS is employed to obtain the “image of the media” discussed above.

Pope, Phillips & Olivardia (2000: 13) argue that “[...] society and the media preach a disturbing message on appearance, though by the standards of the images of modern 'super males', virtually none can reach it.” This aspect was also observed by Keane (2005:200), who argued that this certainly makes sense in that the appearance of the male body is an erotic spectacle and merchandise in the dominant culture that will produce changes in the meanings and experiences of masculinity.

Kanayama, Hudson and Pope (2010) have also posited that the increase of illicit AAS use was fuelled during the 1980s by an increasing Western cultural emphasis on male body image and muscularity. Recently, images of muscular males have been increasing in Western movies, television dramas, magazines, comic strips, and advertising, all seeming to transmit the message that muscularity is a quality of masculinity (Leit, Gray, & Pope Júnior, 2002; Leit, Pope Júnior, & Gray, 2001; Pope et al., 2001). Moreover, in contrast, Japanese and Chinese mythologies have virtually nothing comparable to Hercules and Thor. Similarly, a masculine man in the Confucian tradition is a man who has force of character, discipline, or intellect—but not bulging biceps or pectorals (Kanayama, Hudson, & Pope, 2011). Notably, ancient Japanese heroes and gods are almost always fully clothed in paintings and sculpture, with no suggestion of enhanced muscularity. Then it is not surprising that muscle dysmorphia might be a culture-bound syndrome - bound to a Western tradition of muscle (Kanayama, Hudson, & Pope, 2011).

Kanayama, Hudson and Pope (2010) have reported on the many recent studies documenting substantial levels of AAS use in the United States, and a few studies of the prevalence of AAS use in other countries, that first began to appear by the end of the 1990s. Also, at about this same time, epidemiologic evidence of illicit AAS use had begun to appear in the British Commonwealth, Scandinavian countries, Europe, and Brazil. In Brazil, we have a huge knowledge gap, especially survey information among young people and athletes, due not only to methodological limitations, but also because we have no data regarding the nationwide use of AAS (Galduroz et al., 2005). However, some reports cited previously have found strong evidence that the use of AAS is increasing.

Today, body image is seen as one aspect of the social body and of self-representation, where the individual is responsible for the maintenance and construction of self, and if he fails in this task, it often appears that there is a serious character flaw in the individual. Recently, Silva Junior (2013) studied the main characteristics of morbidity in Brazil due to AAS intake. He argues that the phenomenon of alterations of body parts is also an alteration with implications as a whole. However, the hospitalization rate due to AAS intake in Brazil is relatively low, a fact which can be explained by the under-reporting of cases, since there is no filing of the AIH form (The Hospital Admission Authorization - a mandatory instrument completed by hospitals for patients' hospitalizations and rewarded by the unified public health system) in the immediate care units. Under-notification, under-recording, and missing information on the form, as well as the system's inadequate coverage, are elements which compromise the estimates of clinical-epidemiological parameters, causing misinterpretation on the part of health providers and professionals concerning the relevance and magnitude of diseases (Silva Junior, 2013).

We agree with Silva Junior's position, "we must also be aware that, unlike most 'drugs of abuse', PES (Performance-Enhancing Substances), especially AAS, provide many changes, such as enhanced strength, muscularity, appearance, and performance that many in our society look upon as being positive". Another point

is that education/prevention/intervention programs are expensive, especially at a time when school districts and interscholastic sport programs are experiencing great financial stress and there is growing concern over other medical issues. From the global to local, we can see that only a few AAS education/prevention/intervention (EPI) programs in sport or for appearance have been used with success. But the reality in Brazil is far from these EPI programs, as these programs do not exist and do not reach the young population, and/or gym users. How do we remediate the problem that apparently is "just a case of aesthetic", that underestimates the health system with a growing number of deaths? Isolated efforts exist among coaches and instructors, as we saw during our informal interviews in three gyms and with our own ethnographic research examining the construction of body image among male bodybuilders. Therefore, in a rapidly advancing country such as Brazil, we believe these current efforts are inadequate. Fortunately, together with anti-tobacco and anti-alcohol campaigns, EPI programs regarding AAS and APEDs are emerging as instruments for lecturers, teachers, coaches, and parents to inform adolescents of the potential adverse health problems.

Conclusion and Warning

The combination of factors we have discussed: the extensive use of appearance-enhancing drugs/substances/methods/techniques (AAS and APEDs) in Brazil; the great Brazilian beaches with warm, sunny weather, and media worshiping the "worked body"; the lack of enforcement of Brazilian laws regarding purchase of AAS and APEDs; and the overwhelming emphasis on the fit, healthy, sun-baked body; and a weak system of education/prevention/intervention programs configure to forecast a "Perfect Storm" in Brazil! As a result, and unfortunately, people will suffer serious injuries and some may die. The media alerts the community about the harmful adverse effects, but the specialist and public policies are not giving sufficient attention to this new epidemic phenomenon. Consequently, we are calling attention to this public health concern.

Our greatest glory consists not in never
falling but in rising every time we fall.
Oliver Goldsmith

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Article 2.

*Motivations for Body Construction and the Bodybuilders
Lifestyle: An Ethnographic Study*

Motivations for Body Construction and the Bodybuilders Lifestyle: An Ethnographic Study

Azenildo M. Santos

Abstract

In sport - amateur and professional - the goal is the result, the performance, and Olympic achievement. Appearance is not necessarily part of the plan, however, the images of athletes and their performances reveal bodies molded by intense training. Using qualitative data, generated during an ethnographic study of the male bodybuilding culture in Recife, Brazil, the purpose of the present study was to describe and investigate the pursuit of the ideal body through body modification, the bodybuilder lifestyle, and social relationships within the culture of bodybuilding. We found the demand for aesthetic improvement relates strongly to feelings of pleasure and dissatisfaction within the environment of the gym, indicating certain order models and "intra-group" ideals, but not disconnected from society. This is in agreement with what is observed within the bodybuilding culture. From the ethnography method that was employed in this study and the experiences documented within the bodybuilding culture, it's clear that for our serious bodybuilder informants, bodybuilding is more than just growing muscles. It is a lifestyle in which discipline and health are important values, despite the use of anabolic steroids and other performance- and appearance-enhancing drugs.

Keywords: Body construction, bodybuilding ethnography, bodybuilding culture, lifestyle.

Introduction

Ethnographic study can provide important references for the richness of statements and the experiences within the context of bodybuilding, something that Loïc Wacquant (2002:121) in *Boxing (Body and Soul)*, summarizes as "well as in boxing, it is not possible to learn to be an athlete 'on paper'". Despite awareness that anabolic-androgenic steroids (AAS) are prohibited and illegal substances, many young non-athletes and non-competitive bodybuilders consume AAS with the goal of "improving their physical appearance" and defending such practice with statements that the "body image is something very important and to be valued" (Santos, Rocha & Da Silva, 2011, Bahrke & Yesalis, 2004). In the sport - amateur and professional - the goal is the result, the performance, and Olympic achievement. Appearance is not necessarily part of the plan. However, the images of athletes and their performances reveal bodies molded by intense training. The

use of any resource or agent such as an ergogenic aid⁵ is "just another" tool used to become successful in the culture of the sport. On the other hand, for appearance, as we found in our interviews following months researching inside the bodybuilding culture, the use of ergogenics definitely also works as a very important adjunctive training strategy. We frequently found use of supplements considered legal and illegal, for example, the use of creatine (a legal supplement) and AAS (an illegal substance). Nevertheless, in our observation, the use of AAS and other ergogenic aids was observed as the most effective means for body modification and the improvement of "recreational" appearance by non-athletes. However, these discourses are not well understood, as are the reasons for use, and how these body modifications occur, and why the physically fit body is so highly idealized by the media.

The abuse of AAS is associated with several adverse health effects and non-therapeutic use (e.g., to increase muscle mass, speed, and power) has been reported by several researchers (Kanayama, Hudson, & Pope, 2011, Santos, Da Rocha & Da Silva, 2011, Cafri, Thompson, Ricciardelli, McCabe, Smolak, Yesalis, 2005, Bahrke, & Yesalis, 2004, Evans, 2004, Pope & Katz, 2003, Kanayama, Pope, Cohane, & Hudson, 2003, Rich, Dickinson, Feller, Pugatch, & Mylonakis, 1999). Use of these substances has resulted in severe health problems and even death among individuals who have misused them, i.e., doses far above therapeutic doses (Iriart, Chaves & Orleans, 2009; Santos, 2007; Pope, Kouri, & Hudson, 2000,).

Nettleton and Watson (1998: 8) have commented on the body in everyday life and it is applicable to our research. "What we are concerned with here is the salience of bodies to the creation and recreation of everyday life. How do people think about their bodies? Do people think about their bodies? How do people describe their bodies? How do people 'use' their bodies? These points emerged during our research within the bodybuilding culture. One quote, found among many of the

⁵ According to Santos (2007:205), in *The World Anabolic*, there are various types of ergogenics, but simply they are any resource, technology, or substance capable of improving physical work capacity or athletic performance. These features can be classified and applied in various ways, such as improvement in strength, speed, in a nutritional procedure, psychological or pharmacological, and can range from the acceptable technical advantage to the illegal use of anabolic-androgenic steroids.

motivational quotes within this world of body culture, describes what *lifestyle* means in the bodybuilding culture, and paraphrased it is: lifestyle is the reflex of your training, your nutrition, your attitudes, and is the mirror of your body.

Everyday life concerns "fundamentally the productions and reproductions of bodies. Given the centrality of the body to everyday life, and the fact that it is something that all humans share...", this point expresses how ordinary men and women talk about their bodily experiences. Whilst the better explanation is not new, based on what Hart and Carter (2000) say about consumption, and as I used it here, it definitely is not concerned with the purchase of material commodities, but refers also to broader 'lifestyle' choices and practices including ideas, beliefs, attitudes, and desires relating to obtaining and making use of symbolic goods. In this case the body!

Using qualitative data, generated during an ethnographic study of the male bodybuilding culture in Recife, Brazil, the purpose of the present study was to describe and investigate the pursuit of the ideal body through body modification, within the bodybuilder lifestyle, as well as the social relationships within the culture of bodybuilding.

Consumer Culture of Body Image

According to Featherstone (1991), regarding concern with body image to the perception of the body inside the consumer culture, it is a culture dominated by the existence of a vast array of visual images. Certainly, the inner logic of consumer culture depends upon the cultivation of an insatiable appetite to *consume images*. This is not different in the bodybuilding culture – one that goes beyond the perspective of manipulated products of mass society, but as an autonomous playful space. Based on a seminal study by Featherstone in 1987, in his book, *Lifestyle and Consumer Culture*, we can argue that "inside the consumer culture, the body is proclaimed as a vehicle of pleasure: it's desirable and desiring, and the closer the actual body approximates to the idealized images of youth, health, fitness, and beauty, the higher its exchange-value". Images of the body beautiful, openly sexual

and associated with hedonism, leisure and display, emphasizes the importance of appearance and the 'look' (Featherstone, 1991).

Methodology

The present study was guided by ethnographic principles and the approach chosen to explore the research question. Data were gathered by means of "observant participation", as proposed by L  ic Wacquant (2002). In other words, at the same time I was observing behavior, I was also training. It also means that within the practice of bodybuilding, I was analyzing how bodybuilding works, in what I call the "Anabolic World", the pursuit of muscularity and concern about maintaining a positive balance of protein – which is needed for anabolism. This way it was possible to perform the analysis by "living through", from the sociologic "lived through". The impressions, observations, and descriptions were formed from "face-to-face" relationships with the study participants.

As in all ethnographic research, all of my observations included my formal and informal interviews, documentation of events, and field notes as registered in my field diary. Three gyms were selected following the approval of my project and, according to different socio-economic standards of the individuals and the gyms. Data collection was based upon obtaining approval from the gym managers and owners. One gym was in a suburban area, another was in the metropolitan area and considered the best gym in the area, and the third gym was rated the top gym in the city. Each gym was comprised of different types of members, from low to high socio-economic standing. Recruitment of the interviewees was greatly facilitated by my own, regular participation in bodybuilding gyms over an extended period. However, I was also fortunate to obtain the assistance of and by the introduction from my two "key keepers" (in this research a "key keeper" is the person who is considered to be the 'key' informant, who is part of the place, the gym in this research, as instructor, manager, personal trainer, bodybuilder). The fieldwork was conducted continuously in three gyms over 9 months.

Recife is a city in the state of Pernambuco, located in the northeastern part of Brazil, on the shores of the Atlantic Ocean, with a population of over 1.5 million.

Recife has a metropolitan area that takes its name from the Metropolitan Region of Recife (RMR). It is the largest urban center in the Brazilian Northeast and the fifth largest urban area in Brazil with 3.7 million inhabitants (Metropolitan Region of Recife). Recife is classified by the Brazilian Institute of Geography and Statistics (IBGE) as a regional metropolis, and with that, the Greater Recife is the most populous metropolis in northeastern Brazil and third most densely populated in the country. However, selection of the city was primarily based on the fact that Recife is my hometown, where access to the culture of bodybuilding is unlike any other ethnographic study and the first such study to be conducted in this regard. As a native from Recife I brought the experience of having been born, raised, and having 'lived in the city'. This experience allowed me access to the gyms in a way unavailable to other researchers. The choice of research sites allowed me access inside the culture of bodybuilding that is generally closed to those who "do not belong to this world" and do not speak "the language of the gym", that is, "go hard or go home"! This symbolizes the border for the academic researcher who usually is not welcomed inside the bodybuilding culture that is filled with preconceptions of common sense and formal literature.

In northeastern Brazil, Recife is considered the capital regarding the prevalence of AAS use, the large number of users of an emulsified injection of vitamins A, D, and E (ADE) used for cattle, horses, pigs, goats, and rabbits, and Jack 3D (a pre-workout supplement not approved by the Food and Drug Administration – FDA and prohibited by the World Anti-Doping Agency - WADA - because it contains dimethylamylamine, associated with deaths in gyms) (Santos, Rocha, & Silva, 2011, Santos, & Bezerra, 2010). Given all of these circumstances, Recife became an important place to conduct this study. There was a period of high alert in every gym with inspections by the Regional Council of Physical Education (CREF) and State Police, looking for users of Jack 3D. One of my interviewees told me that a young man, who had used Jack 3D, died in a gym. As a result of the police raids, discussions about AAS and alternative pre-workout stimulants (e. g., caffeine and ginseng) became more taboo than ever. "Hammer", 52 yrs of age, was the supervisor of two gyms where I conduct my interviews and observations, and was very upset with the situation surrounding the gyms. As the oversight on

supplements became more intense, he confided in me about the current situation in the city: *"Here (in Recife) it's prohibited to talk about Jack 3D...and it's better to talk about cocaine than Jack 3D. If the police stop your car and find you with cocaine in your car, it's better than if they catch you with Jack 3D!"* (W.M., 52, *Field Diary*, 2012).

This is a troubling statement but necessary in the beginning to understand the particular environment and culture where the black market is very strong and the laws are not sufficient enough to deter the users of PESs (plural for Performance-Enhancing Substance). This bodybuilder had personal reasons to say this because public health officials were working hard against the black market. The black market is the biggest "door" to obtaining AAS in the city, a source that brings all of the drugs users want into the gyms. With more financial problems/concerns in Brazil, the market for purchasing such drugs has become even more difficult than usual.

In adopting an active "membership" role at the research sites, I regularly lifted weights with bodybuilders, something that was not very unusual for me because I have a long history as an elite level, national class sprinter. Also, prior to undertaking this ethnographic research I had a particular reputation in the city, not because I was born there, but because I have experience competing in sports as a sprinter and a jumper, winning several state and national titles that allowed me access to these places where sport practice is very welcome. Moreover, my training in physical education and specialization in sport physiology provided me with a significant experience that was recognized within the bodybuilding sport and culture.

Following my athletic career, and drawing on my personal experiences from track and field, I began working in many different gyms as an instructor and as a personal trainer, including the special physical preparation of several Jujitsu athletes. My years of training for sports made me very knowledgeable and welcome in the gyms by my peers and by the gym owners. Most of the instructors knew me "from the old days", and the owners knew of my work as a researcher.

This background contributed to my easy insertion into the gyms to conduct my observant participation and to be very close to the culture of bodybuilding. Actually, given my sport and academic experiences, in my case, "membership" was free access to all gyms - with the permission from owners and managers. A few researchers have documented the existence of a "code of silence" among bodybuilders, in that the bodybuilding culture is not open to non-participants (Andrews, Sudwell, & Sparkes, 2005, Monaghan, 2002, 2001, 1999). However, I received great support and confidence from the bodybuilders.

There are references of ethnographic insertions among bodybuilders and "observant participation" conducted in the United Kingdom by Andrews, Sudwell, Sparkes (2005), Monaghan (2001), and Monaghan (2002). However, these differ on some points from my research, not in the methodology, but in the insertion into the field, as they needed to have a normal membership and to train so their bodies "*fell on their skin and they had the mark*" on their body of the bodybuilder culture, i.e. a large body mass with muscles. In particular, I brought with me my sports heritage, both in my physical appearance and in the technical experience of a weightlifter. My insertion was so deep that I could trace all of the observations that most academic researchers are not usually able to trace. My interaction was inspired by the history of Wacquant (2002) who, as a boxing apprentice, his experience led him to compete in the ring with thoughts of leaving his academic life. He really was "beyond the seduction" of the object of his study. Although I did not think about leaving my academic life, the bodybuilding culture is definitely a "very good world to be inside". While I could record the ways that belong specifically to this world, I could not describe all of them. First, because the data that result from an ethnographic study are so numerous, rich, and deep it is not possible to include all of it within one manuscript and second, for ethical concerns (e.g., the black market sales of AAS and other prohibited substances). Participant observation was complemented with my audio-recorded, in-depth interviews, using a semi-structured outline, but completely adapted to the bodybuilding culture vocabulary, so that we could have a "good chat". Additionally, informal interviews also occurred during my field work. The interviews took about one-

and-a-half-hours to complete; sometimes we spent more time or needed another day to complete. Most of the interviews were completed after the workout so we were usually eating or drinking some protein supplements in a more quiet area of the gym. Sometimes, in the "hard-core" gyms, we could stay in the swimming pool. The background and the activity inside the gym, gave "identity to the environment" - enough to not be seen as strange or unusual.

Ethical Considerations

As any research in the health field, in Brazil, research follows the Bioethics Rules of Research and the Regulamentary Rules of Research Involving Human Beings (Resolution no. 196, October 10, 1996) of the National Health Council (CNS). The present project was previously submitted and approved by the Ethics Committee (CEP) of Institute de Saúde Coletiva (ISC) of Universidade Federal da Bahia (UFBA), under the registration CEP number 019-12 / CEP - ISC.

The profile of participants

The sample consisted of 11 males providing in-depth interviews, most of whom were contacted during ethnographic work from the three gyms investigated (See Table 1.). The youngest respondent was 20 years of age and the oldest, 52. The mean age of the interview sample was 29.8 yrs. Half of the sample consisted of "serious bodybuilders", with good muscularity, more than 10 years of training, the majority of whom had more than 6 years of experience of bodybuilding training, and who had experience using AAS. Only one participant had never used AAS, and discoursed against using AAS. Another participant in the sample stated, during our first contact, that he had never used AAS, but after training in the gym, he told me he had decided to use AAS, and told me some of the details during the interview. Three of the participants competed previously at the state and regional levels of weightlifting and bodybuilding. Six of the participants had not completed high school (secondary education), three had attended college, one had completed college, and one possessed a PhD. There was a wide range of occupations, including a financial technician, bodybuilding instructor, police officer, student, security personnel, and civil engineer. Among them, I focused more on the participants with greater experience, whom I considered to be serious bodybuilders. However, even with the differences between the participants, it was

very important to understand what each participant thought about the construction of their body and how they planned their pursuit of the ideal body that they each wanted to reach. My pursuit for bodybuilders to participate in my study basically consisted of securing males, eighteen years of age and older, with good training experience, and with good muscular development, and with more than one year of systematically practicing bodybuilding.

I consider the "serious bodybuilder" as not just another category, it is how practitioners of the culture of bodybuilding consider themselves and whom "pay the price" with pain to be bigger with a "serious" workout and a lifestyle of dedication and discipline. The pain encountered enters into a wide range of issues in determining how the workout must be performed. The "tolerance of pain is normative" and it (pain) "separates the men from boys", according to White, Young, & McTeer (1995). This is the "law" of the bodybuilding culture, where the gyms are often referred to by most interviewers as the "anabolic temple", or the "factory of monsters". This also works as a normative for masculinity as well and masculinity is one theme of the studies of the bodybuilding culture. "Temple", as a reference to the room for a workout, is analogous to the ascetical practices of "pumping up" the muscle mass and reaching a good level of anabolism. "Monster Factory" is another analogy, resulting from a good level of anabolism. These are "huge guys", but "monster" is a better description of them, and is often times considered a compliment.

Table 1. Table of participants , with occupation, level of education, age, years of training, and years of use/non-use of AAS. Names have been changed to protect individual identities.

NAMES	OCCUPATION	LEVEL OF EDUCATION	AGE (YEARS)	YEARS OF TRAINING	USED AAS	TYPE OF GYM	SOCIAL CLASS
1. Harley	Student	Incomplete Undergraduate	20	6	Yes	Small	Popular
2. Diddy	Personal Trainer	Incomplete Undergraduate	39	21	Yes	Big	High
3. Henderson	Planning	Technical/ Incomplete Undergraduate	24	6	Yes	Medium	Medium
4. Neo	Civil Engineer	PhD in Engineering	30	6	Yes/No	Medium	Medium
5. Mathew	Personal Trainer	Incomplete Undergraduate	35	17	Yes	Medium	Medium
6. Hammer	Lecturer	Coordinator in Gym/Supervisor	52	37	Yes	Big/Medium	Medium
7. Nicholas	Student	Instructor Jiu Jitsu/ Incomplete Undergraduate	30	8	Yes	Medium	Medium
8. Ethan	Police Officer	Undergraduate	28	4	No	Small	Popular
9. Jake	Student	Incomplete Undergraduate	22	3	Yes	Medium	Medium
10. Jason	Security Officer	College Graduate	26	10	Yes	Small	Popular
11. Statham	Student	Incomplete Undergraduate	22	10	Yes	Small	Popular

The approach of the field work

I adopted a routine of training Monday through Saturday. During the morning I attended the small gym twice a week; during the afternoon, I attended the gym in the metropolitan area five days a week; and the top gym, two to three times per week in the evening. Certainly, my schedule needed to be adapted to a proper program of hypertrophy⁶ (this could target all bodybuilders, but in this research it was not a category of study) which divides the body into parts so that I could work out twice each day, and I always followed my training with a lot of protein supplements during the rest periods, and very high caloric meals - even inside the gym - as does every serious bodybuilder.

I had time to talk with my "key keepers" from all gyms and from all of the bodybuilders who could give me time for an interview. However, some of them I've known for many years, we've had a good relationship, and they are very popular in the bodybuilding culture of Recife. Among them, I was advised at the beginning of the study, during the evaluation of the project, to conduct interviews with some individuals who were not part of the bodybuilder culture, meaning that they desire and possess the more "aesthetic style" rather than the "muscular huge style".

I have, in the gym, the identity of a bodybuilder, as Monaghan (2002) experienced in his ethnography in UK. During my competitive years as a national level athlete, owing to my own personal background of sports participation, I was very muscular. And, during my field research I developed a considerable amount of muscle that resulted in the addition of 22 lbs of muscle - so much so that I improved all of my personal best results in weightlifting and bested some of those same records of my bodybuilding partners! Although, another very peculiar

⁶ Muscle hypertrophy can simply be defined as an increase in size of the myofibril(s). Mechanically induced tension produced both by force generation and stretch is considered essential to muscle growth, and the combination of these stimuli appears to have a pronounced additive effect. More specifically, mechanical overload increases muscle mass while unloading results in atrophy. This process appears largely controlled by protein synthetic rate during the initiation of translation. Schoenfeld, B. J. (2010). The Mechanisms Of Muscle Hypertrophy And Their Application To Resistance Training. *J Strength Cond Res* 24 (10):2857-72.

difference in my own experience is the fact that all of the instructors, managers, and owners of the three gyms know of my work and research with AAS and use of ergogenic aids⁷ in sport and exercise. Therefore, for me to be able to discuss drugs and supplements, it was a good way for me to interact in the gym, and this is very acceptable and a part of the bodybuilding culture.

Inside the Gyms: a description!

The three gyms used in this study were completely different in number of members, social class, size, quality of machines and weights, number of instructors, price of membership, and services, among other differences. The first gym that deserved attention was the small one. It was very much the opposite of what I imagined and perhaps what many people would think of, even in an area considered a poor suburban area, the pursuit of a muscular body for men and women was the same as with all gyms in this research study. The gym is located in a corner of a building with three floors, where there is no place for parking or any concern for that. The membership costs about \$US 24.00 per month for all activities in the gym. The reception area was the same place where one enters, pays the membership fee, and where most of the time it was the owner who did all of these tasks during different times of the day. Every day I spent time talking with the female owner. "The doors of this gym were open" to me, as she said. There were two instructors (undergraduates in physical education, as it is mandatory by CREF regulations for all instructors working in a gym) in the gym that attended to the members in the morning and during the mid-afternoon, until the evening session. In the entrance, I could see, on the first floor, a few treadmills and stationary bicycles, where most people did their warm up and "updated" their life. Most of the people who used this equipment were women. The equipment was good enough to obtain a good workout, but it was made of very cheap material.

⁷ Santos (2007:205), in *The World Anabolic*, states that ergogenic aids have various definitions according to many sources, but in a manner that is basic and simple, it is any resource, technology, or substance, capable of improving physical work capacity or athletic performance. These features can be classified and applied in various ways, such as improvement in strength, speed, in a nutritional procedure, psychological or pharmacological, that can range from the technical to the acceptable concentration of illegal use of anabolic-androgenic steroids.

The men preferred to do their local warm up directly on the machines, muscle by muscle, and very rarely, via aerobics. In the entrance it was easy to see the stairs to the second floor. On the second floor I found the bodybuilding room. The room was not very large, around 300m², but there was one machine to work each part of the body. Inside the room there was also a room where one of the instructors attended to members and did a physical evaluation/test to begin training. I used this room for interviews. Also, on the third floor, there was an open to the ceiling area for fitness, dance classes, and 'capoeira' (a Brazilian martial art). The gym had about five hundred members.

The second gym was one of the most popular among bodybuilders in the city and this gym has two weightlifting rooms (one with free weights/machines for free weight lifting and another with only machines). A paradise for bodybuilders! The gym was in the metropolitan area of the city, in a middle class neighborhood. The location was on a corner and the building occupied the entire corner, with a parking area, and security. The number of members was around a thousand, with the cost of a membership about \$US 50.00 per month. The gym also offered a membership package for three months and six months. The reception area had three women who attended to all new and current members, with two instructors for each period of the day, two instructors for gymnastics, and one for swimming, plus open vacancies for trainees. The gym layout consisted of two floors, with different modalities for men and women and children (e.g., bodybuilding, spinning, swimming (kids), hydrogymnastics, and body combat). The division of the area was very strategic. On the first floor, after the reception area, I could see a corridor that I found to be the "best" or focal point of the gym: the canteen. From the canteen, I could turn right and go to the "Iron Room", the place for hardcore training (the biggest and most complete bodybuilding room for the serious bodybuilder), and turning left, I could go to the swimming pool, where there was an area with tables and chairs for lunch, to observe classes, and just to have a chat. For a few interviews I used this area between classes, it was a quiet place for a "chin wag". On the second floor I found the second room of weights, a room for physical evaluation/testing to initiate training, and a gymnastic room. However,

the second weight lifting room was equipped mostly with machines, not with free weights. It was the huge gap between them that made the first room unpopular with the older people, beginners, and some gym members. Although this was not a rule, it was very common. Otherwise, who would like to learn and train with the "big guys" who preferred to stay in the first room?! The second room had professional treadmills and stationary bicycles, with a big TV facing the treadmills. The gym was around 1000m². The focal point, as I said, was the canteen. Almost all members went to the canteen before or after their workout. People could also eat their meals here after training, watch TV, purchase lunch, and it was a place where I could observe the routine of the gym.

The third gym was located in one of the best areas of the city, near the beach, and occupied half of a large city block. It had a private parking area on the first floor, with security, carwash service, and parking service. The gym was completely acclimatized (with AC). The reception area had two sections, and was staffed by very attractive female attendants. The first section of the reception area was used to introduce the gym and to tour the gym locations. The second section was used primarily to purchase memberships. A membership cost \$US 185.00 per month for the cheapest membership package. There were package memberships for three months, six months, and a year. This gym operated almost as a social club. There were many activities such as bodybuilding, kick boxing, Muay Thay, Jiu-Jitsu, Yoga, dance, duathlon, spinning, fitness, Pilates studio, swimming, and hydro gymnastics. The surrounding area also had a restaurant, an apparel shop with sports clothes, a hair salon, and a canteen inside, with meals served from breakfast to dinner. The bodybuilding room had all modern resistance training machines, obtained from an international brand that was one of the sponsors of the gym. In the aerobics area there were dozens of treadmills and stationary bicycles with many large screen TVs with pay-per-view channels. This room had everything needed for training the body with many machines and free weights. However, as it was a very clean and expensively equipped area, it was not as "hardcore" as the second room. There were dozens of instructors in the room on the second floor to assist. There also was a third floor/roof top with an Olympic-sized swimming pool. There was also a

lift/elevator! In the parking area, on first floor, it was easy to see millions of dollars in imported cars (BMW, Mercedes, Land Rover, Mitsubishi, Kia, Ferrari, Porsche, Lamborghini, etc.) All of this in 4,000m²! This was definitely one of the best gyms in the country and with more than a thousand members. I also had free access to this gym, as one of my “key keepers” was the manager here.

Analysis

Data were recorded, transcribed verbatim, and analyzed with thematic open coding techniques. Various behaviors were reported regarding body image. Emerging themes showed a clear demarcation between the “experts” and the “intermediates” of bodybuilding. Younger subjects cited power, body image, and vanity as reasons for training, whereas older subjects viewed bodybuilding as a lifestyle and a “sport of discipline”, where the use of AAS was rationalized as more of an athletic-based use and as an additional supplement/accessory to enhance performance.

The analysis used two approaches in an attempt to highlight “the code” by which elaborate meanings could be linked to individual and collective behaviors:

1. The perspective adopted by Iriart and Andrade (2002); Iriart, Chaves e Orleans (2009), and Caprara and Landim (2002) which is based on producing in-depth data, understanding the socio-cultural factors, giving more importance to a deep analysis of phenomena rather than trying to identify generalities, with case studies through what Geertz called “thick description”.
2. Attention to the “discourse analysis” according to Gill (2006), where the interest is the material (interview), itself seeking to uncover the meanings that the subjects themselves construct regarding their actions, guided by the sense that we have together, with our theoretical and methodological framework, and that build the actions of our respondents. I desired to interpret the discourses and practices in their socio-cultural context.

In the present study we understand "discourse" as a term that is used "to refer to all forms of speech and text, as when it occurs naturally during talking, as when it is presented as interview material [...]." (Gill, 2006:247). As the analysis and interpretation of data changes over time, the researcher adds new elements and knows better the context studied, it is common in ethnographic studies. According to Gill (2006:248), "as social actors, we are continually guided by the interpretive context we find ourselves in and build our discourse to adjust ourselves to that context."

Results

The motivation to begin bodybuilding and to pursue an ideal body did not differ among the participants from all three gyms with different social classes and different ages. The results point to the pursuit of a good "body shape" with well-defined muscles, and size does not belong only to a higher social class. Social class may be another category to study to refer to how body size/image works and how the aesthetic of the body can influence the environment of different social classes.

The pursuit to construct the ideal body is greatly appreciated and, to change the body image appears to change the identity. Concern about the "aesthetic style/body" was the main motivation for all of the participants. It was clear that participants wanted to pursue a model that appears to be a pattern, with superior muscle definition, and a very large, muscular body. This was the same across the different gyms, social classes, jobs, and ages - as I could see in the narrative of a few bodybuilders.

Statham, 22 yrs of age, with 10 yrs of bodybuilding practice, "talked" with me after a training session and his very first answer after being asked about his motivation to begin "lifting weights" was:

"Vanity indeed... aesthetic...!" (T., 22yrs, medium/higher class gym.)

Clearly and directly, most people usually do not think about male vanity as they do for women desiring to lose weight, but for the same purpose - vanity.

Hammer, 52 yrs of age, was the oldest bodybuilder I interviewed. He is considered a key player in the bodybuilding scene of northeastern Brazil and he is very influential in the bodybuilding culture. He started very young and can be described as being from the "old school" of the bodybuilding culture. Hammer, was "very straight to the point"

"...to stay strong!" (W.M. 52 yrs, medium/higher class gym)

"Stay strong...." could be many things for a young man. I asked "why", and the answer was "because everybody was getting strong, that means "big", with big muscles and it was the age of the Hollywood movies such as Rocky and Conan - The Barbarian, that had great influence on the 1980s and 1990s generations.

Another interviewee was Leo, 30 yrs age, who was finishing his PhD in engineering and who had another way of getting into the bodybuilding culture. He used the sport to do this and felt that he could "improve" his body in a different way, a way that was not just used for sport but for aesthetics:

"I started bodybuilding because I did Tae Kwon Do, and it was important to me to have more strength in my legs... but I had an injury in my rib so I could not continue fighting..." "After I started bodybuilding I continued my Tae Kwon Do training, but when I saw that I didn't have the focus any more in Tae Kwon Do... Indeed, I wanted to have a "cool body", gain muscles, and increase my muscular hypertrophy." (L. 30 years, middle class gym)

Leo agreed that vanity is very important as well, and is not bad to look after oneself. Leo was the one that decided during the period of my field work to use AAS. He read a lot of about using, including scientific papers about AAS.

Ethan, 28 yrs of age, was a policeman, and started bodybuilding just because he was extremely thin and he was very concerned that for his work on the streets he had to be stronger.

"To gain a "mass of muscles"... the main reason was for muscle... for appearance, and the clothes fit better...to improve the "carcaça". I'm a policeman, and as a thin man, "the guys" (referring to the 'badboys') do not respect me... and I like this because it's better than a weapon...!" (R.P. 28 yrs, popular class gym)

"Carcaça" is a very regional/local bodybuilding culture *slang term* referring to the skeleton, the body structure, when the "guy" is very skinny. He agreed that a big body can gain more respect, and be used as a "weapon". But, the bodybuilding

motivated him to continue training and enjoying caring for himself. Bodybuilding is a very healthy practice for him, Ethan, was the only interviewee that never used AAS and he was absolutely against their use as Appearance and Performance-Enhancing Drugs (APES).

Diddy, 39 yrs of age, was very personable, one of the big "guys" in the gym, tall, and was training to compete in bodybuilding competitions. I had good chats with him about training, supplementation, competition, life, and the bodybuilding lifestyle. Curiously, he started bodybuilding because he thought he was thin for his height. But his motivation was the bodybuilder lifestyle.

"...I thought I was too skinny and I always liked and admired bodybuilding, bodybuilders and the lifestyle, I always had a passion for it, and I had the motivation, satisfaction, and I had a will to please that my personal desire was to one day be able to compete and make my body what I wanted, you know ..." (D. 39 yrs, higher class gym)

The lifestyle of a bodybuilder is now Diddy's life, and he confesses that it is his way that he can build his own body. It is also his life's work because he is a personal trainer. Diddy says that people do not have any idea what it is like to be a serious bodybuilder. Diddy's lifestyle was not his reason for using AAS or supplements. (Definitely one of the greatest controversies about the bodybuilding culture is AAS use by bodybuilders.) There is a science involved in Diddy's practice. How could he best use science and technology on his behalf (When most people believe that all bodybuilders just use "drugs" to be big)? I asked him what he thinks about the common myth of the "normal" lifestyle, and he said: "We (bodybuilders) have a better life than the common sense (normal lifestyle), we take care of our life carefully".

Harley, 20 yrs of age, is a student who believed that bodybuilding would give him power. Actually, many athletes use "weightlifting" to improve power and performance. In Harley's case it was to get big and muscular and to improve appearance. *"I started 'malhar' (pumping/working out) to 'gain' power... I had a goal that was "win weight" ...! (D.P., 20 yrs, popular class gym)*

The pursuit for a "better" body appears to be an improvement of the body as the bodybuilders create another identity for their bodies.

Body Image and Pursuit of the Body Ideal

Inside the culture of bodybuilding there is usually the pursuit of the muscular ideal. Rodrigues (2006:48) confirms in *Tabu do Corpo* (2006/1983), that "[...] each society elects a number of attributes that make up what man should be, both in terms of intellectual or moral and the physical point of view". The basis of his work can be summarized "as in any other reality in the world, the human body is socially conceived, and that the analysis of the social representation of the body offers one of the numerous pathways access to the structure of a particular society." (idem)

The emerging word among most study participants was "magresa" (skinniness)! It was one of the first motivations to begin a bodybuilding program. But, it is very easy to see inside the gym that there is a special kind of motivation, and at the same time, a kind of "teasing" with those who have a "small" body. But I could not see this very clearly in the gyms where I observed, it was just a thing that sometimes occurred between colleagues.

Henderson, 24 yrs of age, an accounting technician, when he started, was not happy with his body image, and confessed that he did not have the "best chances" with girls, because for him he needed a bigger and more muscular body: *"I saw myself in the mirror and said: I'm very thin!"* (E. 24, medium class gym)

Diddy, 39 yrs of age, and a personal trainer, was younger when he started, but there was an admiration for the bodybuilder lifestyle, for the discipline, for the big muscles, training, and enjoyment of working his body and building his own image: *"I was 18 years old, so... I thought I was too thin and I have always enjoyed and admired bodybuilding and the bodybuilder lifestyle..."* (D., 39 yrs, high class gym.)

Ethan, 28 yrs of age, and a policeman, confessed to me that he was not happy with his body because he was very skinny, and he felt the need to "improve his image". Early on it was very important for him to have a "good body" and more muscles for

his job: *"...I was very thin before... it's because you didn't see me before... now I'm better..." (R.P. 28 years, popular class.)*

After a few contacts in the "iron room" and training, I asked Henderson, (24 years, medium class gym, planning) for an interview. He revealed that he started bodybuilding after his girlfriend left him - supposedly because he was too thin:

"I started training for emotional "concerns"... (smiles) I saw myself in the mirror and said: I'm very thin! Then I decided to weight lift, after my girlfriend broke up with me" "After six months, I met my old girlfriend and she was shocked with my increased size... we got back together, and later I broke up with her... it was my payback!" (E. 24 years, medium class gym).

Henderson said that after he "improved" his body, he had many relationships and had the opportunity to give "payback" to his old girlfriend after he met her and she agreed that he was better than before. His self-esteem before that was "cracked" as he said, but in that moment he said he was not interested in another relationship with her.

The ideal body, without fat, in good shape, and muscular was the motivation for Jason, 26 yrs of age, who worked as a security officer. He was not satisfied with his body: *" I started bodybuilding... to lose weight...I was very "full"(fat)...and I wanted to change fat for muscle..." (R. 26 yrs, popular class gym).* Jason had many problems when he was a child, because he was "chubby" and suffered from bullying. He wanted a better shape!

Statham, 22 yrs of age, a student, also wanted to lose weight. He confessed that his biggest problem was not because he liked to eat, but because of junk/fast food: *"First it was to lose weight...I ate a lot of "junk food"...a lot of "bullshit"!* (W.B., 22 yrs, popular class gym)

Having the "ideal" muscular body, from the point of view of the participants, is the main reason to be satisfied with themselves and to have improved self-esteem. The self-esteem is intimately associated with a certain kind of body. But there is also concern about proportion and "perfection" as well, almost a kind of asceticism.

For Hammer, 52 yrs of age, his age was not a barrier, and his physique was even better than one would expect. The real feeling from his age was the feeling that he was in the best shape for anyone of the same age who did not exercise. If compared with the average man of the same age, most were not at the same level of good shape and health. The image of an "old guy" was not forthcoming from his colleagues and his healthy appearance was not just an image, he felt healthy and he had good health:

"...my appearance enhances my self-esteem ...but I have been training until now and, at the same age I am not feeling like some colleagues..." (W.M., 52 yrs, medium class gym)

It's a fact that exercise is used as a "medicine" and as therapy support for many diseases and, can improve health and restore many body systems, e.g. muscles and bones. Hammer, confessed to the preconception that bodybuilding is not for old people and that it is not for women. He said that bodybuilding now is better than before but still he feels and hears the popular rumors such as that when you stop the workout you became "soft", and that all bodybuilders are drug addicts.

Mathew, 35 yrs of age, had a muscular body, but when I asked if he would like to compete, and what bodybuilding means for him, he said he had no interest in it, but that bodybuilding is part of his life. It means everything for him.

"My target was myself... my target was me...I saw and could see that I was becoming good, and better, and better...improving the image of my self-esteem, because, you know, that is all I get from this..." (M., 35 yrs, medium class gym)

Mathew is one of my interviewees that provided me with the analogy that bodybuilding is like air for him, the blood, the essence to survive.

"...practicing bodybuilding is exactly that, the body is physical, it is the cult of the body, so is the proportion of the body, it does not help you to have a big back, a big biceps, a big triceps... if you do not have a big quadriceps, a big biceps femoral, or a big calf muscle (gastrocnemius and soleus) that is at least ... The proportion is much more difficult... at least if not full, is severely disproportional." (D., 39 yrs, high class gym)

It would appear that there is a permanent dissatisfaction with the body. The dissatisfaction becomes the king of motivation. The perfection is to be always better, to cross the "barrier" of one's own body. Mathew, 35 yrs of age, who worked as a personal trainer, assumed that there was no real satisfaction, "in the end", the ideal never arrives. The image of what he (Mathew) sees is "okay", but it can always be better. After all of the years of training and possessing a massive body of mass of muscle, the goal for him is always "more and more" to keep the motivation and to improve to be the best he can be:

"WE are never satisfied... WE are never satisfied, 'cuz the big deal is to know that you can always be better! That's the bodybuilding essence, to know that you always can be better!" "Self-esteem is very important... an example is when you have a job interview, you need to be good in your appearance, it's fundamental! Like my job, I need to be the mirror for my student..." (M., 35 yrs, medium class gym)

Sabino (2000) points out that "the construction of identity 'marombeiro' takes place through a learning process of socialization" in what he calls the field of bodybuilding. However, in the research environment where I worked, the synonymous term used among bodybuilders was 'Ferreiro', once they 'lift iron'. Sabino uses the category field in accordance with the theory of Pierre Bourdieu. Bourdieu defines *social capital* as "The sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (Bourdieu & Wacquant, 1992). Bourdieu explores the cultural signifiers of how people seek to identify themselves with those 'above' them or those 'below' them on the social hierarchy (Bourdieu, 1984). The field organizes itself, from the unequal distribution of capital, and the amount of capital (economic, social, bodily, or cultural competence) that an individual owns, determines his/her position in the hierarchy of the field. Thus, according to what I observed inside the bodybuilding culture, the individual can use bodybuilding as the perfect way to "build" the body he desires. Although in the end they will never achieve it, because they always set another, higher goal to motivate their lifestyle. (It never gets any easier - because once you reach your goal, you add more weight, and it is once again difficult!) This we could see in the narrative of *D., 39 yrs, high class gym*:

"...understood man... well, I want more but not like more and more forever..., I don't want to 'relax'... my goal is to look at me ... and 'get well', get a 'healed old man' in fact with a strong self-satisfaction... you said the 'business' about the satisfaction of the body is mad, sometimes, why fuck...? okay...? okay...?, okay, it does not exist!" (D., 39 yrs, high class gym)

Hammer, 52yrs of age, and a "former bodybuilder", who competed and still practices and lives the bodybuilding lifestyle as his profession, entertainment, and self-care, reported in a very nostalgic way how he has seen the current situation of bodybuilding change. And, I agree that the current professional bodybuilders are very far from the older and more symmetric bodybuilders.

"I am from an age that a man who practiced bodybuilding was once considered a fag... imagine that, an activity determined your sexual option or changed your gender...? But bodybuilding today is a safe sport, and very important. ...but today the guy who gets in the gym, is looking for fashion..." (W.M., 52 yrs, medium class gym)

"It's very weird to see...". The expression from one of our interviewees, who expressed sadness with the current situation in the bodybuilding culture and how the new generation treats that bodybuilding culture. It's not like the 'roots' of bodybuilding. And he complained, *"The best years of bodybuilding were in the '80s and we don't see that today... the guys are very huge...and they are trying to go back to the old pattern..."* (W.M., 52 yrs, field diary).

Nevertheless, Hammer, 52 yrs of age, promotes bodybuilding as a lifestyle and compares it to art. An artist is very aware, disciplined, and works with dedication. The body work inside bodybuilding is compared to these criteria. And, critical of the common sense, which always judges without property or knowledge concerning life inside the gym:

"When you feel it in the skin, the routine of bodybuilding presents very differently from what the people see through the window from the street. However, if common sense (the normal lifestyle) does not understand the portrait, they cannot understand the body construction in bodybuilding". complains W.M, (52 yrs, medium class gym).

People outside the gym only see bodybuilders as people who lift weights, and will hardly understand the demanding process that is required to reach the "ideal" hypertrophy. As Ortega (2008ab, 2006, 2003) and Le Breton (2006) write, fitness and bodybuilding are necessary to assume a status that can be called a cosmetic body shaping and enhancement of body identity.

Social relationship

The life of a bodybuilder, according to my observation and daily interactions, is very disciplined and focused. Leisure time is often filled with people who enjoy the same body work. From my research sample, most of the relationships are with other people from the same bodybuilding culture. The serious bodybuilders in the current research study have wives, girlfriends, and friends who take part in this same culture. Subjects didn't have any apparent problems when questioned about their leisure time. The city is near the coast, and they go there on weekends. But they always maintain their diet! There is a day called "rubbish day", when they eat everything they want, even sweets, alcohol, pizza, and the "villain fat", e.g. fast-foods. However, all of this is done with control. This kind of behavior is part of the bodybuilder program, as is a strategy to not hit what they call a "physiologic plateau". It means that, after many days adhering to their diet and avoiding fat, salt, low carbs (simple sugar), the body needs to experiment with new substrates.

What does life for a "serious bodybuilder" really mean? It is not easy to see outside the culture. The "observant participation" methodology offered me an excellent chance to see, feel, and report on the routine and how it works in the everyday life of a bodybuilder.

After a period of depression and cessation of training, Diddy, 39 yrs of age, 21 yrs of training, working as personal trainer, tried as he said "bad things in life" (alcohol and "social" drugs). Afterwards, he had a decision in his life and stopped "walking" and hanging out with people he said were bad company for him. Bodybuilding rescued him from that life. Now he is happy to be back and return to being a serious bodybuilder.

"The bodybuilding came to be, once again, a very important reason for living, the bodybuilding has returned to my life... got to be bodybuilding again ... It was 'her' who took me out of 'the hole' where I was understood... I was always an athlete and I went through a very difficult time in my life where I said man...'damn' what am I gonna do...?... then I looked and said 'well maybe I'll go back to training, return to feed me, to carry my lunch pail, back training, I am gone, into my, into my tank and going back I think the sport will make me leave again and understood why I came back' (training), ..." (sic)

The narrative of Diddy, reported the importance of his new decision to be in a healthy environment, as he considered the bodybuilding culture to be for him. To his friends and colleagues outside bodybuilding, it was not healthy for him and for anyone else as he would confess to me. The relationship with the "guys" inside the gym could restore his self-esteem so he could once more look after himself, stop using "drugs", alcohol, lose weight, get more sleep/rest and stop partying, etc.

During an interview with one the serious bodybuilders, *Mathew*, 35 yrs of age, 17 yrs of training, said:

"Bodybuilding is my life, I can't imagine living without it man...". (from the second gym)

Another bodybuilder, asked about his life of training and his experience inside the bodybuilding culture said:

"Where I go I carry my lunchbox, it's my life... today it's my life, my life... it's like breath... if you take the bodybuilding out of my life, it's the same as if you are taking blood from my veins...". (D., 39 yrs, higher class gym)

These excerpts relate the feelings to the everyday life of a "serious bodybuilder". Regarding this aspect, a very popular Brazilian author, Mirian Goldenberg, affirms that the social and historical context, especially when "unstable and mutant, in which the traditional means of production of identity - family, religion, politics, and work, among others - are weakened, you can imagine that many individuals or groups are appropriating the body as a way of expression (or representation) of the self" (Goldenberg, 2002: 20). Two more authors reinforce the idea of "build" as a new identity changing the body and using exercise as the "tool" for construction.

I also observed the "the widespread ideology of bodybuilding's own call" the culture of fitness "- which is based on the concept of beauty and fitness produced as a work of the individual over his body [...] seemingly based on that type of ownership"(Goldenberg, 2002: 21).

The value of exercising is very well recognized as a practice of health outside and inside the gym. However, the body - built as a result of bodybuilding - is not considered a healthy practice by people outside of this culture. In the bodybuilding culture, the practice is almost a religion. Although, this practice is not the same for all, the body construction that has been studied, as well as an "ascetic practice", is where the body is worshiped and the gym becomes a temple (Ortega, 2006, Ortega, 2003, Courtine, 1995). The aesthetic model is highly valued and the hyper-muscularity is as well. During my observation inside the gym it was very normal to see people looking in the mirror and "double-checking the muscles". This practice is not seen as a vain practice *per se*. My colleagues, bodybuilders, always complain that people think looking in the mirror is only a "narcissistic practice".

All rooms used for bodybuilding have mirrors. The three gyms I used in this ethnographic study had mirrors in every part of the room. The mirror is responsible for many positive things and many negative things (e.g. correction of exercise movements and development of body image disturbance). When using a mirror, one is likely to observe mistakes in the execution of each exercise. On other hand, it's important to check muscle size, shape, and definition. These are important things to be considered in the culture of the gym.

The body recognized as a "good body" in the gym is not always recognized by the media as "valuable". Today, we have an extreme development of great and huge bodies inside the national and international panorama of bodybuilding. The media shows the well-defined body of men in "health" magazines, but it is not the same for bodybuilders. The "golden age" of bodybuilding is not the same as today. A great change has happened over the years with the pattern of bodies, with size, shape, definition, and use of new machines, PES, and ergogenics during the current period of the bodybuilding culture. There has been a transition from what Liokaftos (2012) called "*From 'classical' to 'freak'*". In his study, Liokaftos (2012),

analyzed the traces of the gradual shift from an early bodybuilding model, represented in the ideal of the 'classical,' 'perfect' body, to what he called "a late-modern model celebrating the 'freaky,' 'monstrous' body". This development is shown to have entailed changes in notions of the 'good' body, moving from a 'restorative' model of 'all-around' development, health, and moderation whose horizon was a return to an unsurpassable standard of 'normality,' to a technologically-enhanced, performance-driven one where 'perfection' assumes the form of an open-ended project towards the 'impossible.' Today the bodybuilding media is different, even the magazines and the programs. The patterns are different from the aesthetic on TV, fashion magazines, soap operas, and movies, with certain of exceptions.

The change in the body modification culture can be understood as "capital" and a form of commodity (Goldenberg, 2002). According to Ortega & Zorzanelli (2010), and the work of Schilder (1980), who, within the aspect of body modifications, endeavors to observe the motives of these changes to adapt to the contemporary body, speaks of somatization and body customization." The body becomes the capital within a "spectacularized society". And, the term "body modification" refers to a long list of practices that include piercing, tattooing, branding (marking with a hot iron), cutting (reduction or incision), binding (moorings), and implants to change the appearance and body shape. But the list can be extended to include gymnastics, bodybuilding (weight training), anorexia, and fasting (Featherstone, 2000:1).

The risk perception is normalized (or "organized by social norms and context"), but it is not the most important issue among serious bodybuilders. They care more about blood tests, being informed, and being monitored by a physician (in particular, an endocrinologist) than it seems to be. The main goal of the sport and the practice of bodybuilding is the development of muscle with a very disciplined workout and dedication to a 'healthy life'⁸. Consequently, very muscular, "ripped",

⁸ "Healthy life", is simple to see and understand when you take part of this culture and have to eat better (i.e. avoid alcohol, salt, fat, fried foods, fast foods, and be mindful of good portions of protein,

“shredded”, “cut”, big and well-shaped bodies are “excessively” honored. This does not correspond to a potentially health-damaging practice and assumes the status of sport. The elite performance sport practices, or even non-competitive participants are subject to injuries and this is part of the training and performance. According to Monaghan (2002), “large gaps remain in our social scientific knowledge of what legitimates and sustains this potentially health-damaging practice” - referring to the study of steroid use in bodybuilding as a culture of drug use. This research shows once again, how wide the gap is in understanding the culture of bodybuilding without all of the academic and common sense preconceptions.

Bodybuilding Culture and Identity

Inside a social context we can assume, based on Goldenberg (2000), that the body is a way of expression (or representation). The present author affirms that “the very widespread ideology of bodybuilding – the so-called “culture of fitness” – which is based on the concept of beauty and fitness products as a work of the individual over his body [...] seems to be based on this kind of appropriation”(Goldenberg, 2002: 21).

This culture of fitness is concerned with a culture of bodies and a culture of construction of bodies. Many authors have discussed and analyzed this culture of the body and how it is reflected in the lifestyle and in the stakeholder (Pope and Katz, 2003, Pope, Kouri, & Hudson, 2000, McCabe & Ricciardelli, 2001, Olivardia, 2001, Pope and Katz, 1994). The consumption of body can be compared to the consumption of commodities and, consumption makes money. This culture is a place where the body can be an object of consumption, or “capital of consumption”, as Goldenberg (2002) has suggested based on the work of Pierre Bourdieu (1989). This type of vision exists but it is not deeply analyzed within our sample. However, it is related to the morals of sport and exercise practice, and how society perceives the culture of bodybuilding, and how people have been influenced by the

carbohydrate, and water), adhere to the basic principles to improve performance (i.e., sleep well and properly, eating slowly and every three hours, rest between training sessions), and supplement use (i.e. amino acids, vitamins, and minerals).

consumption of images (Featherstone, 1991). This is an important point of analysis in qualitative studies and, is another point of bias with the theme concerned with body image construction and bodybuilding culture. In the study of post-moralist society, Lipovetsky (2005) associates the moment of sport to the phase hyperbolic cult show with the strategies of brand communication, with personalization, and professionalization of champions.

From my ethnography experience I could experiment with the bodybuilder lifestyle by being an "observant participant". Every month, eating carefully (e.g. eggs, avoiding fried foods, fat, salt, soft drinks, sugar, fast foods, alcohol etc.), using supplements (e.g. BCAA, whey protein, vitamins), looking after rest and sleep, water ingestion with a hardcore workout, it was a great contribution to "building a massive body change". The discipline to have six meals a day, calculate how much protein, carbs, and water and to do this routine each day is very difficult to do. However, it is not so bad, as my track and field experience gave me good discipline. Second, I could feel and see the good results in my body - more energy, good sleep, more resistance, strength, and with a very good body shape. I gained 22.22lb (10kg), reaching 204.44 lb (92kg), with a low percentage of body fat. At the end of my 'field work' I took part in a competition in the gym called "the personal day", a competition that occurs annually, organized by the gym in groups to participate in a few fitness activities such as circuit training, body combat, and the bench press. I took part in the category over 200 lb (90kg). I was third with 266.66 lb (120kg) in the bench press, and 288.88 lb (130kg) - with assistance. It was my personal best, even during my athletic career I never reached this result. After four months, my partner said to me: "*stop training your 'legs', they are big enough!*" (Field diary, 2012). These points represent, as a participant, that I achieved not only the bodybuilder body or respect, but also the experience to declare what I was feeling "in the skin" about building muscles and how the bodybuilder culture works.

My ethnography experience in the bodybuilding culture reflected the everyday life and the lifestyle of a bodybuilder and bodybuilding. I can generalize according to the narratives of my sample that, "the bodybuilding", from the point of view of a

bodybuilder, may be a "culture of body construction" and a "culture of exercise pleasure", but more than this, it is a *lifestyle!*

Considerations

It seems clear that for sport, appearance is not part of the plan, and this thesis is that use of ergogenic aids (including the use of AAS and other APED substances) is a pathway for body modification and for improvement of the appearance by "recreational bodybuilders", as we call those who practice bodybuilding but do not have the intention to compete, but just do it to enjoy the bodybuilding culture. Unlike in competitive bodybuilding, where appearance is part of the sport.

According to Lipovetsky (2005: 91), it is even more critical that: "After the material goals, products for calculating, the culture industrialization, the sport itself ends up being conquered by the wave of the ephemeral, by the marginal hybridism, the allure of novelty. No longer is it an aristocratic sport from its origins, but fashions sport to suit every taste, the accelerated promotion of "sports-product"; marketing of optional versions that are equivalent to the narcissistic cult of the body and stimulating.

In my studies on the aesthetic motivation among young, male bodybuilders determined to improve their physical appearance, the main statements that emerged from my in-depth interviews were the following: "the goal of my workout is to reach perfection" and "friendships influenced my training", among others (Santos, Guimarães, & Bahrke, 2011). The reasons arising from the interpretations of the collective discourse of these issues were: "For aesthetic reasons, I decided to do bodybuilding", "Definition and perfection, and keeping my body 'designed' are my goals," "People prefer muscle mass", "I work very seriously", "I was influenced by friends, a desire to have good health, and seeing other guys work out," and "other people, especially girls, began to notice". We realized the demand for aesthetic improvement, with a search that relates strongly to feelings of pleasure and dissatisfaction within the environment of the gym, indicating certain order models and ideals "within the group (of bodybuilders)", but not disconnected from society. This is in agreement with what I observed during my term within the bodybuilding culture.

The aspect of "everyday life" of a serious bodybuilder is completely different from what common sense would lead us to believe. Life inside the "Anabolic Temple", as bodybuilders refer to the place of all serious workouts (gyms, fitness centers), it's "The Fabric of Monsters", where the "monsters" are building and born, with an example of discipline and a regime of training with great pain and pleasure. "The house of pain", as recognized, is also a place to build muscles and where it is necessary to tolerate great pain to pass the limits of natural-sized muscles. The process, as everyone knows, is hypertrophy. How serious is the bodybuilder lifestyle?

There is a philosophy in "The Iron Room" regarding the "good way" of self-care and the discourses of health still continue and are reproduced among all of the participants in the bodybuilding culture. The difference inside this world from the world outside the gym is not concern over the use of PES or other "social drugs" such as marijuana, cocaine, and amphetamines, but to keep the "healthy life". It means an extremely disciplined lifestyle with torturous workouts, strict dieting, and ingestion of "perfect potions" of protein, carbohydrates, and APEDs. The "evil" thing within this world of bodybuilding is fat (more than sugar and/or alcohol), and taking the "easy path" to building muscle is thoroughly condemned. All of these things I can testify to and noted in my field diary. The use of AAS in the culture of bodybuilding is taken for granted, but how they use them is completely different from what people outside this 'world' usually imagine. The use is not focused on the types of AAS, 'cycles' of use, or time, but is part of a schedule of training, as are the diet, water intake, workouts, and rest. Nevertheless, there is controversy in that the use of AAS by the serious bodybuilder differs in "quality". Quality appears to be a "very conscious" use, with monitored use, and most of the time use is followed by a physician (as related by a few interviewees). So the serious bodybuilder uses AAS in a moment that he considers a "special" moment to improve his training and/or and a specific muscle or part of the body. Otherwise, the beginner, occasional or recreational "bodybuilder" often enters into

bodybuilding "just to look good". Both thoughts reflect contradictory positions on the use of AAS.

The use of supplements is not free of side effects or health risks. For example, recently, in Brazil, the National Agency for Sanitary Surveillance (ANVISA) in a resolution, prohibited the commercialization of four supplements. First, one supplement that contained BCAA (Branched Chain Amino Acids); second, a supplement that contained taurine in composition; third, a supplement with vitamins B12 and B6 (over the Daily Recommendation Allowance (or Dose) and with a substance that was not for sale; the fourth, no safety proof for use in humans. (Laboissière, 2014). This affirms the concern of ANVISA with other ergogenics as well.

In the gym, the mirror reflects images differently from what "common sense" (or normal lifestyle) reveals outside the gym. Whereas,

"common sense sees bodybuilders as a number of huge guys who use drugs and anabolics, who are caring for their health, we don't smoke, we sleep very well⁹, we have an excellent diet (and they have the best nutrition of any athletes), we don't drink alcohol, we control our blood exams, and we are the bad guys...?!" (D. 39 yrs, high class gym, field diary).

The excerpt from Monaghan (2002), "bodybuilders used to condemn the condemners" could be in accordance with this research about bodybuilders who feel physically (if not morally) superior to potential condemners. Although, I cannot make any value judgements, if there really is a superiority in this feeling, by my ethnography that I conducted and my experience inside the bodybuilding culture, it easy to affirm that when compared with the contemporary lifestyle of fast foods, the bodybuilder has a healthier diet and he is more concerned about his health. However, there is a controversy between a healthy life and AAS use and is not my position or affirmation, once this is the collective thought of the absolute

⁹ Sleep is very important to the anabolic process as during sleep the body releases growth hormone, the "precious" and important hormone, required for growth.

majority of my interviewees and the bodybuilders I contacted during my ethnography experience.

In the analysis of Courtine (1995), the body imposes amid a culture of muscle, which is a central element of the culture of the body in the U.S. A peculiar critical analysis from Courtine is the noted eccentricity of the event of bodybuilding when he speaks of "bloated bodies of men, artificially tanned ...", "the incoherence of anatomies", "unusual muscle masses that do not serve for running or for throwing, and that break with all that is within sport logic of associated muscle to movement". Maybe hard and deep critical analysis of this culture now and then inside the "academic temples" of knowledge is identified and recognized as a subculture.

But normal for whom? As Goldenberg (2011) points out, "De perto ninguém é normal (Closer no one is normal)" since we all have deviant impulses, but the bigger concern lies in not why we have deviant attitudes, instead we should be asking why someone committed a deviant act. For each culture there is a case, and in this particular case what can be seen is the culture of ascetic dedication to muscle. In this respect, the culture of muscles in U.S. bodybuilders is, for example, how the image is strongly valued and ritualistic. In the competitions, analyzed by Courtine, there is a duel of pictures, positioned in this context as "pure appearance fights".

Ortega and Zozarnelli (2010) explore how technological developments feed the body modification industry, since "the limits of how the body can be modified and rebuilt expand with the assistance of the biotechnology industry." "But in the "somatic culture" body modifications are a *sui generis* case of body customization. In contemporary times, the practices of body modification [...] we provide a wide spectrum of uses that have been admitted to the body as performance stage "(Ortega & Zorzanelli, 2010:80).

The important issue is concern about what is the healthy path? In a society that permits alcohol and tobacco use among teenagers, where "junk food" is a very common habit, and the obesity epidemic becomes also a problem among children

and adults (and in Brazil more than half the population is classified as obese according to the Health Ministry - Portal Brasil, 2013), it is a huge problem with crack drug use in the streets that became a health system problem.

There is no due attention to drug use within the high performance sport, and this seems to be reflected in the bodybuilding practice among the young inside the gyms. It is frequently the cases of doping in Brazil, with simple substances very well known in sport, e.g., nandrolone, sibutramina, EPO, etc.). Drug use in sport is real and according to the last annual report 2012/2013 of ABCD (Autoridade Brasileira de Controle de Dopagem), 89% of all athletes registered at the Ministry of Sports answered that they have never been subjected to any doping control out of competition in Brazil. And, 83% have never been subjected to any doping control during competition in Brazil (ABCD, 2012). *"These results revealed the need for a more effective approach by the sports bodies regarding measures for the prevention and control of doping, with a strong emphasis in education"*, confirm the ABDC (ABCD, 2012).

"Mind the gap!"

Drug use in gyms seems not to receive much attention. Education/prevention/intervention programs, with better sports nutrition information, would be a good option. Definitely, the use of PES in the bodybuilding culture is a different situation. The beginner is different from the serious bodybuilder. And, this is clear among the sample interviewed in the present study.

Lastly, the social, cultural, and anthropologic aspects should be considered when the young population is exposed to an environment that pursues the muscular ideal (Santos, Rocha & Da Silva, 2011).

Going forward, I believe the greatest problem is the gap in the public health system that involves the Health Secretary, the Education Secretary, the CREF (Physical Education Federal Council), the Sports Secretary* ANVISA (National Agency of Sanitary Vigilance), and other organizations. The ethnography research

among bodybuilders, with an effectual participation in the culture of bodybuilding, has been of important value in understanding the culture of the participants and the value of more intervention programs. At this point, we agree with Monaghan (2002) in recognizing that "large gaps remain in our social scientific knowledge of what legitimates and sustains this potentially health-damaging practice". Due to the importance, we believe that research should support education and prevention measures and interventions among young people in our country and among professionals in the field of public health.

Conclusion

There is a philosophy in "The Iron Room" which is that the 'good way' of self-care and the discourses of health still continue and are reproduced amongst all the participants in the bodybuilding culture. The difference inside this world from the world outside the gym is not concerned with the use of PES (including AAS), or other "social drugs" such as marijuana, cocaine, and amphetamines, but in keeping a "healthy life". This means leading an extremely disciplined lifestyle with torturous workouts, strict dieting, and ingestion of "perfect portions" of protein, carbohydrates, and APEDs. The "evil" thing within this world of bodybuilding is fat (even more so than sugar and/or alcohol), and where taking the "easy path" (the use of domestic oil inside the muscles documented in another paper) to "build" muscle is thoroughly condemned. As Monaghan (2002) states "bodybuilders used to condemn the condemners" may be in accordance with this research about bodybuilders feeling physically (if not morally) superior to potential condemners. Moreover, the use of any resource or agent such as an ergogenic aid is "just another" tool used to become successful in the culture of the sport. However, although it's necessary, an impartiality to make a value judgement, if really there is a superior feeling among bodybuilders because of their lives to be better than the common sense (the normal lifestyle), but by the ethnography conducted and the experience inside the bodybuilding culture, it's easy to confirm that the bodybuilding lifestyle is healthier than common sense leads us to believe and in regards to the health aspects. Who has the power to condemn? If compared with the contemporary lifestyle of fast foods with no exercise, alcohol consumption,

"social drugs", and self-medication for example, the health benefits of exercise and power training, combined with a balanced diet, are very well known. The harmful effects of ergogenics, body image disturbance, eating disorders, and injuries are well known health risks, but the "headline" of sport drug use is not generally well known.

Education is a good way of beginning to understand how important body work is in the process of embodiment and lifestyle. However, non-participatory researchers will be unable to get access the real world of bodybuilding, the "Iron Room", nor gain the confidence of members of that culture and consequently, will be unable to understand how this culture works.

*"Your body is the mirror of your attitudes.
It reflects what you eat, how you train, your lifestyle."
"Seu corpo é o espelho de suas atitudes.
Ele reflete o que você come, o que você treina, o seu estilo de vida."
'Maravilhas Saradas', FB, 2013*

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Article 3.

*Pattern of anabolic steroid use within Brazilian
bodybuilding culture: controversial issues*

Pattern of anabolic steroid use within Brazilian bodybuilding culture: controversial issues.

Azenildo M. Santos

Abstract

The image of huge bodies within the "Iron Room" – the name given to the bodybuilding room in one of the specific bodybuilder gyms visited during the ethnography research – seems to the outsiders of this culture, that muscle is the symbol of masculinity. Much of the time, however, the pursuit of the ideal body, worked with discipline to reach the ultimate muscular shape, is confounded with an exclusive pattern of anabolic-androgenic steroids (AASs) use. Using qualitative data, generated during an ethnographic study of the male bodybuilding culture in Recife, Brazil, the purpose of the present study was to investigate how anabolic-androgenic steroids (AASs) and ergogenic aids are included within the culture of bodybuilding in relation to aesthetics, body image, and health risks. Masculinity, narcissism, and the pattern of AAS use are noted since they play a significant role in the bodybuilding culture.

Keywords: Anabolic-Androgenic Steroids, health risks, "patterns" of AAS use

Introduction

The use of anabolic-androgenic steroids (AAS) is commonly associated with bodybuilding. Often, bodybuilding participants with muscular bodies are pejoratively called "bombados" (pumped guys). There is no doubt that anabolic steroids, as an ergogenic aid, are part of the culture of bodybuilding, but it is necessary to go beyond common sense (the normal lifestyle) to understand better the preconceived ideas of the meanings associated with these substances and why and how they are part of this culture. It is also important to note that not all bodybuilders use AAS.

Extensive research, as well as widespread media coverage, has focused on the "ideal" thin female body type, a body type that has resulted in both body image and eating disorders (Carper, Negy, & Tantleff-Dunn, 2010). However, more recent research has begun to examine the impact of the media on eating disorders and body dissatisfaction in males (Carper, Negy, & Tantleff-Dunn, 2010). The media and society have helped set the model as a thin body for women and a lean and muscular symmetric body shape for men. Although today's muscular body type is very popular as an *aesthetics* type, society has also promulgated a cultural type for men as well. This emphasis on muscular strength and mass has also been characterized in pop culture in a variety of ways. Much of the time the pursuit of the muscular ideal is not the main reason that bodybuilders "live the bodybuilding

culture". I am talking about the serious ones, not those that do not live the bodybuilding culture. However, the serious ideal body, worked with discipline and to reach the ultimate muscular shape, is often confounded with an exclusive pattern of use of anabolic-androgenic steroids (AAS).

Pope, Phillips & Olivardia (2000: 13) have commented that "[...] society and media preach a disturbing message about [a man's] appearance with the modern images of '*supermacho*' (super males), that virtually no one can attain." This observation was also made by Keane (2005:200) and it certainly makes sense with the appearance of the male body as erotic spectacle and, merchandise in the dominant culture will produce changes in the meanings and in the experiences of masculinity.

Concerning masculinity, Pierre Bourdieu (1999) criticized the "male domination" that compels men to be strong, powerful and virile, while women should be delicate, submissive, and dismissed. Bourdieu argues that men tend to be unhappy with parts of their bodies that feel "too small", while women are upset with critical regions of their bodies that seem "too big" to them.

The image of huge bodies within the "Iron Room" – the name of the bodybuilding room in one of the specific bodybuilder gyms we visited during our ethnography research – seems to the outsiders of this culture that muscle is the symbol of masculinity. Alan Klein, author of *The Little Big Man: bodybuilding subculture and gender construction* (1993), says that masculinity is sociologically determined and bodybuilding is a subculture and a gender construction.

Using qualitative data, generated during an ethnographic study of the male bodybuilding culture in Recife, Brazil, the purpose of the present study was to investigate the pattern use of AAS and ergogenic aids that are included in the culture of bodybuilding and their relation to aesthetics, body image, and health risks. Masculinity and narcissism are also noted since they play a part in the bodybuilding culture.

Methodology

The present study was guided by ethnographic principles and the approach chosen to explore the research question. Data were gathered by means of "observant participation" as proposed by LÖic Wacquant (2002). This way it was possible to perform the analysis by "living through", from the sociologic "lived through". The impressions, observations, and descriptions were formed from a "face-to-face" relationship with study participants.

As in all ethnographic research, all of my observations included formal and informal interviews, documentation of events, and field notes, as registered in my field diary. Three gyms were selected following the approval of my project and according to the different socio-economic standards of the individuals and the gyms. The fieldwork was conducted continuously in the three gyms over 9 months. Data collection was based upon obtaining approval from the gym managers and owners. One gym was in a suburban area, another was in a metropolitan area (and considered the best gym in the area), and the third gym was rated the top gym in the city. Each gym was comprised of different types of members, from low to high socio-economic standing.

Ethical Considerations

As with any research in the health field, in Brazil, research follows the Bioethics Rules of Research and the Regulamentary Rules of Research Involving Human Beings (Resolution no. 196, October 10, 1996) of the National Health Council (CNS). The present project was previously submitted and approved by the Ethics Committee (CEP) of Institute de Saúde Coletiva (ISC) of Universidade Federal da Bahia (UFBA), under the registration CEP number 019-12 / CEP - ISC.

Profile of Participants

The sample consisted of a total of 11 males from the three gyms, providing in-depth interviews, most of whom were contacted during ethnographic work (See Table 1.). The youngest respondent was 20 years of age and the oldest, 52 years of age. The mean age of the interview sample was 29.8 yrs. Half of the sample was classified as "serious bodybuilders", with good muscularity, more than 10 years of training, the majority of whom had more than 6 years of experience training in

bodybuilding, and who had experience using AAS. Only one participant had never used AAS, and discoursed against using AAS. Another participant in the sample stated, during our first contact, that he had never used AAS, but after training in the gym, he told me he had decided to use AAS, and told me some of the details during the interview. Three of the participants competed previously at the state and regional levels of weightlifting and bodybuilding. Six of the participants had not completed high school (secondary education), three had attended college, one had completed college, and one possessed a PhD. There was a wide range of occupations, including financial technician, bodybuilding instructor, police officer, student, security personnel, and civil engineer. Among them, I focused more on the participants with more experience, whom I considered to be serious bodybuilders. However, even with the differences between the participants, it was very important to understand what each thought about the construction of their body and how they planned their pursuit of the ideal body they each wanted to reach.

I consider a "serious bodybuilder", as not just another category, it is how practitioners of the culture of bodybuilding consider themselves and whom "pay the price" with pain to be bigger with a "serious" workout and a life of dedication and discipline. The pain enters into a wide range of issues determining how the workout must be undertaken. The "tolerance of pain is normative" and it (pain) "separates the men from boys", according to White, Young, & McTeer (1995). This is a "law" of the bodybuilding culture where the gyms, are referred to by most interviewers as the "anabolic temple¹⁰", or the "factory of monsters". This also works as a norm of masculinity. Although masculinity is one tenant of the study of the bodybuilding culture, in another paper, I discuss the social science of masculinity and bodybuilding.

¹⁰ The "anabolic temple" is the main expression used by older bodybuilders to describe and label the gym. "Temple", as a reference to the room for a workout is analogous to the ascetical practices of "pumping up" the muscle mass, and reaching a good anabolism. "Monster Factory" is another analogy, resulting from good anabolism. These are "huge guys", but "monster" is a good description of them, and is often times considered a compliment.

Table 1. Table of participants, with occupation, level of education, age, years of training, and years of use/non-use of AAS. Names have been changed to protect individual identities.

NAMES	OCCUPATION	LEVEL OF EDUCATION	AGE (YEARS)	YEARS OF TRAINING	USED AAS	TYPE OF GYM	SOCIAL CLASS
1. Harley	Student	Incomplete Undergraduate	20	6	Yes	Small	Popular
2. Diddy	Personal Trainer	Incomplete Undergraduate	39	21	Yes	Big	High
3. Henderson	Planning	Technical/ Incomplete Undergraduate	24	6	Yes	Medium	Medium
4. Neo	Civil Engineer	PhD in Engineering	30	6	Yes/No	Medium	Medium
5. Mathew	Personal Trainer	Incomplete Undergraduate	35	17	Yes	Medium	Medium
6. Hammer	Lecturer	Coordinator in Gym/Supervisor	52	37	Yes	Big /Medium	Medium
7. Nicholas	Student	Instructor Jiu Jitsu/ Incomplete Undergraduate	30	8	Yes	Medium	Medium
8. Ethan	Police Officer	Undergraduate	28	4	No	Small	Popular
9. Jake	Student	Incomplete Undergraduate	22	3	Yes	Medium	Medium
10. Jason	Security Officer	College Graduate	26	10	Yes	Small	Popular
11. Statham	Student	Incomplete Undergraduate	22	10	Yes	Small	Popular

The Field Work Approach

Two of the gyms in this study can be described as hard-core bodybuilding gyms, i.e., they had superior resistance training equipment for creating the “perfect conditions” required to construct the “ideal body”. One gym was in a metropolitan area with a “middle” social class and the other gym was a “top” gym in the city with a higher social class. The third gym was a small gym in one of the suburbs of the city, but without the equipment to produce the “best looking body”. I adopted a routine of training Monday through Saturday. Twice a week, during the morning, I attended the small gym. Five days a week, during the afternoon, I attended the gym in the metropolitan area, and the top gym, two to three times in the evening. Certainly, my schedule needed to be adapted to a proper program of hypertrophy¹¹ (this should be the goal of all bodybuilders, but in this research study it was not a category of study) which divides the body into parts so that I could work out twice each day, but I always followed my training with several protein supplements during my recovery periods, and very high caloric meals - even inside the gyms - as does every serious bodybuilder.

Participant observation was complemented with my audio-recorded, in-depth interviews using a semi-structured schedule, but completely adapted to the bodybuilding culture vocabulary so that we could have a “good chat”. Additional informal interviews occurred during my field work (I spoke with a few bodybuilders in the gyms). The interviews took approximately 1.5 hours, although sometimes we spent more time or needed an additional day to complete. Most of the interviews took place after the workout so we were usually eating or drinking protein supplements in a quieter area of the gym. Sometimes, in the “hardcore” gyms, we could meet in the swimming pool area. This background and the life

¹¹ Muscle hypertrophy can simply be defined as an increase in size of the myofibril(s). Mechanically induced tension produced both by force generation and stretch is considered essential to muscle growth, and the combination of these stimuli appears to have a pronounced additive effect. More specifically, mechanical overload increases muscle mass while unloading results in atrophy. This process appears largely controlled by protein synthetic rate during the initiation of translation. Schoenfeld, B. J. (2010). The Mechanisms of Muscle Hypertrophy and their Application to Resistance Training. *J Strength Cond Res* 24 (10):2857-72.

inside the gym, gave the interviews the "identity of the environment", enough so as not to be seen as out of place.

I took time to talk with my "key makers" from all of the gyms and to ask who of the bodybuilders I could meet for an interview. However, some of the bodybuilders I knew and they had extensive experience and were very popular in the bodybuilding culture of the city. Among them, I was advised at the beginning of the study, during the evaluation of the project and "upgrade", to conduct interviews with some individuals who were not part of the bodybuilding culture: meaning that they desired the "aesthetic style" rather than the "muscular style". A peculiarity of this sample concerned AAS use, only one participant did not have experience with AAS and disagreed with the use of AAS to improve appearance. Curiously, one of the participants, when we had our first contact and informal interview in the gym, had never used AAS before but was very curious about how to use AAS, including what would be "the best options", and where he could purchase the "real thing". However, the majority of bodybuilders basically consisted of males, eighteen years of age and older, but also men with extensive training experience and with good muscular development.

Given my personal background of sports participation, I was muscular. Additionally, I actually developed a considerable amount of muscle during my "field camp" so that I was 22 lbs heavier and improved all of my personal weightlifting "bests", some of them the same as those of my bodybuilding partners. In the gym I have the identity of a bodybuilder, as Monaghan (2002) experienced in his ethnography in the UK. Although another very significant difference in my own experience is the fact that all of the instructors, managers, and owners from the three gyms knew of my work and my research with AAS and ergogenic aids¹²

¹² Second, Santos (2007:205), in *The World Anabolic*, the word ergogenic has various definitions according to many sources, but in a manner basic and simple it is any resource, technical or substance, capable of improving the physical work capacity or athletic performance. These features can be classified and applied in various ways, such as improvement in strength, speed, in a nutritional procedure, psychological, or pharmacological that can range from the technical to the acceptable concentration of illegal use of anabolic-androgenic steroids.

and their use in sport and exercise. Therefore, to discuss drugs and supplements was a very good way for me to have good interaction in the gym, something very acceptable and part of the bodybuilding culture.

With my "identification", there were certain methodological advantages that generated rapport and produced social access in a domain where other drug researchers have failed, particularly in academic research. Definitely, there are very particular aspects in bodybuilding that are still taboo and do not belong to the "normal" world.

Analysis

Data were recorded, transcribed verbatim, and analyzed with thematic open coding techniques. Various behaviors were reported regarding body image. Emerging themes showed a clear demarcation between the "experts" and the "intermediates" of bodybuilding. When asked about reasons/motivation for steroid use, younger subjects cited muscular power, body image, and vanity, whereas, older subjects viewed bodybuilding as a lifestyle, a sport of discipline, and AAS use was more athletic-based as opposed to a supplement/accessory, such as with performance enhancement.

The analysis used two approaches in an attempt to highlight "the code" by which the study participants elaborate meanings linked to individual and collective behaviors:

- 1.) The perspective adopted by Iriart and Andrade (2002); Iriart, Chaves, and Orleans (2009); and Caprara and Landim (2002) is based on producing in-depth data, understanding the socio-cultural factors, giving more importance to a deep analysis of phenomena rather than trying to identify generalities with case studies - through what Geertz calls "thick description", and 2.) Concern for the "discourse analysis" according to Gill (2006), where interest is in the material (interview) itself, seeking to uncover the meanings that the subjects themselves construct regarding their actions, guided by the sense that was adopted in this research that has, together with our theoretical and methodological framework, and built the

actions of our respondents. We sought to interpret the discourses and the practices in the respondent's socio-cultural context.

In this study we understand "discourse" as a term used "to refer to all forms of speech and text, as when it occurs naturally in the discussions, as when it is presented as interview material [...]" (Gill, 2006:247). As the analysis and interpretation of data changes over time, it is common in ethnographic studies that the researcher adds new elements and knows better the context being studied. According to Gill (2006:248), "as social actors, we are continually guided by the interpretive context we find ourselves in and build our discourse to adjust ourselves to that context."

"Beyond the body": no limits to satisfaction

Background

Regarding body image dissatisfaction, a study conducted in the U.S. in 1997 found, among 548 men surveyed, that 55% were dissatisfied with their muscle tone, 63% with their abdomen, 52% with their weight, 38% with their chest, and 43% with their overall appearance (Pope; Phillips; Olivardia, 2000: 12).

A research study conducted by Blond (2008) suggests that a young man's body dissatisfaction increases when he sees images of other, attractive muscular men. The effect sizes indicate that exposure to images of idealized male bodies has a small, but statistically significant, negative impact on men's body dissatisfaction. This study suggests that young men, who are dissatisfied with their bodies, are at increased risk for negative self-evaluations when exposed to idealized images. Also, other studies suggest that men who are satisfied with their bodies may be protected against the negative impact from seeing such images.

Idealized images most likely are related to perfectionism. Perfectionism has come to be viewed as an important sustaining factor of disordered eating. Body dissatisfaction is a robust risk factor for disordered eating and it is thought to be especially problematic in the presence of high levels of perfectionism (Wade & Tiggeman, 2013).

Inside the bodybuilding culture, satisfaction, perfection, and narcissism are present. The ethnography within this culture likely brings with it a pragmatic explanation at the same time that it brings forward the point of view of the serious bodybuilders, who seek bodybuilding as a lifestyle or the way they live their lives.

EAA and Body Image Disorders

With AAS use, adverse effects such as “roid rage” (slang for steroid-induced aggressive behavior), depression upon steroid cessation, and body dysmorphia, may also occur among the bodybuilding population. Body image disturbance (BID) among men has only recently become a phenomenon of clinical significance, with noted heterogeneity in the behavioral consequences of these disturbances (Hildebrandt, Alfano & Langenbucher, 2010).

Nevertheless, current discussions on the topic in journals and in academia are still scarce when compared with the number of cases of death from bulimia, anorexia nervosa, Body Dysmorphic Disorder (BDD), Obsessive Compulsive Disorder (OCD) and Muscle Dysmorphia (MD) found in the international scientific literature and popular media (Barros, 2005; Drewnowsk and Yee, 1987, Santos, 2005; Santos, 2007; Pope; Phillips; Olivardia, 2000; Stanford and McCabe, 2005).

Keane (2005) has proposed two different frameworks to explain psychological disorders in men who use AAS. The first framework involves the use of steroids as a form of illicit drug use and establishes a steroid user as an anti-social subject and overly masculine. The second framework places the use of steroids in the field of body image disorder, resulting in a steroid user as a male and a female victim. *Within the body image, the consumption of artificial and unrealistic images leads to psychopathology and the consumption of dangerous substances.* Truly, a living example of masculinity in crisis.

From the qualitative aspect of our investigation, our sample is far removed from this issue of body image disturbance. It's difficult to form a diagnosis of our sample given various methodological concerns and because it was not the main objective of our research. Nevertheless, we observed in all of our interviews that there was a

"very positive" thinking/feeling among our subjects about themselves and very far from what is recognized by others such as Pope, Phillips, & Olivardia (2000) as signs of muscle dysmorphia.

Klein, author of *The Big Little Man* (1993), postulates that the more insignificant a male bodybuilder feels on the inside, the more significant the bodybuilder strives to appear on the outside. Klein assumes, that this sounds much like a cliché of the social psychology of male bodybuilders. Nevertheless, the problem with body image disturbance is not a priority of male bodybuilders in contemporary society, as reported in the research studies cited in this paper. Notwithstanding, the use of AAS is a reality in bodybuilding and there are problems and harmful effects with the use, but it would be a crude generalization to say the majority of the serious bodybuilders got into the bodybuilder culture and began using AAS just because they felt small.

Bodybuilding for masculinity?

Romeo Gomes (2008) garnered our attention in his study on *Male Sexuality, Gender and Health*, the remarkable approach and interlacing of a conceptual framework - in his words - about sex and gender toward how the cultural context will influence the understanding of male and female. Think how masculinity is associated with the word man. However, the "thinking about being a man" leads to "thinking about being a woman", because to define male arises as to what is opposed to female. In this concept, gender is a cultural attribute, where the male and female take their features from multiple cultures. And, the gender models are built on a relational perspective. These are some of the points highlighted by Gomes in his analysis of several authors of reference. Alan Klein (1993:5) also writes of a "crisis in masculinity", but his explanation for such analysis is related to the "traditionally" developed musculature associated with body functioning at work and at war. For Klein, this aspect would be the key connection, i.e., muscularity suggested at a high level of operation and usually one of the functions of soldiers (combat). However, it could also mean physical labor (e.g., mining, blacksmithing, farming, and ranching). Therefore, Klein also concludes that the sexual division of labor, in which each gender tends to work on different tasks, also endorses certain morphological

differences, some feminine and some masculine. For Klein, in the mid-1980s, bodybuilding was a study of masculinity. And musculature and what it connotes - power, domination, and virility - again focuses on the masculine side and their opposite traits on the female side.

Today, bodybuilding does not only represents masculinity, since there is a series of other current aspects related to bodybuilding (e.g., improving self-esteem, "improving" body image, narcissism, asceticism, drug abuse, etc.) that can be explored.

Results

Patterns of AAS Use

Even with the potential of several serious adverse health effects, AAS users adopt a variety of techniques/technologies to increase muscularity. In addition to AAS, users also consume dietary supplements such as amino acids, proteins, vitamins, and fat burners. Although, many of these supplements are ineffective (placebos), they fuel the supplement market, winning over consumers increasingly concerned with muscular development, generating millions of dollars in profits for the manufacturers. But why use AAS? The goals of individuals who use AAS and related substances in competitive sport and non-competitive exercise are dependent upon the activity in which they participate. Bodybuilders desire more lean mass and less fat, weightlifters to lift the maximum amount of weight, field athletes want to put the shot, or throw the hammer, discus or javelin beyond that of their competitors, and swimmers and runners hope to be able to perform more frequent, high intensity, longer duration workouts without physical breakdown (Bahrke & Yesalis, 2004). In addition, there are others who use AAS and APEDs simply to "look good" — which to many people means being big and muscular. *AAS use alone was not a category of study of our thesis*, but as body image (and body image disturbance), masculinity (and gender study), PES (Performance-Enhancing Substances, considered as ergogenic aids), and dependence, are part of bodybuilding research studies and possess great value for social scientific analysis, and this information was included. These studies are also basic to understanding

the “point of view of bodybuilding” and what the bodybuilder thinks and, who lives bodybuilding as a lifestyle.

Nevertheless, the use of AAS is part of the culture. This is not new and does not reinforce what researchers have been saying for many years - that it is the "culture of anabolics" and that common sense says all bodybuilders are addicted to drugs. This affirmation is not in accordance with the narrative of the majority of this study's sample. The use of AAS is not legal and is against the law. But the use of AAS is taken for granted within the culture of bodybuilding when compared to the use of tobacco, alcohol, fat, and salt consumption, social drug use, and other risky health behaviors. These social practices are considered by our sample narratives and field observations with "observant participation" as "health-damaging" practices.

The AAS Experience and Gym Life: Above the Law!

"Clearly, experienced steroid-using bodybuilders are unlikely to be dissuaded from their 'hazardous' practices by clinicians perceived to be less knowledgeable" (Monaghan, 2002). In a very pragmatic way, this is a reality that happens within the bodybuilding culture.

The ethnography experience of the bodybuilding culture for myself, can best be described by how it works during a day workout in two of the gyms: first, in the peripheral area, a small gym with very amateurish, basic machines; second, in the metropolitan area, a big gym with all of the machines and all of the free weights required/desired by a professional bodybuilder. Also, how it (the ethnography experience) occurs during the usual day with AAS use, their purchase, the participants' comments, and their diets.

In a typical workout in the small gym, I decided to visit at a different time of the day, so I could observe the different types of training and people. One day, I stopped at the entrance and began speaking with the owner, a very kind lady that one often meets almost any day in the gym. This gym is a very small gym in the periphery area, with people that come from the lower to middle economic class. At

any rate, this day was a special day because this owner is always "haunted" by constant inspections and was complaining about that to me. I always stopped to talk a little bit with her, and she also worked as a "good informant", sometimes she commented to me about something concerning the gym routine. This fact is very special because the Regional Physical Education Council (CREF) usually appears for an inspection looking for irregularities in the resistance training machines, hygiene, security, professional staff registration (instructors must be registered with the CREF) and substance use (e.g., AAS and stimulants). What happens with these inspections? I met with an instructor, another person who helped me with recruiting a few participants for an interview, and he said that the CREF, visited three times in one year, unlike the gym where he worked, and where the CREF inspected only once in three years. The difference, of course, is the "social class" of the gym! The inspections frequently are unannounced, surprise visits. So, if there is another gym nearby, and a person is suspicious of anything, an inspection might occur. In that gym, I met two bodybuilders who talked to me about their routine and how important bodybuilding was in their lives. The use of AAS was really taken for granted, but it was not the focus. They used the same "channel" (seller/dealer) to obtain the "products" (AAS). Their concern about sleep, diet (food and supplements), work (they had different jobs and they were studying as well), and their training was very serious. They planned their season by the necessity of any part of the body that needed to be improved.

According to my sample, the pattern of "day-to-day" use of AAS actually does not exist. Our sample was comprised of some non-bodybuilding competitors, although a few of them had competed in the past. So, the use of AAS is part of the average participant's program, but is not more important than diet or working out. Participants assume that the use of AAS is associated with a period needed to overcome "the plateau". The variety of drugs, including AAS, used by participants, closely matched what is available elsewhere in Brazil, especially in Recife where there are special and intense inspections for AAS (actually a case involving death following the use of stimulants provoked a tense series of inspections by the CREF and the National Agency for Sanitary Surveillance (ANVISA) (Santos, Da Rocha & Da Silva, 2011, Resolution no. 2, on May 5, 2004, Brasil, 2004).

Two bodybuilders told me that together, during their training, they usually do two "cycles" (a period of using AAS, usually for six or eight weeks). The most common method is *stacking*. This was not representative of all of the sample, as I could see during the study, because they did not have a pattern, and one of the eleven had never used AAS. This technique consists of using more than one AAS during a cycle, with 'anabolic' and 'androgenic' hormones (Santos, 2007). This is what is called the "cycling theory" and it is the most basic form of AAS use in the "anabolic world". Sometimes bodybuilders "pyramid" as well. Pyramiding consists of starting with a low dose, increasing to a high dose, and then tapering to a low dose at the end of the period. Also, bodybuilders use other products that are called "TPC" (Post-training therapy), these are drugs like Proviron ® (Mesterolona) used to stimulate the levels of natural testosterone during a cycle and the use of Silimarina (Legalon®) which is intended to protect the liver.

That same day, in the second gym, my partner (and my "key keeper") said that "another source", a drug representative, secured 8 units of "Dura" (slang for Durateston®, also known as Sustanon® outside Brazil), a very desirable AAS product! We were waiting for another "source" to get the "products". We waited for four weeks. But it was definitely difficult because of the effect the State has on drugstores and gyms and retailers and shoppers by scaring them with the threat of an inspection. But, despite this there is still the black market and it is strong! And, I tried to learn how it works. Sure, guarded by law (CNS, Resolution 196/96), my desire was to save and keep safe all of my sources. What happened next? The drug representative sold, without a prescription, a box of 8 "Dura" to my partner. Unfortunately, we discovered later that they were fakes. The question is, how do they do that? I discovered on "YouTube" how to detect fake/bogus steroids, and another bodybuilder and instructor as well, told me that there were forgers of Durateston® and Deca-Durabolin® in the State. Then, I was alerted and I could confirm a fake ampule. It was a good fake, but it was missing some very important details. My partner called me and said: "Our product is a fake!" She saw a tutorial with 'four tips' to find out and told me. The four tips to discover fakes included: Tip

#1: The box has a Braille embossing; Tip #2: It is manufactured by Schering-Plough®, and today no more "Dura" is manufactured by Organon ®; Tip #3: The ampule does not come with the name engraved, but is plastic; and Tip #4: When opening the ampule, a test on the tongue reveals that it tastes sweet in the beginning and bitter at the end (Figure 1 & 2.).

Figure 1. Fake Durateston®, without embossing, and no barcode.



Figure 2. An original Durateston®, with embossing, and a barcode.



After a rest day, I returned to training with a controlled workout. And I met one of my interviewees in the locker room and he asked me about his diet and his cycle. He knew that I had authored a book on steroids, and now he sometimes called me "the doctor" in a humorous sense! "That's pretty cool" and interesting, because it was a good opening to talk about the subject (AAS), one that is "forbidden" for many. The cycle with Sustanon® is four weeks. I did not know the exact dose, but certainly it was not small. Moreover, this subject weighed over 100kg (220lbs). He had questions about his carbohydrates, especially potatoes. Everyone in the bodybuilding culture includes the sweet potato as the base of their diet during the "off" period (not competing and not "on" a cycle) or "pre" period (pre-contest or

“on” cycle). However, not all consume the “normal”, typical potato, although both have good nutritional value.

One day after I arrived at the gym I had to change to train and I had not taken my “supplements pack” for training (protein, vitamins, minerals, BCAA, caffeine in a pack). Without them, the workout gets 'heavier' (the effects of these supplements pack postpone the fatigue and 'improve motivation'). I made several 'test drives' in this regard (workout with supplement and without supplement, with little rest and with lots of rest and I assumed there would be a huge difference). I went to the canteen (the canteen is the central meeting point for eating snacks, meals, chatting, and meeting everyone; it is a very "cool" place in the gym) where two colleagues, instructors at the gym, and I began chatting with them. Suddenly, I took out my “little pack” and very slowly and carefully put it in my mouth. The instructor caught my attention and immediately she said, "There's a supplement"! Everyone laughed, because this is a very common practice and they knew and really enjoyed it. It's taken for granted as well. "Quickly I felt by the plastic noise...!" (the plastic noise she referred to was my pack of amino acids). This is the way things go. A pretty normal practice that I've adopted, and it became part of my routine.

Another day, I met, once again, one of my interviewees (*N.E, 30 yrs old and from the second gym*), who had left the gym because he works as an instructor, but was working at another gym. He was doing this stage (instructor), mandatory for his graduation certification. I had arrived at the gym and he was leaving the gym because he had completed his workout. He asked me: "*What's the strongest AAS...?*" This was because he had asked me about Estigor® (an oil based substance/product used in animal husbandry and consisting of vitamins ADE and nandrolone, an AAS) and what I thought was best to gain strength. My question was: "Estigor to gain more strength ... that's just a vitamin? ...". To my surprise! That question from him was strange because I thought he would know the best “drugs” used for this purpose, since he had many years as of bodybuilding experience. So, not all bodybuilders really read and know the effects and pharmacokinetics of each AAS, as I thought. But then he said "It contains a

hormone ... ". Yes, it has nandrolone, but it's not considered a strong AAS. Many people misunderstand the use of Estigor® as a potent AAS to be administered to animals.

I replied that it was very "weak" when compared with the other drugs used by bodybuilders; nothing compared with Dianabol ® (methandrostenolone, the "old school hormone")! I tried to explain that Hemogenin® and Anadrol® (Oximetalone) are stronger than Estigor. Well, he told me he had met a guy from the federal police who could get AAS and other drugs for him and he would check. But I told him these were some of the most toxic drugs available. In the literature it is possible to see that the "basic types" of drugs have remained the same for years, but with a variation of brands, e.g. Nandrolone as Decadurabolin® or Decadobrol®, Oximetalone as Hemogenin® or Anadrol®) (Santos, 2007).

The pattern in this case and others actually does not exist! The "drugs" are not available whenever you want and need them. Also, *N.E*, 30 yrs, said during our first interview (we had many meetings during the year): "Man, you know that AAS are not the most important things... I just use them a few times a year, but protein and whey protein never, ever miss...; the training and the diet are the most important parts"(sic).

M., 52 yrs, the most experienced bodybuilder in the study, and considered by all in the state, as "The Master", when I said I would like to "talk" with him, said: " I'm not going to talk about anabolics...!" People "outside" or "non-participants" in the "anabolic world", always wonder how AAS work, how they are used, how much is used, and what the effects are, if they (bodybuilders) know about risks, etc. He was tired of hearing about researchers who only look for "users" of AAS, or how they use. The ethnography research I conducted demonstrates the opposite, considering that bodybuilding is not a culture of AAS users. Well, AAS use is very controversial according to the majority of my sample, but is not the focus of the sport.

The "consumption of bodies" is not the main purpose of the bodybuilding culture. The practice has many points that are part of the everyday life of a bodybuilder. This culture also involves discipline and dedication and it is not possible to deduce, at least from our sample, that bodybuilding is only concerned with the "consumption of bodies". This is an aspect that I could see as an example in the narrative of *Mathew*, 35 yrs, from one of the three gyms that I interviewed before a session of training that assumed the importance of bodybuilding in his life. Mathew, an instructor and personal trainer, was very strong in his affirmation when he said: "*Bodybuilding is my life! If you take this from me, I die!*"

The use of AAS, as I could see during my observation, is taken for granted, and it is not an issue that is part of all "chats" within the gym or outside the gym, and the most important part inside the bodybuilding culture. There is a silence surrounding this issue (it could be called a "code of silence") but not a feeling of a taboo, although as another agent that is part of the culture. If necessary, AAS will be used (to improve bodybuilding when it is necessary to cross the "muscular plateau"). The use of AAS exists, but I observed that is not the same as the "bodybuilders" who use "just for aesthetics" (that means they don't care about a series of body construction aspects. For example, symmetry, body shape, and health care [doping control]). This point is one of the controversies inside this culture, and very 'hard to understand from the social desk' [as the pioneers of social research used to say]. *The irresponsible use of AAS is condemned by the 'serious bodybuilders'*. Ones who use "oil" or AAS as a substitute for hard work, and the pain in the gym, does not have respect within the bodybuilding culture.

As the subjects declared, even with the use of AAS, they are concerned with their health status. It's a controversy, where on one side there is the use of AAS in that it can bring serious harmful effects, whilst on the other side they do a health "check up".

An important point with any prevention program should be the diversity of lifestyle among bodybuilders. The real life within the bodybuilding culture is complex and brings controversies that should be considered.

Considerations

Appearance among bodybuilders is very important and commands a great amount of attention. In addition, competition appearance is the main objective for serious bodybuilders, as during competitive bodybuilding contests where there are specific categories of examination that adhere to the rules of professional bodybuilding (e.g., symmetry, definition, shape, etc.). Although, non-competitive, serious bodybuilders still have the same discipline as the competitive bodybuilders, it's not as difficult because they do not diet as rigidly as the competitive bodybuilders because they do not compete. The phenomenon of the aesthetic style, with pressure on young boys and girls, was noted by me in the gyms where I trained. The use of illicit substances, the addiction to other drugs, the obsession with body image, are all very clear, not only in the mirror, but also in the dialogue among bodybuilders.

On the other hand, it is not clear what the professional bodybuilder's response will be when faced with these contradictions proposed by all of the academic researchers. The field of research is "begging for" professionals who understand the current situation in the field and who are without t prejudices, and who do not condemn the practice of lifting weights or assume that all participants in the bodybuilding culture are drug addicts. Gaining access into the "anabolic temple" is not a simple task, especially for those who do not have the respect and the recognition of the bodybuilding culture. Then how do experts and professionals conduct studies and research programs within this culture?

The question raised by many professionals from health and social sciences together is, "To what extent do we consider typical bodybuilding practices healthful?" Also, "What are the consequences of using appearance enhancement substances among bodybuilders?" From qualitative research, using ethnography with observant participation, and trying the bodybuilder lifestyle, I sought answers to other questions: First, why can't bodybuilding practices be considered healthy? Second, what are the consequences of the media highlighting enhancement of appearance in today's society?

The lifestyle of a bodybuilder presents a very important issue in this world. A sociological analysis of this population could more deeply provide understanding of what this lifestyle of being a bodybuilder represents and really means. Monaghan (2002) also agrees that a few sociological analyses do not adequately account for the illicit steroid use among non-competition athletes - as understood by the users themselves and their peers.

However, what about masculinity? Klein, (1993, 1995) affirms that bodybuilding is the study of masculinity. However, as Gomes (2008) states "thinking of man" leads to "thinking about being a woman". Accordingly, what we see within the bodybuilding culture from the present study, this is not exclusively the way that our world works. Based on my experience in the gym, tThis is another contradiction about women, who have pursued a body with defined muscles and a slim body. The current bodybuilding culture is not an exclusive "study of masculinity"! Alas, there is a very popular quote/saying from the bodybuilding world: *"If a muscular women "looks like a man", a non-muscular man "looks like a woman?"*

Neither is bodybuilding a study of pain, the "culture of pain" or, a study of AAS use or abuse, as discussed by Monaghan (2001, 2002, 1999). Moreover, pain is embraced within the bodybuilding culture. It is not the cause of "masculinity-in-crisis", as proposed by Klein (1993, 1995). Studies of the bodybuilding culture are not a "subculture" looking inside the gym and delineated as a category in many studies (Klein, 1993, 1995, Monaghan, 1999, 2001, 2002).

Several findings of our research are in agreement with what Monaghan (2001, 2002) reported in his study of bodybuilding, drugs and associated risks, in the United Kingdom and must be highlighted. First, bodybuilding is not separate from gender considerations, although "masculinity-in-crisis" is not sufficient to explain the "culture of male body construction" or performance-enhancing substance (PES) use. Second, "it should be added that qualitative research of illicit drug use and voluntarily risk-taking in general, may also be of practical value".

There is a quote from all of the interviews we conducted that perhaps best describes the feeling of a bodybuilder living in the bodybuilding culture and defines what bodybuilding is. Although it sounds like something easy to say, it really represents so much of the narrative. The excerpt from what I consider in this research to be a "serious bodybuilder" summarizes best what they feel, "*Bodybuilding is not fashion, it is life!*" (W.M., 52 yrs).

This field is open to research, but definitely it is not "open to researchers". To investigate this population and to understand it deeply, it must to be recognized by the field and by the bodybuilding culture. The gaps will continue because qualitative researchers like us who conduct this research are still sparse.

Conclusion

From the sample investigated, it is rare for clinicians to be able to have any success in talking to male bodybuilders who have taken part in 'hazardous' practices, as they do not belong to the bodybuilding culture. All of the serious bodybuilders, who were interviewed were very aware of the use of AAS and other substances. The use of PES is minimized/minimal amongst bodybuilders compared with people who use 'pain killers' without prescription or who freely use aspirin, as both have risks to health and side effects. However, this is not my opinion concerning the use of AAS for aesthetic achievement.

Concerns about education or reducing risks will not be as effective as it should be or could be - if conducted by a researcher or clinician who is not part of the "anabolic world" or, in other words, a non-participant in the bodybuilding culture. From our experience in the field and from the interviews that were conducted, there is no single pattern of use of AAS. Administration of AAS is a very personal experience practiced by those pursuing the ideal body and their own goals. The use of AAS is not the focus of this sport. The use of AAS alone is not enough for bodybuilders to increase their size. A few research limitations imposed by the reality of this sport can happen with non-participatory researchers in the bodybuilding culture, and can show deviant data far removed from the reality of the bodybuilding lifestyle.

After decades of studies concerning numerous aspects of the use of AAS and its impact on health and social life, Brazil has not developed a national survey regarding their use in sport and exercise by taking into account gender, age, and region of use, among many other factors. I did detect a few, isolated attempts by researchers working on the prevalence of AAS use in Brazil, however, these researchers are not generally representative. Although we have seen research on the prevalence of AAS use, the incidence of harmful use and death caused by AAS are well documented by the media. While many countries are working on national programs, providing information and educational programs, a few publications have reviewed the effectiveness of intervention programs (e.g., the *Journal Substance Use & Misuse*, launched a *Special Issue on Substance Use (r) Intervention Failures*, which explored a range of substance use intervention failures (*Substance Use & Misuse*, 47:1366-1372, 2012). In addition, a more recent special issue of *SUM* has addressed the topic of drugs and doping in sport and exercise from the Brazilian perspective (*Substance Use and Misuse*, 49:1095-1231, 2014). Brazil is disadvantaged without the necessary information of AAS and PES use in the population. Public policy projects concerning these points are urgently needed.

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Final Considerations

Consumption makes money! This affirmation should be only for consumer products and other material items. But according to our theory, review, and our observation inside the bodybuilding culture, there is also a consumption of image and the body!!!

Given the huge growth of bodybuilding among women inside Brazilian gyms, strong evidence suggests that body image construction has become very important. Our ethnography research showed me how important the "body culture" is in Brazil, where "worship" of the huge buttocks and thighs of women - no matter on the beach or on the stage, TV, in magazines, music, bands, and carnival - is always prevalent and on display. This phenomenon that we analyzed parallels my experience inside the three gyms through the many months of my "observant participation". My "key keeper", who trained with me was a woman, and she always said that "butt and thighs are the law", and this has become mandatory among female bodybuilders and is also of great value among male bodybuilders. The routines of male and female are the same in intensity, diet, discipline, workout, and lifestyle.

Our research is in disagreement to that of Klein (*The Little Big Man*, 1993:6) who affirmed that "bodybuilding is a study of men, and the women do not need to deal with it in a mandatory manner". However, Klein's research (1993, 1995) must be considered in historic perspective, since his experience began in the 1970s, when the historically male domain of bodybuilding came from a patriarchal premise. Nevertheless, with our sample, sites of observation, and experience within the bodybuilding culture in three Brazilian gyms, Klein's opinions do not represent the current reality. The same author (Klein) says masculinity is sociologically determined. According to Brazilian anthropologist Romeu Gomes (2008), "thinking about a man, makes us think about a woman." It means that the male body is the opposite of the female body. It is not surprising then that bodybuilders feel physically (if not morally) superior to their critics (Monaghan, 2002).

For Hart and Carter (2000), this may be all the more salient in a larger, healthier and “medicalized” culture where health and individual behavior (rather than social location) are claimed to be intimately related. The pursuit of health through lifestyle, which entails the avoidance of harmful commodities, has become an imperative in contemporary society. In the following excerpt from Monaghan (2002) it is possible to detect a discussion of protection of the bodybuilding culture: the “health conscious steroid-using bodybuilder, besides denying injury, condemns imagined condemners by calling them hypocrites.”

With this approach, and according to our research, we can say that the construction of body image is very particular and very animated - as a kind of self identity. We agree that health promotion should be more adequate when it is connected to the meanings of shaping peoples’ identities and lifestyle choices. According to Hart and Carter (2000), it has been argued that an understanding of these developments in socio-cultural theory is significant for two reasons: first, the design and delivery of interventions to modify peoples’ risk behaviors (such as health promotion) will be more adequate if such strategies connect with the meanings shaping peoples’ social identities and lifestyle choices; and, second, there are well established associations between many forms of individual consumption and health risks (for example, smoking and drinking).

Bodybuilding culture has its risks, as participants know what is included in sports. But the harmful effects, as the critics say, are not acceptable to this culture. There are more acceptable risks in society, such as smoking and drinking and risky behavior (e.g. drinking and driving) than in bodybuilding - with all of its discipline.

According to the present ethnographic study, we can agree to a need for new research to really understand the other part of common sense (the normal lifestyle) and what sociologists call the “underworld” and subculture, respectively. *This is an alert - to give more attention to new qualitative research and what sociologists would argue, since rarely has such research been conducted in Brazil on this issue or to understand “the rest of the story” (i.e., in this case how bodybuilders think about their own sport). How to promote health intervention programs -*

without a true understanding of the bodybuilding world, this is one of the very controversial issues to investigate.

Quantitative research has been inadequate in the number of samples, regions, and states, and does not use qualitative science in tandem. The limitations in this field include access to the bodybuilding culture and how the academic world perceives "underworld" research. However, education/prevention/intervention is not only for adult or teenagers or the next generation. The concern about image consumption and body patterns is to satisfy a society within the culture of narcissism and not within the bodybuilding culture. As Klein (1993) has said, the crucial point of overlap between 'risk-inducing' bodybuilders and 'health conscious' fitness enthusiasts is generally a shared attempt to embody and display a sense of empowerment and self-mastery.

Notwithstanding, from the point of analysis, I would use this excerpt from Klein to affirm, as well more generally accept, that in all cultures there are activities which attempt to embody and display a sense of empowerment and self-mastery (e.g. smoking and drinking). Bodybuilding is an important activity that is very useful and recommended for all ages, including weight training of different types and purposes. We can highlight the competitive (power lifting, weightlifting, strongman competitions, and bodybuilding), prophylactic (preparing the muscles for a specific effort), therapy (correcting postural problems, recovery from injuries and surgery), aesthetic (muscle definition, modeling), sports preparation (complement of physical preparation of athletes in any sport), and physical fitness (general conditioning).

My ethnographic experience has changed all of my academic pre-conceptions that I held before I became deeply embedded within the field (i.e., the bodybuilding culture). The PES use, the polypharmacy, and the AAS use are all part of this culture as a competitive sport but are not the rule for all participants. I could experiment with the discipline and observed improvements in my own health (e.g., better sleep, fat reduction, strength improvements, well-being, better stamina, etc.). The concept of a very harmful environment is in opposition to all of the

benefits that frequent monitoring and training can accomplish in many aspects of human health. This is the concept of a healthy exercise practice.

Despite being aware that AAS is a prohibited substance, many young non-athletes and non-competitive bodybuilders make use of AAS, with the goal of "improving their physical appearance" and with a discourse that body image is very important today and much valued. In the sporting context - amateur or professional, the goal is the result, performance, and Olympic realizations and, appearance is not a part of the plan. It just shows a picture of the body shaped by training, and the use of any resource, agent, or ergogenic aid that is "one more" integrated tool in the culture of sport. If we affirm that bodybuilding is a culture of AAS, it is the same as saying that it would be necessary only to make use of doping to get an Olympic medal and not by training. It is known that this fact does not correspond to reality, because without proper training and genetics (i.e., biotype, physical characteristic for a given task), this is sure to fail. *Body image, according to this study has been built in the collective imagination in accordance with what has been declared, and sold as healthy images of consumption.*

The identity of the bodybuilding culture is marked by building muscles, which symbolizes a disciplinary health credential conquered with an incorruptible discipline, unlike, the faux 'bodybuilder' who does not have this discipline and has no value in the bodybuilding culture (e.g., the use of 'oil' to pump muscles). Body image construction is part of the culture and lifestyle of bodybuilding.

From observations made during my research, bodybuilding gives individuals the autonomy to change their own body to be how they want it to be and to build their own identity. The issues are concern with size, what they use, and the paths that will be taken to build the "new body" that will determine how much the bodybuilder really pays to reach their goal.

In 1995, Courtine affirmed that the culture of muscles was a central focus of the body culture in the USA. Today we can affirm this by our research that it is the same here in Brazil. However, this same author (Courtine) described a "depreciative analysis" when describing the body of a bodybuilder, since he does

not recognize bodybuilding as a competitive sport like track & field. Foreexample. Courtine (1995) uses terms like "bloated bodies of men...", "the rambling of anatomies". What does a bodybuilder think about this description? I did not ask any bodybuilder, but I know that they do not believe the life outside the bodybuilding world is better than within the bodybuilder lifestyle. This kind of position has a "boomerang effect", provoking a sense of no respect from the academic and/or medical fields.

From my ethnographic experience, the bodybuilding culture is really concerned with health. And, if we try to highlight the deviant behaviors and health risks in our society we can mention drunk drivers who kill thousands of people in Brazil every year. As a statistic, in Brazil, the number of car accidents with fatal victims is higher than homicide and cancer, 61.000 deaths in 2012. (ONSV, 2012). There are also accidents and deviants in the culture of bodybuilding, however the number of deaths and accidents in bodybuilding caused by the use and abuse of AAS and other substances are comparatively low and are not, in fact, caused exclusively by the use of AAS, as documented by the present research findings. Controversially, the use of "oil" today is increasing and it is worse than the problems caused by the use of AAS. Many people and all of my interviewees were really concerned about their health and it can be assumed that it is the same within the universal bodybuilding culture.

Recently, near the end of 2013, the headlines of a national Brazilian magazine drew readers attention to what they called "The Doctors of 'Bombs'" (this is how AAS are known in Brazil). The report denounced a new practice within the community of physicians who prescribe hormones to "build" muscles and "improve appearance" (Luz, 2013). The number of people doing this consulting is very large and increasing every year. The most important point in the report was that such hormones were not prescribed exclusively for use by athletes. Prior to this report, the use of hormones had been associated primarily with doping use among athletes. It is interesting that in Brazil, the use of hormones is forbidden for use in sports and for sale without a prescription. The sense of health from people outside the bodybuilding room seems to be harmful and worse when a bodybuilder looks

at them, i.e., the life of a bodybuilder can be healthier than people with generally good common sense (normal lifestyle)! If one considers the serious bodybuilder - who has responsibility for their body, bodybuilders do not use AAS as do the young in pursuing a new body image and in trying to 'improve' appearance.

Recently, a well known Brazilian singer, who had spent many months in a hospital with liver problems declared *"Every youth who works out and takes steroids, stop taking! Because people should like you for who you are"* (Henderson, 2013). In other reports of conversations in the social media, I found a chat completely unlike the singer's attitude. The author of the chat stated: *"Funny, I do not see any athletes dying, athletes who abuse quantities that science never even tested for during 20-30 years, are alive and healthy, over 50-60 years of age, and taking care of their grandchildren. Only the "stars" that have a super life and are "HEALTHY" acquire these diseases. Incredible phenomenon, is it not?"* (Hipertrofia.org, 2013). From the point of view of my experience, the last quote is far from reality among serious bodybuilder. There are many people, without extensive knowledge, who do "cycles" without any information. However this is the "dark side of the moon", where all of society knows that is is the same among drug users such as crack users.

A few questions have emerged from my field experience. Does thinking about body image always result in dissatisfaction with one's own body? Is bodybuilding the only endeavor for the use of anabolics and for body dissatisfaction? I'm not sure. I believe that we are at a time of crisis with the growing number of people who are exercising for primarily aesthetic reasons and without giving due consideration to their own health/lives.

If we consider, in a general way, the storm of images and the body culture in today's world, this alarm is well founded. We increasingly see that the concern over proper guidance and the training of professionals is justified. The bodybuilding culture is not a very "open" field of research for non-participant members. Conversely, more research is necessary and researchers should consider investigating deep within the culture to understand how it really operates from the perspective of a bodybuilding participant.

Reflections on public policy

Body image construction among male bodybuilders, especially concerning serious bodybuilders, differs from the newer generation of bodybuilders who are being directed/influenced by appearance. As previously discussed, messages are often passed along by the 'society of appearance' that impact "the male" and are absorbed by those who are seduced by the practices of bodybuilding in order to obtain a new body image and identity. Certainly not all of them are bodybuilding practitioners who are actually searching for a new identity, but they were "led and seduced by the desire" to enter into this universe and seduced by the "consumer body" society. However, research points to the need for the development and implementation of public health policies for this population of young people/participants.

First, public health policy programs should incentivize systematic education/prevention/intervention programs in a partnership with CREF/CONFED, Secretary of Education. This could be a permanent partnership among sport federations, gyms, and schools that are the foundations of these institutions. The CREF/CONFED has a registry of all physical education professionals and gyms in Brazil. This might be a reference for working together with consulting experts on this theme of drug use in sports and doping. I know isolated campaigns against AAS use are not successful and that using "scare tactics" is also not successful. As documented by Goldberg, Bents, Bosworth, Trevisan and Elliot (1991), "a teaching model that only emphasizes the untoward consequences of anabolic steroids is ineffective." Programs without experts consulting will be failures. A few models of programs exist and this was documented by Bahrke (2012) who studied the *Risk Factors and Considerations for Success and Failure in Intervention Programs*. A few implications and recommendations for intervention were related and included: (a) providing training in refusal skills specific to PES and AAS; (b) providing information on both the positive and negative effects of PES; (c) using the sports team because it can capitalize on peer ties, the coach's influence, and an athlete's motivation to improve, to prevent drug use, and to promote healthy behaviors; (d) providing

alternative options to PES use including strength training and sports nutrition; (e) using a peer-led, small group format to dispel the perceived peer tolerance; (f) including a parent-based component, one that emphasizes disapproval of drug use; and (g) providing social support, especially from within the bodybuilding community.

Second, an effective intervention program concerning drug use and doping in sports and exercise does not exist in Brazil. However, we have examples in other countries with successful programs that could be models for adapting to the Brazilian reality. The use of APEDs is growing along with the "storm" of images meeting the pursuit of a new model of the body. And, as I have presented, the serious and sometimes fatal health problems associated with use of 'oil' has become worse than the use of AAS among young people who enter into bodybuilding. The use of AAS is recognized as an epidemic and, currently, a worldwide public health problem. Brazil was recently involved in a global meta-analysis, never done before, on the epidemic use of AAS (Sagoe, Molde, Andreassen, Torsheim, & Pallesen, 2014). The authors report that the male sample percentages were significant predictors of AAS use and prevalence, among other indicators. And, that nonmedical AAS use is a serious widespread public health problem.

This population (of AAS users) does not have the support nor the information regarding the real effects of AAS that health care professionals/experts in drugs, nutrition and training policies in sports should provide. Based on programs which consider recommendations for intervention, free and anonymous national/regional/local service programs on drug use in sports and doping should be created. We have good examples of successful programs instituted in other countries, such as in France with the 'Ecoute do-page' (National Anti-Doping Phone-Help Service) and in Sweden with the 'Anti-Doping Hot-Line' (Mohamed, Bilard, & Hauw, 2013, Eklöf, Thurelius, Garle, Rane, & Sjöqvist, 2003). These programs might be adapted to the Brazilian situation and could give information with anonymity guaranteed and, at the same time, it would be advantageous to do a survey with an easy Q & A on drug use, diet habits, and supplement use. This

would be an excellent opportunity to have an authentic profile of users, types of drugs used, number of users per region/state, quantity and quality of drugs used, and adverse health effects, among others. It would be possible to have a true national statistic. As of now, Brazil does not have a national survey analysis of AAS and drug use in sport and exercise. This kind of research is now in progress and together with other related research will include a pilot research study as a pathway to conducting a detailed national survey. We are currently taking part in an unpublished, systematic review (*in press*) on the prevalence of AAS use in Brazil and another program (in progress) on the use of AAS among women with a collaborative group of Brazilian researchers. Knowing this population is the first step in developing effective education/prevention/intervention programs.

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"Por que a loucura de Deus é mais sábia que os homens; e a fraqueza de Deus é mais forte que os homens. e Deus escolheu as coisas desprezíveis do mundo, e as desprezadas, e as que não são para reduzir as nada as que são." 1Cor. 1:25 e 28

"Because the foolishness of God is wiser than men; and the weakness of God is stronger than men. and the base things of the world, and the things that are despised, did God choose, [yea] and the things that are not, that he might bring to the things that are;" 1Cor. 1:25 and 28