

MEN AND BODYBUILDING

MEN AND BODYBUILDING: A STUDY OF HEALTH WORK, MASCULINITY, AND BODYBUILDING

By

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A Thesis

Submitted to the School of Graduate Studies

in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Philosophy (Sociology)

McMaster University

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Doctor of Philosophy (2021)

(Sociology)

McMaster University

Hamilton, Ontario, Canada

TITLE: Men and Bodybuilding:
A Study of Health Work, Masculinity and Bodybuilding

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NUMBER OF PAGES: xi, 151

For

*Karen, Emily, Bella, and Jovie
Mom, Dad, Nana, and Aunt Donna*

James

Abstract

This dissertation is the product of ethnographic and participant observation research into the social worlds of men that pursue the achievement of health through their participation in bodybuilding and consumption of sports nutrition supplements. Theoretical and empirical literature on the sociology of health, gender and aging, bodybuilding, social constructionism, phenomenology, and social reproduction are leveraged to frame and interpret the narratives shared by men participating in this research. In total, 32 digitally recorded interviews were conducted with male bodybuilders between the ages of 18 and 68 who were living a seemingly heteronormative lifestyle. They took place between September 2007 and June 2008 most often in local coffee shops or in participants' homes; five interviews were conducted over the telephone. The interviews lasted an average of 52 minutes. While men participating in this study identified, in some way, with being a bodybuilder, only a few provincial or national level competition winners identified as being 'hardcore'. In three substantive chapters, I address: (1) how men engage in health work and masculine identity construction through bodybuilding at various stages of the life course, (2) which sources of knowledge they consult and trust to learn about bodybuilding activities (e.g. weight training techniques, dieting strategies, sports nutrition supplement consumption practices), and (3) how, for a subset of participants, they develop and exchange cultural capital for economic capital through employment in bodybuilding industries. Collectively, this research has contributed to our understanding of the intersection between male bodybuilding, health, and masculinity.

Acknowledgments

Working on completing this dissertation has spanned a decade and a half, during which I have experienced some of the most beautiful moments that life has to offer. I have learned along the way more about who I am and what I value above all else in this world. With this in mind, I want to thank my wife Karen and daughters Emily, Bella, and Jovie for their love, patience, and unwavering support while I have dedicated time to this work. I am proud of the life and family we have created together, Karen, and completing this dissertation is a goal that I would not have been able to realize without you. I love you, and I look forward to experiencing all of life's adventures with you.

Thank you to my family for your love and support. Mom and Aunt Donna – you always believed that I would complete this dissertation, including during times when I less sure myself. It was not easy saying good-bye to you, Dad and Nana, but I am grateful for the time I had with you and for the lessons you taught me. You are never far away. Thank you to my sisters, Darlene and Cheryl, for your support over the years. Tom – I hope convocation offers another opportunity for a podium picture, and Greg Russell – well, it looks like we will be having a party after all.

It is fitting that I come to thank my supervisor, Dr. James Gillett, immediately after acknowledging my family as you are both a mentor and friend. You have been there for me through life's most precious moments, as well as in times of challenge. There is no way I will ever be able to repay you for all that you have done for me. Twice you challenged me and my desire to complete this dissertation. Through introspection, I realized that I was not willing to

walk away. I realized that I wanted to earn my PhD for *me*, and you supported my decisions. When the light on my dissertation dimmed and flickered at times over the years, you helped me see that the flame was still alit, and the dream was alive if I wanted it. And here we are. You have had such a profoundly positive impact on shaping my life and I am grateful for everything you have done for me. I am your biggest fan. Thank you.

The goal of completing my PhD does not happen without the support of my other supervisory committee members – Dr. Phil White and Dr. Vic Satzewich. I appreciate the time and effort you have dedicated to my work, particularly in rather unique circumstances. Likewise, Dr. Mark Norman and Dr. Casey Scheibling, I appreciate your guidance and feedback as I prepared this dissertation package. Each of you helped me at a time when I needed it the most, and for that I extend my most sincere gratitude. Thank you.

Thank you to the professors, fellow students, and staff in the Department of Sociology that I had the good fortune to work with. I would like to thank Dr. Andrew Hathaway and Dr. Michael Atkinson for your guidance, and for supporting my application to the PhD program. Days often started with early morning sessions lifting heavy weights at The Pulse with Andy – something I remember fondly. Looking back, some of the most important life lessons are ones that I learned during my time at McMaster. Dr. Billy Shaffir taught me about reciprocity – a core value that I live my life by – as well as the importance of maintaining relationships. “You’ll be surprised at how willing people are to help you, if you ask” he used to say. He was right. I learned a lesson about holding myself accountable in working with Dr. Charlene Miall, while Dr. Dorothy Pawluch was most generous with her time, challenged my intellectual understanding of prior knowledge when conducting research, and served on both of my comprehensive exam

committees. Thank you. A special thank you to Dr. Carl Cuneo who took me under his wing as a Master's student. Carl provided me with research opportunities and encouraged me to do the very best that I could do. His mentorship during my time in the program was invaluable. It was a privilege to experience my time in the PhD program with colleagues Neisha Cushing, Yvonne LeBlanc, Antony Puddephatt and Carrie Sanders – I wish the best for you. Lastly, and certainly not least, I relied on the efforts (and patience) of Corinne Jehle and Olga Cannon in keeping me organized during my time in the program – thank you for your support.

I have spent my entire 14-year professional career, to-date, identifying not just as a professional in health care administration, but also as a graduate student who was trying to complete his dissertation. I am grateful for the encouragement I received from fellow colleagues and leaders, with special note to Philip Christoff, Toni Lemon, and Dr. Jennifer Everson. Thank you for your leadership, flexibility, generosity, and cheerleading, and for helping me to balance my personal and professional lives.

It goes without saying that I am indebted to the men who participated in my research, and who shared their bodybuilding and supplement consumption experiences with me. I learned so much from you. Thank you.

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Chapter 1

Introduction

This dissertation is the product of ethnographic and participant observation research into the social worlds of men that pursue the achievement of health through their participation in bodybuilding. In this research, I set out to better understand (1) how men engage in health work and masculine identity construction through bodybuilding at various stages of the life course, (2) which sources of knowledge they consult and trust to learn about bodybuilding activities (e.g. weight training techniques, dieting strategies, sports nutrition supplement consumption practices), and (3) how, for a subset of participants, they develop and exchange cultural capital for economic capital through employment in bodybuilding industries.

Theoretical and empirical literature on the sociology of health, gender and aging, bodybuilding, social constructionism, phenomenology, and social reproduction are leveraged to frame and interpret the narratives shared by men participating in this research. In the subsequent pages of this introductory chapter, I describe: the personal context that I bring to this project over the past decade and a half, the research context for which this study is socially and academically situated, the research process I employed, and an overview of the three distinct articles comprising this “sandwich style” dissertation.

1.1 The Personal Context

The study of health work and masculine identity construction through the practice of bodybuilding is deeply personal. I am grateful to have had the privilege to study this topic at the graduate level at McMaster University, learning lessons along the way that transfer well beyond academia. My career, if you will, as a graduate student is rather atypical, if not unique. I wish to offer insight into my connection with bodybuilding, and the desire I had to better understand health and masculinity, while sharing how this research has been part of my life over the past 16 years.

1.1.1 My Personal Journey into my Dissertation

My interest in bodybuilding took roots during high school. It was a perfect combination of identity discovery and formation, hormones, and environment that allowed this interest to take shape. During the early years of high school, I remember listening to my friend speak of bodybuilding and his father's weights in his garage. He spoke of professional bodybuilders and the Mr. Olympia contest while downing shakes of Mega Mass 2000 in the cafeteria. At the time, Arnold Schwarzenegger and Lou Ferrigno were familiar due to their acting roles, but champion bodybuilders like Dorian Yates, Lee Haney and Lee Labrada were foreign to me. I was intrigued. At the same time, I was fortunate to attend a school where a group of motivated teachers and parents ran volunteer-led bingo fundraising events to raise funds for development of a new weight room addition. I was a benefactor of their dedication.

In 1993, I held a summer job as a lifeguard – a position that only amplified a teenager’s awareness of his physical appearance and relationship between that appearance, masculine identity, and self-confidence. I remember wanting to be lean and muscular, doodling Hulk-like ideal physiques in my notebook to pass the time. Like my friend’s father, I too set up a makeshift garage gym complete with a bench, plastic cement-filled weights, and a chin-up bar. I didn’t really know what I was doing, but I enjoyed trying to figure it out. It was a time when the supplement industry was entering a new era, demarked by the commercialization of creatine monohydrate and the emergence of EAS supplements. It wasn’t long thereafter that I was consuming new EAS supplements like Phosphagen and Myoplex.

The journey into becoming progressively more immersed into the bodybuilding subculture followed Becker’s (1953) understanding for how one becomes a marijuana smoker for pleasure: I learned to work out and consume supplements in an effective way to produce desired results (e.g. build muscle, get leaner); through trial-and-error, learned to become in-tune with the phenomenological experience of working out (e.g. the mind-muscle connection, experiencing ‘the pump’ – characterized by muscles enlarged with blood and feeling tight), and; learned to enjoy the feeling of my muscles feeling ‘pumped’.

My participation into bodybuilding started off as a hobby became more immersive over time. Becoming a complete member in the bodybuilding subculture (Adler & Adler, 1987) had me absorbing and applying knowledge, mastering techniques, and forming a masculine identity that centred on physique development. It also allowed me to expand my network of contacts. I had a list of over 50 gyms spanning across North America that I had worked out in – discovering a new gym on my travels was exhilarating, and planning for my workouts became as

much a part of travel planning as booking accommodations. The countless hours spent toiling in the gym helped me to learn lessons of being mentally strong, determination, and the value of consistency and goal-setting. For a period of time, my Christmas morning began with a trip to the gym.

The journey also brought its share of challenges. What started out as a fun activity of for health and physique enhancement took on new meanings the more I became invested in it. An activity once aligning with a pure perception of health turned into a lifestyle where the lines between health promoting behaviours met those that included calculated risks on health. The more ‘hardcore’ I had become in my body project, the more clout I put into setting and refining goals that I would never reach. While there was nobility in rationalizing to always strive to be better, the unintended consequence was that the joy of achievement often eluded me. At times when I was putting on mass, I was big and strong but didn’t feel lean enough. Conversely, at times when I was ‘ripping up’, I could feel lean but then I concurrently felt skinny.

It was in graduate school while in my Master’s program that I discovered bodybuilding as an area of academic research. It was here that my personal interests in health and bodybuilding converged with my academic interests, which fuelled my desire to pursue a doctorate degree in sociology. My earliest readings on bodybuilding from authors, such as Alan Klein’s (1993) *Little Big Men* and James Gillett and Phil White’s writings on hegemonic masculinity reassertion through bodybuilding (1992, 1994), were framed from a critical feminist perspective that positioned bodybuilders as a response to a crisis of masculinity and anxieties over evolving gender roles leading men to build extremely muscular bodies to embody patriarchal power. Further, self-objectification within bodybuilding was viewed as a form of

narcissism that was rooted in low self-esteem, and the development of an extremely muscular body was seen as the embodiment of patriarchal power. Candidly, this literature was difficult to digest as it countered my personal experience as a bodybuilder, and challenged the masculine identity I had constructed. “They don’t get it” is what I told myself, having held the belief that bodybuilding was an inherently healthy endeavour. “They couldn’t be more ‘wrong’”. These authors, however, challenged me to reflect upon my beliefs and perspectives of not only bodybuilding, but also my motivations for pursuing a lean and muscular physique as a bodybuilder. In contrast, Lee Monaghan (2001a, 2001b) posited a more positive understanding of bodybuilding in by framing the pursuit of a plurality of masculine physique ideals as a body project, one that could be experienced as both pleasurable and empowering. When I reviewed his taxonomy of anabolic and androgenic steroids in *Bodybuilding, Drugs and Risk* framed against calculated or rationalized risk-taking I thought, “Now this guy gets it”.

These authors, of course, “got it” in their own right. They presented different frameworks for understanding the sport of bodybuilding and those who participated in it. Appreciating the contrasting perspectives helped not only to recognize and challenge by own biases, but also laid the foundation to interpret bodybuilding activities from multiple lenses in this dissertation.

1.1.2 The PhD Experience: A 16-Year Journey

My journey from starting in the PhD programme in Sociology at McMaster University to the anticipated completion of this dissertation will have exceeded 16 years in duration, which I believe is worthy of explanation. By 2007, I had successfully completed the course work and

comprehensive exam requirements of the program. It was at this time, in April 2007, that it was best for my family that I pursue paid employment while continuing my studies on a part-time basis. My application to withdraw from the programme in good standing was accepted by the university on August 31, 2009. Although challenging to manage work demands (including a 2.5-hour commute each day) and family obligations, I was able to prepare and defend my dissertation proposal, have my study approved by the McMaster University Research Ethics Board, conduct 32 in-depth interviews, and complete my initial data analysis.

I continued to pursue scholarly activities in the years that followed while my personal life blossomed. Throughout 2010, I prepared a co-authored manuscript that was subsequently published as a chapter in a bodybuilding anthology, and a year later, I presented my findings at the Qualitatives 2011 conference, which were published in a single authored article in a peer-reviewed journal in 2013. It was during those years that I advanced my career again, and my family and I purchased our second house in the town where I worked, thereby bringing greater harmony to a work-life balance.

From this departure, there appears to be a six-year gap in my academic activity. In January 2013, as a husband and father of two daughters, I advanced my professional career again by accepting a promotion which lengthened my commute from 15 minutes per day to, under ideal circumstances, two hours. To be transparent, I had underestimated the constraints that the additional professional responsibilities and commute would impose on my ability to progress my dissertation. In early 2014, our daughter was diagnosed with a serious medical condition that required our full attention for much of the next four years. This time in our lives could be characterized as “blessed chaos”, where we were fortunate to welcome our third

child, while having our relationship challenged as we rallied to support our daughter's path to recovery. This time brought with it moments of tremendous personal growth where I developed an appreciation and gratitude for life, time and spirituality never previously contemplated. At the same time, there were challenging moments where it felt like maximum effort was required just to get through the day without experiencing any major setbacks. It was during this period in my life that my dissertation had become relegated to the status of an intrinsic "want" to pursue, and as such, I was unable to make any noteworthy progress.

As time passed, my daughter's health improved and stabilized, and with it came an eventual discharge from the hospital-based medical program. In February 2017, my family moved closer to my place of employment which helped to re-store a more harmonious work-life balance. With renewed energy and focus, I was able to prepare another manuscript to a peer-reviewed journal for review, and I received an invitation from the journal to revise the manuscript and re-submit for consideration of publication.

The COVID-19 pandemic changed the way business is conducted in my professional life. The ability to work remotely meant my family and I had become less geographically dependent, and in September 2020, we moved once again to settle closer to extended family. It is from here that my dissertation was completed and prepared for defense.

1.2 The Research Context

Why study bodybuilding? Aren't bodybuilders just those overly muscled meatheads who are always flexing? I imagine this represents a common connotation of a bodybuilder, those depicted on the covers of magazines such *Muscle & Fitness*, and bygone publications like *Flex*

and *Ironman*, with Arnold Schwarzenegger serving as the sport's most popular ambassador. Bodybuilding has been the subject of academic research for the past 40 years, which has advanced our knowledge of the motivations of men and increasingly women to pursue bodybuilding within the broader intersection of masculinity, health and risk. In Chapter 2, Dr. James Gillett and I looked to contribute to our collective understanding by researching the health work and motivations done by bodybuilders across the life course framed along an aesthetic-functionality continuum.

The sport has evolved and expanded over time, becoming broader in scope and more commercialized along the way. Bodybuilding competitions have grown to become multi-sport Expos, big-name personalities are starring in popular movies, and the sports nutrition supplement industry has exploded since the early 1990s. The pluralization of ideal physique types has been recognized as the number of bodybuilding classes has grown to represent different types of bodybuilders. Alongside this expansion, advancements in online platforms and social media outlets facilitate knowledge creation, sharing and access to information. It is within this environment that I sought to better understand the phenomenological experience of bodybuilders, and how their lived experience shaped their perception and evaluation of information (see Chapter 3). Additionally, the evolution of bodybuilding and bodybuilding industries provide avenues for some bodybuilders to make a living, and it is this exchange of acquired cultural capital for economic capital that is the focus of Chapter 4.

In this section, I provide an overview of academic perspectives on bodybuilding, and delve into the commercialization of the sport. Further, although beyond the scope of this

dissertation, I provide an overview of the academic literature dedicated to female bodybuilding (see Appendix A: Female Bodybuilding).

1.2.1 Interpretations of Bodybuilding

Bodybuilders pursue the development of muscle yet lean appearance. Mansfield and McGinn (1993, p. 51) provide a definition that captures, in general terms, what it means to be a bodybuilder:

The bodybuilder can be described as a person who deliberately cultivates an increase in mass and strength of the skeletal muscles (hypertrophy) by means of the lifting and pushing of weights. The aim is to produce a body which fulfils certain criteria in terms of muscular size, shape, definition and tone.

Once associated mainly with a heavily muscled caricature-type physique, bodybuilding has expanded to include several competitive categories. While the elements outlined in Mansfield and McGinn's definition still apply, they vary in intensity or emphasis depending on the competitive class. Seeing the nuances and variation in the appearance of bodybuilders, Monaghan (1999b, pp. 269-270) described the term 'bodybuilder' to be a heterogeneous category, such that approaches depicting bodybuilders as a singular, homogeneous community are limiting and some members find to be a "less than satisfactory referent". This study supports a heterogenous perspective of male bodybuilding with definitional variation changing contingent upon the perspectives of participants in this study.

The realm of bodybuilding became the subject of academic research in the late 1970s and early 1980s with Klein's (1985) ethnographic study of elite competitive bodybuilders in Venice, California. Klein has made a substantial contribution to the literature on the bodybuilding subculture, and more generally, on the gender construction and self-objectification of the body (1985, 1986, 1992, 1993). Bodybuilding as a sport was gaining attention and popularity in the mid- to late-1970s after the release of the award-winning bodybuilding documentary, *Pumping Iron*, and thus a "preponderance of competitive bodybuilders" lived and trained in West Coast gyms that made researching this subculture possible (Klein, 1992, p. 328). This was an era in North America when the broader cultural shift towards healthism – seen as the pre-occupation of personal health being the primary definition and achievement of well-being – was not only gaining momentum (Crawford, 1980, 1984), but it was an era where a moral imperative existed for individuals to be responsible for their own health (Goldstein, 2000; Gruneau, 1997; Pawluch, Cain, & Gillett, 2000).

The behaviours and lifestyles of bodybuilders have been interpreted from multiple perspectives. On the surface, it could appear that participating in bodybuilding activities such as weight training, eating nutritious foods, and foregoing temptation, aligns perfectly with the healthism movement. Critical feminist theorists, however, have identified issues regarding the hypermasculine male body (Klein, 1993) as an embodiment of patriarchal power (Gillett & White, 1992; White & Gillett, 1994). Counter to a being a healthy endeavour, researchers found that male bodybuilders routinely engage in practices of self-objectification (Gillett & White, 1992; Klein, 1992; Monaghan, 1999b), which can result in both psychocultural and sociocultural anxiety (Gillett & White, 1992; Monaghan, 1999b) over the dissonance between

bodybuilders' achieved or desired physiques and socially accepted ideals of masculine physical appearance. Klein's use of creative titles for literary works such as 'Pumping Irony' (1986) and *Little Big Men* (1993) encapsulates his view of bodybuilders as narcissistic and insecure, countering the macho outward presentation of the hypermasculine physique. More recent research posits the sports supplementation consumption practices of a sample of recreational bodybuilders being a response to the "crisis of masculinity" (Atkinson, 2007) emblematic with the erosion of traditional hegemonic masculine traits.

For others, the practice of bodybuilding is framed as a body project (Featherstone, 1999; Monaghan, 1999b) or as a form of body modification (Featherstone, 1999) whereby participants exhibit control over their bodies in pursuit of sculpting one of a plurality of ideal-type physiques (Monaghan, 1999b) through lifestyle choices (i.e. diet, exercise, supplementation and/or drug-taking). For bodybuilders, 'looking good' is often described as synonymous with 'feeling good' (Bailey & Gillet, 2012; Monaghan, 2001b), where not only is 'non-injurious, self-inflicted and self-controlled "pain"' is embraced and re-interpreted as 'enjoyable' (Monaghan, 2001b, p. 345) but also where a sense of control and strength comes from restrictive dieting and foregoing indulgences (Crawford, 1984). In the pursuit of developing a muscular and lean physique, some bodybuilders will engage in rationalized 'risky' bodywork – such as the consumption of illicit steroids or over-the-counter supplements – whereby techniques are employed to neutralize risks, be it through the justification for their use as a means to an end (Monaghan, 2002) or through planned intermittent use (i.e. 'cycling strategies') (Bailey, 2012). A positive self-image and feeling of being in good health can come from achieving a 'sexy appearance', or for some middle-aged men, achieving a more athletic,

youthful appearance than same-aged peers even if physical ailments (e.g. sore knee, sore shoulder) are being experienced (Bailey & Gillett, 2012).

1.2.2 Sports Nutrition Supplements

It is within the expansion of bodybuilding that new economies emerge. The recent efforts to spread bodybuilding into mainstream consciousness has fueled consumerism in a capital society to expand sports nutrition supplement product availability. Once available only at niche retail outlets 20 years ago, supplements are now sold online and are on the shelves of leading grocery and retail stores. The growth in this industry is fueled by profits and, as Smith and Westerbeek (2010, p. 345) have argued, the technological advancements in genetic science and media distribution are driven by commercial forces. Agriculture and Agri-Food Canada, a department within the Government of Canada, reports that the Canadian retail sales of sports nutrition supplements totaled CAD\$114 million in 2008 (Agriculture and Agri-Food Canada, 2010). This market is dominated by the sale of protein powders but can also include performance enhancers, metabolic/fat burners, muscle builders, meal replacements, weight gainers and energy formulas. It is expected that the market for these products will continue to expand further to reach mainstream, non-traditional consumers and will grow to \$240 million by 2018 (Euromonitor International, 2014).

The expansion of this industry is impressive considering that the body of research on many supplements is not substantial enough to draw conclusions on their efficacy (Kreider et al., 2010), or as Tilburt, Emanuel, & Miller (2010, p. 1497) found, “when research shows supplements to be safe but not necessarily effective, there may be little or no influence in

public consumption.” Kerksick and colleagues (2018, p. 1) updated the International Society of Sport Nutrition’s (ISSN) exercise and sports nutrition review which “presents a well-referenced overview of the current state of the science related to optimization of training and performance enhancement through exercise training and nutrition.” Based on available scientific evidence, the authors determined that only four muscle building supplements and seven performance enhancement supplements had strong evidence to support their efficacy while being apparently safe to consume.

The development of a muscular and well-defined physique is often the impetus for men engaging in bodybuilding activities (Bailey & Gillett, 2011), which I argue for the majority of bodybuilders, involves consuming sports nutrition supplements. This position is supported by the narratives of participants in this study, as well as research conducted by Atkinson (2007) that revealed recreational bodybuilders consumed one or two supplements per week on the low end of the spectrum up to 10 supplements daily. Interviews with male bodybuilders in this study revealed that sports nutrition supplement consumption was a normative practice.

According to Hart and Carter (2000), consumption “is not simply 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” (p. 236). A competition preparation and lifestyle coach, who has trained hundreds of people ranging from professional bodybuilders, athletes, and female fitness and figure competitors to people simply looking to improve their health and appearance, explains the meaning that supplementation has had for some of his clients:

Supplements, whether they realize it or not, have been filtered through capitalism as a need. In actuality, they buy into their own success so if they're not committed to paying money for supplements then they internalize that as not being committed to their goals. It has (taking supplements) a cache value and all it does is reinforce to someone else that they, on a shallow level, are taking their goals seriously.

In bodybuilding circles, the consumption of sports nutrition supplements is, in some ways, representative of a commitment to the bodybuilding lifestyle.

Companies attempt to legitimize their products through scientific research and to appeal to a wide consumer base by selling them in a wide variety of stores for consumer convenience. Take, for example, MuscleTech products: by far the most commonly identified supplement brand by men participating in this research, these products are now available commercial retail outlets. Hydroxycut, a popular fat-loss sports nutrition supplement, made the list of top-spending brands with \$11.3 million spent on advertising in 2010 (DeLorme, Huh, Reid, & An, 2012, p. 552)

1.2.3 The Evolution and Portrayal of Bodybuilding over the Past Decade

The years it has taken for me to prepare this sandwich thesis has afforded me the opportunity to see the evolution of bodybuilding as a sport over a decade and a half, as well as to understand the various perspectives presented in academic literature. Since I conducted my in-person interviews in 2007 and 2008 (see Section 1.3) and building off the works cited above in Sections 1.2.1 and 1.2.2, researchers continue to interpret the evolution of the fitness and bodybuilding social worlds.

I have addressed masculine identity construction for male bodybuilders throughout the life course, as well as knowledge construction and exchange, in Chapters 2 and 3. These processes continue to be relevant in bodybuilding and the subject of academic interpretation, particularly in online environments. Not only are masculine identities and perceptions of health constructed in online communities of serious recreational and competitive bodybuilders, but these are also sites where participants shared knowledge on topics performance-enhancing drug use, training, nutrition, and supplements (Smith & Stewart, 2012a, 2012b). The type of knowledge construction and dissemination of anabolic and androgenic steroid cycles on muscular hypertrophy and health impacts based on lived experiences, or ethnopharmacology (Bailey, 2013; Monaghan, 2002, 2012), extends and expands in online environments to be coined 'virtual ethnopharmacology' (Smith & Stewart, 2012b, p. 35). Whereas my research addressed the role of direct interpersonal relationships trusted knowledge transfer (Bailey, 2013), these online communities offer a space for participants to seek and share information on illicit and illegal substances in an anonymous fashion (Andreasson & Johansson, 2016; Smith & Stewart, 2012b).

Popular Culture and Social Media

The increasing cultural presence of bodybuilding in North America provides ample opportunity for academic exploration. *Pumping Iron*, released in 1977 and starring Arnold Schwarzenegger and fellow bodybuilders, offered the populace a glimpse into the subculture. In 2013, nearly four decades later, the first in a trilogy (as of 2020) of *Generation Iron* documentaries was released that followed a similar plot as the lives of elite competitors were documented as they

pursued becoming Mr. Olympia. This documentary had a commercial release into theatres and was successful enough that two sequels were released in 2017 and 2018. The avenues by which such material is disseminated has grown tremendously through the Internet, and through the use of streaming services like Netflix.

The lives of elite bodybuilders are readily accessible now who use social media tools such as YouTube, Facebook and Instagram to market their brands, and the merchandise and/or services they offer. Elite bodybuilders such as Mr. Olympia 2020 Champion Mamdouh “Big Ramy” Elssbiay, Phil Health, Kai Greene, Brandon Curry, Roelly Winklaar, and James “Flex” Lewis to name a few, all have well over a million followers each on Instagram and actively communicate with their fans to provide physique updates, training videos, commentary on other bodybuilders, and to market goods and services. With the relatively recent availability of social media platforms such as Instagram, there has been an emerging body of literature addressing the negotiation of masculine (Marshall, Chamberlain, & Hodgetts, 2020) and feminine (Marshall, Chamberlain, & Hodgetts, 2019; Rahbari, 2019) gender identities by male and female bodybuilders using such platforms. Further, Wellman (2020) explored how bodybuilders and trainers discredit the digital labour performed social media influencers in the construction of their identities within the bodybuilding subculture, thereby resisting their status as being authentic members.

Business

The inroads for bodybuilding into mainstream culture also have an avenue paved through associations with Hollywood celebrities. In 2013, Paramount Pictures released *Pain & Gain* to

major North American movie theatres - a film in which the main characters in the storyline were bodybuilders played by Hollywood stars Mark Wahlberg and Dwayne “The Rock” Johnson. Wahlberg, known for possessing a lean and muscular physique, has co-founded Performance Inspired Nutrition which produces sports natural supplements, and signed a promotional relationship with Joe Weider’s Olympia Fitness & Performance Weekend in time for the 2019 event.

These relationships exemplify what Vallet (2017) coins the ‘magic triangle’ of complementary capitalist pillars in the bodybuilding industry to appeal to audiences: the show, the media and products, gyms and technics at home. Likewise, Liokaftos (2014) documents how this event has diversified and expanded to include other ‘extreme sports’ and thereby broaden its appeal to a wider audience (see Chapter 4).

1.3 The Research Process

As written earlier, my interest in bodybuilding and the process of constructing a masculine identity that included the development of a lean and muscular physique gained momentum in my teenage years. From my early 20s onwards, I spent a great deal of time in gyms working out. Bodybuilding had become a serious hobby but it wasn’t until I applied to the PhD programme at McMaster University that my personal and academic interests aligned. I was fortunate to have the support of Dr. Andrew Hathaway and Dr. Michael Atkinson who, at that time, were pursuing a research grant in a related area.

I began in the PhD programme in the fall of 2004 with the goal of conducting ethnographic research to better understand the perspectives of male bodybuilders on the use

of supplements. By this time, the supplement industry had rapidly expanded over the previous decade, as had the availability and function of the Internet. My research question was: How do males experience using supplements for the purposes of bodybuilding? I set out to learn more about the sources of knowledge they draw upon to inform them of which supplements to take, how to take them, and the perceived health benefits and risks of consuming supplements. The process of collecting and analyzing first-hand data allowed for the application and further examination of material learned through graduate-level coursework and comprehensive examinations in areas such as the sociology of health and medicine, social problems, theory, qualitative methodology and computer applications in data analysis.

In the following sub-sections, it is acknowledged that there is considerable overlap in the description of methods and analytical approach of each chapter. This study used an inductive approach where qualitative interviews were conducted to capture an in-depth understanding of the meanings that men attach to bodybuilding and sports nutrition supplement use. In-depth interviews provided the basis of first-hand data for analysis in each chapter. The descriptions of methods and the research setting as appearing in each article, including my role as the researcher, were influenced by the feedback provided by anonymous peer reviewers.

1.3.1 Participant Recruitment

Participant Observation

In total, 31 male bodybuilders between the ages of 18-68 years old were recruited to participate in this research. As a former competitive bodybuilder who frequented several gyms,

I was a ‘complete member’ (Adler & Adler, 1987) in the local bodybuilding community. I was also a contributing expert for an upstart Canadian fitness magazine. As such, I was able to leverage the considerable social capital (Bourdieu, 1977) I had developed with my social network to discuss my research project and to request an interview. Bodybuilders interviewed for this study were mainly recruited through pre-established contacts I made in two local gyms (n=17) or through purposive sampling (n=11). These two gyms, both part of a national chain, are located in a large suburban area. According to Statistics Canada’s Census Profile based on 2016 Census data, this community, located in the western region of the Greater Toronto Area, has a population of approximately 183,000. Median incomes by household types in this city were consistently higher than provincial levels. While recruitment posters were also placed in these gyms with permission from management, this strategy only yielded three participants. (see Appendix B: Recruitment Poster).

Purposive Sampling

Candidly, my first three interviews were conducted with bodybuilders with whom I had a personal friendship in order to gain confidence in conducting interviews. My fourth interview was conducted with a bodybuilder that I had identified as a key informant. According to Berg (2001), “When developing a purposive sample, researchers use their special knowledge or expertise about some group to select subjects who represent this population” (p. 32). This individual had developed an impressive physique and was a supplement distributor who was well-connected in the bodybuilding community. It was with this individual that I tested some initial findings and sought his expertise on the supplement industry.

In general, during interviews, participants were asked who they considered to be experts in sports nutrition supplements, with responses including ‘experienced bodybuilders’, ‘supplement company representatives’, ‘supplement store owners’ and ‘researchers’. From this departure, purposive sampling (Berg, 2001) was employed where I actively sought the participation of these types of experts to help guide or refine questioning, or enrichen the data by capturing their perspective. These individuals not only had extensive experience as bodybuilders themselves, but also in the development, evaluation or distribution of supplements, as well as had a background in interacting with other bodybuilders.

As part of my research design, I sought to capture the experiences of older men to learn their motivations for participating in bodybuilding. These individuals were further along in a normative life course trajectory, which was be characterized by nearing or reaching significant life milestones such as retirement or being a grandparent. Their reasons for engaging in the sport were sought to provide a greater breadth of bodybuilding experiences and more insight into bodybuilding for men experiencing life in their late 50s through late 60s. Purposive sampling techniques were also employed in order to get representation of older bodybuilders.

1.3.2 Interviews

This study used an inductive approach where qualitative interviews were conducted to capture an in-depth understanding of the meanings that men attach to bodybuilding and sports nutrition supplement use. Interviews were conducted between September 2007 and June 2008, mostly in local coffee shops or in the homes of participants; five interviews were conducted by telephone.

In total, 32 interviews were conducted with one participant, a key informant, being interviewed twice as I had additional questions arise following our initial interview. The interviews lasted an average of 52 minutes, ranging from 27 to 85 minutes in duration. An interview guide (see Appendix C: Interview Guide) containing questions around the topics of bodybuilding experience, aesthetics and functionality of the body, and sources of trusted knowledge was created; the order in which these topics were addressed often depended on how pre-interview conversations progressed.

Sharing my experiences with competitive bodybuilding and consuming sports nutrition supplements both in the gym and during the interviews allowed me to develop rapport with participants, which, as Hathaway and Atkinson (2005) found, “fostered a context of mutual identification that facilitated more in-depth conversations” (p. 71). All participants agreed to having their interviews recorded, and all agreed to signing a consent form (See Appendix D: Consent Form).

1.3.3 Analysis

Recorded interviews were transcribed and imported into Nvivo, a database management system. Using Nvivo, each transcript was read line by line and coded for key concepts, while keyword and Boolean text searches were also conducted on the entire dataset. I began coding descriptively for information about respondents, settings and contexts, followed by topic coding. Morse and Richards (2002) describe topic coding as a process that entails “creating a category or recognizing one from earlier, reflecting on where it belongs among your growing ideas, and reflecting on the data you are referring to and on how they fit with the other data

coded there” (p. 117). Coded text segments resided in free nodes, which are “containers for categories” (Morse & Richards, 2002, p. 141) that are not yet organized in a hierarchical tree structure. To clean and manage the dataset, free nodes were compared and merged to reduce duplication. Analytic concepts were then created by abstracting from the data in order to identify key themes and patterns in the data (Morse & Richards, 2002, p. 135).

Memos were created extensively while reading and coding the data. These memos contained my thoughts, reactions and questions to the data, as well as notes about the patterns I began to see emerging in the data. These memos were re-visited when abstracting from the data, as well as in initial writing phases.

Three distinct chapters have been prepared for this ‘sandwich style’ dissertation. Given the duration of time that had passed between the initial collection and analysis of the data between 2007-2009, I re-read transcripts and re-visited the Nvivo dataset often during the preparation of each manuscript.

1.4 Overview of Dissertation

The following three chapters represent distinct articles that comprise this ‘sandwich style’ thesis. Each article, at its core, is substantively focused on men who participate in bodybuilding activities as part of the health work they undertake while pursuing health, physique transformation and masculine identity construction. Each article, however, is approached and framed from different theoretical perspectives. As a collective, this work has been assessed through the peer-review process to be worthy of publication, or showing promise for future publication.

This style of dissertation was chosen over a traditional dissertation for three main reasons. Firstly, this format allowed for flexibility to address a diverse set of research interests pertaining to male bodybuilding; secondly, as a husband, father, and working professional, delineating the dissertation into smaller ‘project-based’ chapters allowed for a better fit with my lifestyle and within the scope of achieving larger family goals, and; thirdly, this approach allowed for the pursuit of peer-review publication for each article, which I perceive as representing smaller, tangible yet intrinsically-rewarding achievements to experience on the way to completing this dissertation. There are disadvantages to acknowledge in this approach that has led to some overlap between articles. While each article is unique in topic and theoretical framework, they draw upon the same seminal literature base – namely, the writings of Alan Klein and Lee Monaghan – that is rather foundational to understanding sociological perspectives on bodybuilding. I looked to minimize this redundancy by incorporating and emphasizing the most salient works of these and other authors to the topic at hand, as opposed to presenting a common overview of bodybuilding literature in each article. Further, there is commonality in the description of the data and methods between each manuscript, as each is rooted in the same body of collected data. To mitigate this impact on findings, the data was re-visited and re-analyzed during the development of each article. In spite of these challenges, I offer these chapters as distinct articles that contribute to our understanding of the phenomena each addresses. Collectively, they comprise a coherent body of work centred on male bodybuilding, health, and masculinity.

Chapter 2 was published in 2012 in *Critical Readings in Bodybuilding*, a bodybuilding anthology edited by Adam Locks and Niall Richardson. In this chapter, Dr. James Gillett and I

contributed to the collective understanding of the health work and motivations of bodybuilders across the life course framed along an aesthetic-functionality continuum. In this paper, we present how masculine identities are re-constructed by men as they age, evolving broadly from the primary goal of developing an attractive lean and muscular physique in earlier years to a focus on developing a physique capable of performing tasks to foster personal independence later in life. Participants were also asked which sports nutrition supplements they consumed to support their goals from the growing and evolving number options at their disposal.

Alongside the expansion of the sports nutrition supplement industry, advancements in online platforms and social media outlets facilitate knowledge creation, sharing and access to information. It is within this environment that I sought to better understand the phenomenological experience of bodybuilders, and how their lived experience shaped their perception and evaluation of information (**see Chapter 3**); this article was published 2013 in the journal, *Sport in Society*. Additionally, the evolution of bodybuilding and bodybuilding industries provide avenues for some bodybuilders to make a living, and it is this exchange of acquired cultural capital for economic capital that is the focus of **Chapter 4**.

1.4.1 Chapter 2: Bodybuilding and Health Work: A Life Course Perspective

In 2010, I was presented with an opportunity to contribute to an anthology on bodybuilding, which provided a tangible path to developing a ‘sandwich’ format dissertation. The book chapter, co-authored with Dr. James Gillett, was the first manuscript prepared from my research. As a preamble, with respect to my contribution to the book chapter, Dr. Gillett and I agreed that I would be the lead author for this work. I wrote the majority of the chapter while

Dr. Gillett positioned the work within existing literature in the introduction section of the chapter. He provided critical reviews of the manuscript to guide refinements of the chapter prior to submission. The evidence provided in the book chapter is from the interviews I conducted. I served as the main point of contact in communicating with the editors and I addressed their recommendations in the preparation of the final manuscript submission.

A common theme amongst those I had interacted with was that working out with weights and eating nutritious foods was perceived to be a positive, healthful endeavour. The focus on the chapter was to explore this health work with men of different ages and what motivates their continued participation. I found it interesting that masculine ideals types presented in media often centre on males who possess, to varying degrees, lean and muscular physiques, and these images are presented as representations of positive health. Having competed in a bodybuilding competition, I felt a paradox between the lived experience of achieving an ideal type physique and notions of health because I never felt unhealthier than when I stepped on-stage.

This chapter calls attention to the perceptions of health shared by men at different stages of their lives, as well as the role that the appearance of one's body plays in the (re)constructing of masculine identities over time. It is framed within the notion of health achievement that requires congruence between cultural ideals of physical attractiveness (White, Young, & Gillett, 1995) and the moral imperative to demonstrate individual responsibility and self-control (Crawford, 1980; Crawford, 1984; Gruneau, 1997; Lawton, 2003; Pawluch, Cain, & Gillet, 2000;) along a life course trajectory (Leder, 1990; Oliffe, 2009; Sparkes & Smith, 2002). Masculine identity construction at different stages of life are positioned in

relation to hegemonic masculinity (Connell, 1987; Connell & Messerschmidt, 2005) and hypermasculinity (Gillett & White, 1992; White & Gillett, 1994). Men participating in this study associated positive health through different dimensions at different stages of their life course along an aesthetic-functional continuum. While all men valued a strong and lean body, we found “the importance of the body’s ability to function takes precedence over achieving an aesthetically pleasing physique as men age” (pp. 92-93). As such, the motivations of men participating in bodybuilding generally delineated from non-specific aesthetic goals such as “being huge” or “getting ripped” most often associated with younger men, to more functionally-oriented goals of being physically able to complete activities of daily living such as cutting the grass and taking out the garbage while preventing illness.

This chapter advances our understanding on the intersection between the meanings of health and the meanings of masculinity at various stages in the life course for men who pursue health work through bodybuilding.

1.4.2 Chapter 3: Ethnopharmacology and Male Bodybuilders’ Lived Experience with Consuming Sports Nutrition Supplements in Canada.

I understood the practice of sports nutrition supplement consumption as being nearly synonymous with the practice of bodybuilding. As my own interest in bodybuilding grew, so did my interest in understanding how supplements could help me build muscle or lose body fat. I would hardly be alone in holding this perspective, something that Atkinson (2007) notes. Since the early to mid-1990s, the supplement industry in North America grew and proliferated from sales in niche brick-and-mortar stores to mainstream and online retail outlets. I became

intrigued with understanding how bodybuilders learned about which supplements to take in a capitalist marketplace environment rife with conflicting opinion and outrageous claims-making, while there co-existed a dearth of objective, scientific research on supplements.

The continued development of the Internet increases opportunities for claims-making and knowledge generation, along with forums where bodybuilding enthusiasts could pose questions and receive responses from fellow enthusiasts. Earlier, Monaghan (1999a) argued that bodybuilders often challenge medical perspectives on risks associated with steroid consumption; rather, bodybuilders develop an ethnopharmacological understanding of steroid consumption (2002, 2012) whereby they are informed by their lived experience, or ‘learning by doing’ (Crossley, 1995, p. 54). This amassed ‘stock of knowledge’ (Monaghan, 1999; Schutz & Luckmann, 1973) informs their consumption practices and risk mitigation strategies, and experiences are shared with and recognized by other enthusiasts via the intercorporeality – or ‘belonging to a common world’ (Crossley, 1995, 2006) – associated with participating in the bodybuilding social world. While participants in my research spoke mainly of gathering and sharing information in interpersonal or offline (e.g. magazines, reading labels) environments, it is acknowledged that there is a body of literature in the online social worlds of bodybuilders that has grown since the publication of this article (Andreasson & Johansson, 2013; Andreasson & Johansson, 2016; Hutchinson, Moston, & Engelberg, 2018; Smith & Stewart, 2012a; Smith & Stewart, 2012b).

Participants revealed that although they consulted numerous sources of information such as magazines and other bodybuilders, they privileged their lived experience with consuming a supplement to determine its efficacy and safety. This included the interpretation

of physical cues such as ‘getting pumps’ or feeling jittery as indicative of experiencing desirable or undesirable physiological responses from the consumed substance. Their stock of knowledge was also drawn upon to interpret their phenomenological cues to assess risk, which at times countered warnings on certain products from Health Canada. This research also revealed that bodybuilders privileged intercorporeal experiences – or the lived experiences of trusted others – as more elevated on the hierarchy of trusted information than other sources, which speaks to the importance of social networks in bodybuilding.

This article contributes to the empirical understanding of consumption practices of bodybuilders with legal sports nutrition supplements, including which sources are consulted and deemed trustworthy in assessing the efficacy and risk associated with such products. This article contributed to the scant body of literature on the use of sports nutrition supplements and found that male bodybuilders continue to use legal, over-the-counter supplements even after government warnings have been issued regarding their safety.

1.4.3 Chapter 4: ‘My Body is My Business Card’: Muscularity as a Craft Industry

My interest in the economics of bodybuilding emerged as a theme through the analysis of transcribed interview data. It became apparent that for several participants in my research project, bodybuilding was much more than a hobby or past-time. For these individuals, developing a muscular and lean body through bodybuilding was a form of capital or currency that could be leveraged and exchanged during the transaction of selling a product or service. They were employed or ran businesses within bodybuilding industries, holding occupations such as personal trainer, contest preparation coach, sponsored athlete, or sports nutrition

supplement store owner/distributor. For a sub-set of individuals, they utilized the physical capital they developed through participating in bodybuilding activities – or what some call ‘bodily capital’ (Monaghan, 2004; Wacquant, 1995, 2004) – to succeed in the physically-demanding roles of nightclub bouncer or firefighter, which are not considered to be bodybuilding industries.

The sport of bodybuilding has expanded from its ‘hardcore’ roots characterized by men sporting extremely muscular, hypermasculine physiques to include a plurality of physique-types that are recognized and legitimized through competitions. The sports nutrition supplement industry continues to expand and with it, so has the marketing of these products (DeLorme, Huh, Reid, & An, 2012). A plethora of masculine ideal type physiques are now used to market sports nutrition supplements, thereby broadening the products’ appeal with an expanded consumer base. These conditions point to the broadening of the ‘field of production’ (Bourdieu, 1978) in bodybuilding that helps to produce the need for its own products.

With the expansion of bodybuilding comes the accompanying growth in bodybuilding industries, and with it an increasing number of opportunities to earn an income in a related field. Using Bourdieu’s (1977, 1978, 1986) writings of social reproduction as an analytical framework, participants develop various forms of objective and embodied capital through their physique, knowledge, credentials and/or social networks that all possess relative value in these industries that are then marketed and exchanged for income.

This analysis contributes to a more fully developed understanding of the interrelationship between the social, cultural and economic dimensions of sport participation in late modern societies.

1.4.4 Chapter 5: Conclusion and Future Directions

In this chapter, I present a conclusion to the dissertation that summarizes my main findings and contributions main to the literature. Based on existing literature, including this dissertation, and the direction of recent publications, I offer thoughts on where future research on masculinity, health work, and sports nutrition supplementation will go within the context of bodybuilding social worlds to fill gaps in our collective knowledge.

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Chapter 2

Bodybuilding and Health Work: A Life Course Perspective¹

On the covers of magazines like *Flex* and *Muscle & Fitness*, bodybuilders are commonly depicted as men possessing extremely muscular, nearly fat-free bodies. This figure of the ‘bodybuilder’ emerged in the 1980s when subcultures of men, like those described by Klein (1981, 1985) in his studies set in southern California, sought to push the limits of muscularity and to advance ‘professional competitive’ bodybuilding. Thirty years later, bodybuilding is a more generalized and normative practice, a trend described by Monaghan (1999a) as the plurality of the muscular body. A more diverse range of men are pursuing muscularity as a component of their gender identity.

In this chapter we examine the health dimensions of bodybuilding for men who are at different points of their life course. We build upon existing social scientific research on the meaning of bodybuilding practices for men who work out regularly but do not compete professionally. A prominent theme in studies of bodybuilding is the connection between muscularity and the construction of hegemonic masculinity (Gillett & White, 1992; Klein, 1986, 1992, 1993; White & Gillett, 1994). The practice of bodybuilding is seen as linked to a broader crisis of masculinity in which men turn to the muscular body as a means of reasserting dominance as traditional sources of authority for men recede with transformations in the gender order. This premise continues in more recent studies of male bodybuilding. Bridges

¹ Bailey, B., & Gillett, J. (2012). Bodybuilding and Health Work: A Life Course Perspective. In A. Locks & N. Richardson (Eds.), *Critical Readings in Bodybuilding* (pp. 99-106). New York: Routledge.

(2009), for instance, introduces the idea of gender capital to describe the process by which male bodybuilders use muscularity to negotiate their masculine identity, which may but not necessarily reproduce broader hegemonic social relations in different and contingent social settings. We build upon this work by examining the place of gender capital among men involved in bodybuilding at moments in their life course when their masculine identity is renegotiated and transformed.

Along with masculinity, the health dimensions of bodybuilding is another predominate theme in social research on men involved in the sport. This literature tends toward questions regarding the health benefits and risks of bodybuilding. The use and misuse of steroids among men involved in weight training and bodybuilding is a central concern in this research. Keane (2005) highlights the extensive number of studies that link bodybuilding with steroid abuse as a public health threat. Steroid use among bodybuilders is framed either as a form of illicit drug use or as a result of men suffering from a 'disorder' or problematic masculine identity (Keane, 2005). Not all research on health and bodybuilding attend only to the rise of steroid abuse among men. Monaghan (2001a), for instance, expands this frame of reference to include an analysis of the lay knowledge that bodybuilders acquire and use in weight training and participation. Understanding the pharmacological knowledge that bodybuilders acquire and use to manage the risk of steroid and supplement use suggest that bodybuilding is work that men do in pursuit of muscularity and also undertake in pursuit of what they define as health.

The discourses of muscularity and health are becoming increasingly intertwined. Studies indicate that understandings of health in the bodybuilding community are closely associated with descriptions of ideal masculine physiques (Gill, Henwood, & McLean, 2005; Grogan, 1999;

Monaghan, 2001b). This trend is evident in the titles of popular magazines like *Muscle & Fitness* and *Men's Health* that promote and twin a relationship between hegemonic masculinity and the muscular male body. Yet, few studies examine the meanings of health for men who participate in bodybuilding. In a preliminary study, Gillett (1995) indicated that many young men think about bodybuilding as a means to health, albeit an understanding of health that is closely twinned with conventional understanding of masculinity (strength, power, control, invulnerability). There is a need for further research on the intersection between the meanings of health and the meanings of masculinity for men who are involved in bodybuilding.

The purpose of our chapter is to move in this direction by exploring bodybuilding as a form of health work that is carried out by men at different stages of their life course. We explore questions like: How is health negotiated by male bodybuilders as they pass from one stage in the masculine life course to the next? How is health expressed in terms of bodily aesthetics and function as men age? How do the forms of health work performed by men change as they grow older?

In this chapter we begin by describing the sample of male bodybuilders and the context in which interviews took place. Participants shared experiences that followed a heteronormative life trajectory while conversing about the health dimensions of bodybuilding. The dimensions are structured in relation to two broad understandings of health: aesthetic and functional. We then move to examining the constructions of masculinity through the health work of bodybuilding at three distinct moments in the life course: youth; middle age; and elderly. To conclude, in looking at the health dimensions of bodybuilding across the life course,

we make the point that, for men, the importance of the body's ability to function takes precedence over achieving an aesthetically pleasing physique as men age.

2.1 Interviews with Bodybuilders

A total of 32 digitally recorded interviews were conducted with predominantly Caucasian male bodybuilders between the ages of 18 and 68. They took place between September 2007 and June 2008 most often in local coffee shops or in residences' homes; five interviews were conducted over the telephone. An interview guide containing questions around the topics of bodybuilding experience, aesthetics and functionality of the body, and sources of trusted knowledge was created; the order in which these topics were addressed often depended on how pre-interview conversations progressed. The interviews lasted an average of 52 minutes. While all men participating in this study identified, in some way, with being a bodybuilder, few identified as being 'hardcore'. The participants who most strongly identified with being serious or 'hardcore' had won provincial or national level bodybuilding competitions, one of whom shared aspirations of competing in professionally.

Participants were recruited from gyms to represent a bodybuilding continuum: from recreational bodybuilders to winners of national-level amateur bodybuilding competitions. As such, purposive sampling techniques were used in order to obtain a sample that would be diverse in terms of age and in bodybuilding experience. All participants understood their bodybuilding practices as a means to enhance health yet the kinds of work done to achieve health varied by age. The study used an inductive approach that began with the meanings

participants attached to bodybuilding activities and their health, and we sought a greater understanding of those meanings.

Bodybuilders interviewed for this study were mainly recruited either through pre-established contacts made by one researcher (BB) in local gyms, or through recruitment posters placed in these facilities. These two gyms, both part of a national chain, are located in a large suburban area in middle-class neighbourhoods. Both gyms were much busier in late afternoon and early evening than in the early morning hours (i.e. prior to 7a.m.); a markedly younger demographic populated these facilities later in the day than in the morning. One site was more commercial than the other and has an open concept design to house its combination of free weights and machines. Amenities include several fitness classes (e.g. spinning, “boot camp” style, and such) as well as towel and child-minding services. The other gym had fewer amenities and the closed concept design avails itself to different workout atmospheres. The primary basement weight room, a low-ceiling and dimly-lit room, lends itself to a rather ‘hardcore’ feel. Groups of young men performing sets of bench presses, barbell curls and deadlifts dominate the weight room floor in the evening. The upper level contained cardiovascular equipment and weight machines in a less intimidating atmosphere.

2.2 Health Dimensions of Bodybuilding

Male bodybuilders in this study led a seemingly heteronormative lifestyle. The vast majority of men spoke of being career-oriented and having a desire to raise and provide for a family as a natural life course trajectory. Questions focusing on sexual orientation were not explicitly

asked of participants, but through conversation, most revealed their sexual interest in females or in being involved in monogamous, heterosexual relationships.

Men in this study closely associated bodybuilding with the pursuit of health. Western culture embraces and promotes the concept of healthism, which calls for individuals to be responsible for their own health (Goldstein, 2000; Pawluch et al., 2000). Healthism, according to Crawford (1980, p. 365), “is the preoccupation with personal health as a primary—often *the* primary—focus for the definition and achievement of well-being.” He posits elsewhere (1984, p. 67) that “health must be achieved. It is dependent on health-promoting behaviors. As the goal of health acquires a new-found importance, priorities must be reordered, a commitment made.” Participating in bodybuilding activities, then, can be viewed as the health work done by men to achieve positive health.

The health work done by participants went beyond just lifting weights. Many men described living a bodybuilding lifestyle that included being dedicated to working out regularly and to eating nutritious foods. It also requires discipline and self-control by foregoing temptations (Crawford, 1980; 1984). One participant explains:

When I think of bodybuilding I think of someone that makes the lifestyle choice of bodybuilding. It's not just going to the gym 3 to 5 times a week and training. They alter other aspects of their lives to conform to their bodybuilding lifestyle. They eat a certain way, they exercise a certain way, they're not heavy drinkers, heavy partiers, they eat healthy. The whole lifestyle is thought towards being healthier and building their body the best they can.

Throughout our interview, this man shared his beliefs on the positive benefits of living a bodybuilding lifestyle. These included relieving stress and having a positive mental outlook on life. Of importance to him was that by living this lifestyle, he developed a good work ethic that transcended the gym to other areas of his life, such as his occupation.

His experiences were shared by other male bodybuilders. There were several health dimensions that emerged during this research. Similar to other findings (Monaghan, 2001b; Robertson 2006), when asked what being in good health meant to them, many participants proclaimed they “looked good and felt good.” Others felt they were in good health precisely because they were not experiencing symptoms of illness, injury or disease. Dimensions of health, however diverse, tended to be organized around two tendencies: aesthetics and functionality. Each of these tendencies play a role in shaping the health work conducted by men of all ages, albeit to varying degrees of importance throughout the masculine life course.

2.2.1 Health and the Aesthetic

Men of all ages cared how they looked. There is great social significance placed on the aesthetic desirability of the body, which is often the reason that males engage in bodybuilding activities. Possessing a lean, muscular body aligns with Western social ideals of physical attractiveness for men (White, Young, & Gillet, 1995). To deviate from this ideal is to risk being socially stigmatized as lacking self-control, discipline and will power (Crawford, 1984) as bodily indulgence is a sign of “immortality, irrationality, decadence, and weakness” (Gruneau, 1997, p. 198).

There is no single masculine ideal type. Images of ideal masculine physiques are disseminated through various forms of media, and how a man *should look* is, of course, historically and contextually specific. Contemporary media representations of men vary in shape and size, but what commonly appears are nearly fat-free bodies with, in the least, a modicum of muscularity. Hardcore bodybuilding magazines would represent the very extreme in images of hyper muscularity. Very few participants in this study identified the physiques of professional bodybuilders specifically when discussing their aesthetic goals. The goals of younger men, however, seemed to align with such extremely muscular images as they stated, in the most general and non-specific terms, a desire to get “huge” and “ripped”. When it was discussed, a couple younger bodybuilders aspired to look like cartoon superheroes or action movie stars. Older bodybuilders, in contrast, generally wanted to avoid getting fat with less concern on developing exaggerated muscularity.

The peer group provided a relational context for men to evaluate their physique. Compliments and positive reinforcement received from peers on the appearance of their body served as a source of pride for participants. Men wanted to look better than their peers at all phases of the life course. In turn, how they felt about the appearance of their bodies had a profound impact on their masculine identity construction. Our findings also support that “bodybuilders are united in the ongoing project of enhancing bodily aesthetics” (Monaghan, 1999a, p. 268).

2.2.2 Health and Function

The functioning dimension of health refers to the body's ability to *do something*. Men lift weights to better prepare their bodies to undertake an activity. What that something tended to be was contingent on one's place in the life course. Younger men, and men reflecting back on their younger years, disclosed their desire to improve their performance in sport through bodybuilding health work. Older men, conversely, wanted to maintain the ability to perform daily activities.

It is during the period in between these life course phases that the functional dimension of health recedes in importance to identity (re)construction. The body, during this phase, becomes an absent present (Leder, 1990; Sparkes & Smith, 2002). When not experiencing injury, illness or disability, the ability of the body to function becomes taken for granted and disappears from conscious awareness (Leder, 1990; cited in Sparkes & Smith 2002, p. 266). As men age, we argue the preservation of this functioning body re-emerges to serve as a health work goal for male bodybuilders.

The aesthetic and functional dimensions of health exist on a continuum for male bodybuilders. These dimensions are not dichotomous in that males are ever only concerned with aesthetics *or* functionality, but rather the importance they place on them changes over time and in response to life experiences. The interplay of these dimensions of health are prominent in masculine identity construction throughout the life course.

2.3 Masculine Life Course and Identity Construction

Bodybuilders place varying degrees of importance on the symbolic and pragmatic representations of health as they progress in their life course. Lawton (2003, p. 33) states “...within popular culture, health is increasingly being conceived and evaluated in representational rather than instrumental terms, the *appearance* of health (achieved through the cultivation of strong-looking, fat-free body) often being regarded as more important than the attainment of health *per se*.” While the lived experiences of younger bodybuilders in this study align with this reasoning, older participants challenge this notion as their health work is performed with pragmatic bodybuilding goals in mind. The interplay between the aesthetic and functional dimensions of health influenced masculine identity construction as various phases of the life course.

Health work was organized to develop muscular physiques that were the literal and symbolic embodiment of power, a characteristic of traditional hegemonic masculinity (Connell, 1987; Connell & Messerschmidt, 2005). For others, we found the truth game of masculine identity construction through bodybuilding was more centrally tied to developing a functional body. These men tended to be older and worked towards maintaining good health and independence. Although still influential, the importance afforded to physical appearance at this stage in the life course for identity construction had lessened.

We categorized men in this study to occupy positions in one or more phases in the masculine life course, namely younger, middle-aged and older years. Chronological age alone does not differentiate between these phases. Blaxter (2000, p. 41) argues that “A real lifetime is measured subjectively in social periods—infancy, schooldays, family formation, work,

retirement—rather than calendar years; periods of life which may be determined by social roles, but are particular to individuals.” We compare the health work done throughout masculine life course at these phases, as has been done elsewhere (Oliffe, 2009), but acknowledge that they are temporal in nature, being neither fixed, nor self-evident (James & Hockey, 2007, p. 136). They are not clearly defined or mutually exclusive as men, arguably, could be part of more than one phase.

2.3.1 The “Sexy Beast” Image: Younger Men

An important component of masculine identity construction for younger males is tied into the appearance of their bodies. The body can be developed as a resource to gain gender capital. Bridges (2009, 92) defines gender capital to be the “knowledge, resources and aspects of identity available – within a given context – that permit access to regime-specific gendered identities.” These men wanted to portray a muscular, sexualized body image that would be accepted and admired by their peers. Notions of what it meant to be a ‘real man’ for them—someone that same-sex peers respected and that females would find sexually attractive—encompassed the display of a physically strong and lean body. One bodybuilder recalls an experience he had while in high school.

You know, the motivation when I was bodybuilding was that if I could get my arms a little bigger, get my chest a little bigger, get a little leaner and get my abs popping out, I'd feel better. You want to be the guy that the girls look at... I remember one incident in high school in particular where a girl made a comment to me: “Oh, you look like you've been working out” and right there, that was all

the incentive I needed to keep going to gym. It was like wow, like this hot chick just noticed that I got a little bigger. You know, I went from 154 pounds at 6'1 to 164 pounds at 6'1.

Cooley's (1964) concept of the "looking glass self" can be applied to understand the process of masculine identity construction for younger men. He identifies three components to the "looking glass self": the imagination of our appearance to the other person; the imagination of judgement of that appearance, and some sort of self-feeling, such as pride or mortification (Cooley, 1964, p. 184). One participant recalls his desire to develop a muscular body that, in this particular context, would not only be admired and envied by other males, but would also receive approval from females.

I had it in my head that, I wanted to be a big guy with big arms—and I wanted other guys to notice. Yeah, it kind of got overblown because I wanted chicks to think the same thing. I remember I was showering once in university, it was night time in the dorm and everyone was running around drunk, and when I opened the shower, they looked at me. I then heard a couple of my buddies say, "the girls looked at you and they loved your body" and I thought I could eat this up. It was a good thing.

At the time, this male was in his early 20s. He had a masculine ideal type in mind that he idolized and thus the health work he did was intended to align his physique closer to this ideal. He projected an identity of being "the big guy" to his same-sex peers, and that of "the sexy

beast” to interested females. In receiving positive feedback from others—either real or imagined—his body image was reinforced.

Once reinforced, the bodybuilder internalizes his masculine identity which becomes his master status (Becker, 1963). He becomes known to others by the aesthetic image he projects. This identity becomes a self-fulfilling prophecy (Becker, 1963) insofar as he continues to organize his bodybuilding health work to maintaining it. The following exchange with a participant exemplifies how once established, he worked to maintain (or continually re-construct) his masculine identity.

Interviewer: So, when people start recognizing you that way (big, muscular), do you feel pressure to maintain that identity?

Definitely, yeah. It's like you almost feel like you have to be the big guy, you have to be the strongest. And it's like you start—sad to say—sizing up the people around you because you want to have that edge over them. You want to be a little bigger than them, you want to be a little stronger than them because you know the minute someone stronger and bigger comes along, you wonder who you are. Who am I? If he's the big guy, what am I?

Ideal masculine images for younger bodybuilders tend to focus on extremely muscular or hypermasculine bodies (Gillett & White, 1992; White, Young, & Gillett, 1995). Such ideal types are representative of superheroes or embodied by iconic professional bodybuilders that are commonly reproduced in popular culture. The mass media is an important source of images of masculinity for youth (Connell, 2008, p. 133) and plays a role on youths' identity formation. We

argue that younger men might be more susceptible to such images than middle-aged or older men. One participant recalls:

You know, I always liked watching Arnold Schwarzenegger and action stars (as they) are always like ripped and built. I thought that's cool, you know what I mean? So I was always like, I wanted to look like that.

Developing muscular physiques were of interest to young men who participated in sports. A strong body was perceived as being functionally beneficial to improving performance. Being successful in organized high school sports allowed young bodybuilders to integrate and identify with a group (Elling & Knoppers, 2005) that endorses traditional masculine scripts (Miller, Sabo, Farrell, Barnes, & Melnick, 1999). Connell (2008) argues that sport serves as a site for peer group interactions where definitions of masculinities are created and adopted in adolescence. Constructing bodies that would facilitate success in sport provided motivation for young men to begin undertaking bodybuilding practices.

All through high school I played every sport like football, basketball, rugby, hockey, tennis... like every sport. That was my first motivation to start working out. I was really skinny and scrawny and you notice that all the bigger, more muscular guys are better at certain sports. So, like I say, I didn't want to be an average guy on the team. I wanted to be one of the studs you know, one of the guys that was playing.

It was not uncommon for males to organize health work in order to build strength and muscularity in the body even apart from playing sports. Muscles were desired and considered to be manly, while being skinny, conversely, was viewed as problematic for young bodybuilders.

Well in high school I was, you know, I was kind of a skinny kid. I guess more or less people do it (body build) to find an area to fit in. You know, maybe they're kind of bookish or they're kind of a nerd if you will. You know I would qualify myself as possibly being a nerd at that age but bodybuilding is just a way to fit in, to feel a little bit more accepted with your peers, girls and your buddies.

Another male found that developing physical capital in his body through increased musculature held social currency with older peers.

I got big pretty quickly at that time I got more respect for being bigger in the gym. Bigger guys—older guys, started talking to me more because I was bigger even though they were 20 and I was 16. They wouldn't normally talk to 16 year old little skinny guys in the gym. They'd talk to guys who were just as big as them and they would teach me stuff.

Younger men personify the 'sexy beast' image in the social contexts in which they find themselves. An integral part in performing this gender identity is presenting a muscular and lean physique. Health work for them incorporated bodybuilding activities in the pursuit of obtaining this type of gender capital. As men aged, however, the embodied goals of approaching bodybuilding changed.

2.3.2 Avoiding “The Pot Belly” Image: Middle-Aged Men

The men in this study expressed that they experienced different events as they aged that competed for their time. Events such as starting a career, a marriage, a family or purchasing a house were seen as part of a normative life trajectory and challenged the amount of time that they could dedicate to bodybuilding health work. In turn, these life occurrences also offered men ways to re-construct their masculine identities apart from their body image. We consider these life events to be biological transitions that may signify a male moving towards the next phase in the life course.

At the time of the interview, a 29-year old male was married and purchased a house within a year. He also provided the bulk of the family income and was studying for a new career. He explains how as he encountered more demands for his time and resources, the meaning he attached to bodybuilding changed.

You get older and then your career starts kicking in. You're doing school or you have a baby or you buy a new house—like I just bought a new house—or getting married you know. Before it (bodybuilding) was more of seeing how big I could get. Now I don't have the time for that anymore.

At 68 years old, an older bodybuilder recalls how bodybuilding health work changed in significance during his middle age years.

As you age and, you know, you get married and you have kids and you have a house and you got a career, you have to fit all the training into your lifestyle. For

a while there I was obsessed with the training. I started to realize at that time that bodybuilding had to be part of my life but not all of my life.

The health work that middle-age men engage in develops gender capital that is significant across different contexts. As Bridges (2009) states, “the value of bodies is dictated largely by the contexts in which they are presented” (p. 93). For middle-age men in this study who are trying to balance a family, career and social life, certain traditional hegemonic masculine characteristics such as having a successful career and being a good provider gain importance. Such identity forming and gender performing avenues were not present in the lives of younger men.

One participant, a man in his mid-30s who owns a business in the bodybuilding industry, explains how changes in his life circumstances altered his health work goals. The construction of his masculine identity, implicitly, was influenced by more than just the appearance of his body.

In your 20s you could do whatever, hang in the sun and drink until 3 in the morning; do whatever you want to your body and you're sort of invincible, right? As you get to your mid to late 30s, you know, I get injured a little bit more, I need more sleep; you know I have a business and a family to take care of you—I have a son. These things start playing in your mind saying you know what, is it worth doing those extra things to benefit my appearance... as opposed to making wise choices and trying to prolong life? I'm here for the benefit of my family and my business.

This is not to say that the appearance of the body lacks social value in this phase of the life course. The demarcation of status within the aesthetic dimension of health, however, rests more in the comparison against same-aged peers as opposed to masculine ideal types.

(After working out) I just feel better you know because I don't want to be like the guys at my office who're sitting there and it looks like there's a beach ball in their shirts.

If I take a snapshot of the average 50-year old, I don't see me, I see a guy that's overweight whose going to have heart problems. He's going to have problems in the future possibly. And I see myself as probably looking better, you know, than the average guy my age.

It is during this phase of the life course that age becomes an important category in and of itself. Middle-age men were far more likely to qualify their health experiences by their age than their younger counterparts. More specifically, the pursuit of gender capital by these men tended to centre on looking younger than their chronological age. Receiving compliments from others on their appearance also shapes, in part, their masculine identities. A 48-year old participant describes how engaging in bodybuilding health work helps him feel younger and has resulted in the admiration of others.

After weight training, you feel like you're pumped and you feel strong. Yeah, you feel good, you feel strong and athletic and you don't feel like a 50-year old. I feel like a 30-year old. And it's important too, when people tell me that I don't look my age or that they can't believe how fit I am for my age. It just gives me a lot of

satisfaction. I feel great about it, I feel like I'm doing something that nobody else is doing.

We contend that the body during middle life becomes an absent present (Leder 1990; Sparkes & Smith, 2002) where a presumption exists that the body will function as desired. In other words, men in this phase of the life course largely didn't think about their body's ability to do daily tasks. The body returns to consciousness when one is experiencing illness or disease (Leder 1990; cited in Sparkes & Smith, 2002, p. 266). It is precisely the experience of living with colitis for five years that prompted one bodybuilder to say: "I don't think you appreciate your health until you're sick." Middle-aged men, in turn, tended to organize their bodybuilding health work towards achieving non-specific and conceptually imprecise goals such as 'being healthy', 'feeling good' or 'not getting fat'.

The intersection of the aesthetic and functional dimensions of health plays an interesting role in developing gender capital and in the construction of masculine identities in this phase of the life course. Physiological indicators of vulnerability were experienced by men, yet they were able to concurrently realize good health based on a positive aesthetic self-image. When asked how he would describe his health, one male bodybuilder shared how even though he was facing physical ailments—arguably symbolic of poor health—his better-than-average appearance allowed him to construct a healthful masculine identity.

You know what? I'm 37 and I feel like I hit a bit of a wall. I feel like I'm like running to stand still. I was just at massage and I feel like I'm falling apart. I've had two knee surgeries. My rotator cuff in one shoulder is bugging me and then I

got some wrist problems and stuff. As I get older I don't recover as well... But my health yeah, I still think if you looked at every 37-year old you know and did an average I'd probably be better than average I think. Yeah, I'm still in pretty good shape.

As men in this study aged, they experienced greater demands for time which limited opportunities for engaging in bodybuilding health work. These demands, however, also provided ways in which they could construct their gender identities in ways apart from their physical appearance. Achieving status through career progression and providing for their families, for example, gain importance in shaping their sense of heteronormative masculinity. The preservation of being able to live an enjoyable, independent lifestyle into later life was acknowledged, and the types of bodybuilding health work undertaken were adjusted to align with these goals.

2.3.3 The “Independent” Image: Older Men

Experiences at different points during their lives challenged and shaped understandings of health and health work for male bodybuilders. Men develop more pragmatic health goals as they transition into the last phase in the life course. For older men in this study, the bodybuilding health work they performed focused on maintaining a high standard of living after retirement.

Retirement, for these men, signified a stage in the life course characterized by less stress and fewer demands on their time than while they were employed. They engaged in bodybuilding health practices in order to maintain physical fitness, mobility and independence.

Part of leading a quality life and developing gender capital was being able to perform daily tasks.

Implicit in the health experiences of these men was a vulnerability of becoming dependent on others and losing a part of their masculine identity. Engaging in bodybuilding activities was a means for older men in this study to maintain their independence which, as Smith and colleagues (2007) found, was a central component to successful aging. One bodybuilder articulated how he became reflexive of his bodybuilding health work goals as he aged.

Look around in the gym. There aren't many guys my age around. I'm 68. That means I'm 2 years away from 70 and 12 years away from 80. 12 years away from 80! Think about that. I've re-evaluated why I train, like "What am I doing this for?" As you age you tend to train for just day-to-day routine things like being able to do the things you enjoy. In my case, I like to go hiking and you might want to hike for 10, 15 kilometres. You also want to be able to do the day-to-day routine things that you've got to do like cut your grass. I've moved away from just bodybuilding and lifting heavy weights to work on more endurance. It's balancing these.

Part of being masculine at this phase of the life course was developing a body that enabled men to perform their daily tasks. Another participant, 57, illustrates how being physically fit serves as a source of pride and is essential to enjoying an independent life in the years following retirement.

You go out shopping or do any of your daily activities and just feel good about yourself. To take out the garbage, you're not struggling; you know you could shovel snow and everything would be right. Usually when a person retires at 65, he's not in any shape to do anything and he can't enjoy his retirement. This is where physical fitness comes in because now you see people, you know, who have worked out and have stayed in shape. They can be 65 or 70 and you see them out working out and they're in great shape, you know, they're jogging. You may live to be 100 but if between 60 and 100 you are in bed and basically vegetating and people have to feed you and care for you, well that's not a good quality of life. If you can maintain that fitness, you can be very independent and have a good enjoyable retirement for 20 or 30 years which is basically what life is about.

In this phase of the life course, the body re-emerges from being an absent present in middle life to occupy a more central role in masculine identity (re)construction. Older bodybuilders participating in this study directed their health work, in part, to preventing health problems. Of particular concern to older bodybuilders was prostate health. According to Gray and colleagues (1997), "The vast majority of men with prostate cancer are diagnosed after age 60, and as many as half have no observable symptoms at the time of diagnosis" (cited in Gray, Fitch, Fergus, Mykhalovskiy, & Church, 2002, p. 44). Preventative health practices, as a component of the functional dimension of health, became primary (as opposed to tertiary) foci for older bodybuilders.

Apparently selenium is helpful for your prostate. As you age, that's the thing (prostate) that can get men in the end. You get a lot of, you know, problems with the prostate so I'm just trying to keep mine healthy. In addition to that I take vitamin E and I take a One A Day vitamins. The reason I take the One A Day is I heard on the radio how it has lutein. I think it's something like lutein, which is to stop (prevent) cataracts. I've heard that so I decided well that's got to be a good thing so now I take One A Day.

In marked contrast to the 'sexy beast' image pursued by their younger counterparts, older men placed more importance on the functional, rather than the aesthetic, dimension of health. This is not to say that older men were not concerned with their physical appearance, but as one participant, 68, explains, "When you get to my age, you're not working out to look pretty for the girls anymore, I can tell you that much."

Conway and Hockey (1998) found that if older people "did not actually feel ill, they found it hard to identify themselves as elderly" (cited in James & Hockey, 2007, p. 150). One participant, 57, began participating in bodybuilding in his early 50s because he did not like the changes in his physical appearance. Further, he did not want his physical appearance and ability to function to decline to the point where he felt old like some of his same-aged peers.

I thought "Okay, I've got to get into the gym as I'm starting to get fat (laugh)."

Basically I got into bodybuilding just to get back into shape because I've got a lot of buddies that are 210 pounds, (have) pot bellies, sit around, eat whatever, and watch TV. Good friends of mine of the same age and they can't do anything.

They'll say, "I'm too old, my body won't do it" and I just don't want that to happen to me.

Male bodybuilders in the later phase of the life course organized their health work through bodybuilding with pragmatic goals in mind. Maintaining independence and self-reliance became a central component in masculine identity construction for men in the years after retirement. Men expressed the desire to live a good quality of life during their later years and engaged in bodybuilding in order to keep physically fit and to prevent health problems.

2.4 Conclusion

Men engage in bodybuilding activities as part of the health work they perform. While the men in this study ranged in age from 18 to 68 and provided various reasons for working out, the organization of health work through bodybuilding tended to have two recurring dimensions: aesthetics and functionality.

Characteristics of traditional hegemonic masculinity situated in heteronormative lifestyles were shown by men throughout the life course, but how they were performed differed over time. The 'sexy beast' image performed by younger men transitioned into a masculine image that revolved around self-reliance later in life. A muscular and lean body has currency with younger men and their peer group: in this context, a powerful body is aesthetically desirable and helps facilitate achievement in sports, which leads them to gain social and gender capital. For middle-aged men, to look good was to avoid getting fat and to look better than their peers. Middle-aged bodybuilders seemed to take their physical ability to

perform daily tasks for granted, and the body, when not ill or injured, became an absent present (Leder, 1990; Sparkes & Smith, 2002). Masculine identity construction in this phase had roots in career success, and being providers for their families. The body re-emerged in the post-retirement years as older men organized their bodybuilding health work with the goal of maintaining their independence. The construction and performance of a masculine identity was represented by having the ability to do daily tasks (e.g. taking out the garbage, shoveling snow) and to maintain a high quality of life.

The ways in which men develop masculine identities differs over time and context, which supports the notion that a plurality of hegemonic masculinities exists. On one hand, men in this study aligned with traditional heteronormative and hegemonic ideals by desiring physical strength, by being breadwinners for their families, and by being self-reliant. On the other hand, men in this study were also expressive in sharing health concerns and vulnerabilities, and displayed nurturing tendencies in discussing the importance of their spouses and children.

Future research could expand upon the health work that men performed at each phase of the life course, and how they managed perceived risk. Similar to other studies, the majority of male bodybuilders participating in this research stated that they used performance-enhancing substances such as dietary supplements (Atkinson 2007) and/or steroids (Monaghan 1999b, 2001, 2002) as part of their bodybuilding health work. Not surprisingly, younger males consumed dietary supplements and/or in order to improve their muscular strength or physical appearance. Older bodybuilders, conversely, consumed dietary supplements such as multivitamins and preventative health products in order to maintain mobility and to thwart disease.

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Chapter 3

Ethnopharmacology and Male Bodybuilders' Lived Experience with Consuming Sports Nutrition Supplements in Canada²

In the bodybuilding world, two main social problems get (re)constructed: the need for bodybuilders to gain lean muscle mass and/or to decrease body fat. Mainstream print and online magazines are robust sources for claims-making activities purported by sports nutrition supplement companies and industry experts. Online forums dedicated to bodybuilding exist where information can be shared between bodybuilders on training and diet techniques to best gain muscle and/or lose body fat. Ploderers, Howard, and Fang (2010) found that online collaboration within and between groups of bodybuilders can then extend to offline settings. In gyms, for example, one could network with other bodybuilders, personal trainers and contest preparation coaches who all have their own perspectives on how to address these 'problems' seemingly common to all bodybuilders. The sheer number of sources available to learn about sports nutrition supplements, and the diversity of parties making claims about them, has created a landscape that can be difficult to navigate for novice and experienced bodybuilders alike. While popular notions of bodybuilders connote images of extremely muscular and nearly fat-free physiques, Monaghan challenged the homogeneity of this view as being rather limiting. (Monaghan, 1999b). This research includes both recreational and competitive bodybuilders, and while a diversity of motivations for participating in bodybuilding exists, these men shared a

² Bailey, B.J. (2013). Ethnopharmacology and male bodybuilders' lived experience with consuming sports nutrition supplements in Canada. *Sport in Society: Cultures, Commerce, Media, Politics*, 16(9), 1105-1119. <https://doi.org/10.3390/socsci8030080>.

common goal of developing muscle and decreasing body fat in order to improve the aesthetic appearance of their bodies.

In Canada, the sports nutrition supplement industry is largely unregulated. For the purposes of this research, I employ a similar definition of ‘supplement’ as Atkinson (2007) where supplements are “performance enhancers sold commercially and legally in the province of Ontario, Canada” (p. 167). While Health Canada enacted Natural Health Product Regulations on January 1, 2004, the scope of these regulations do not include the majority of ergogenic sports nutrition supplements geared towards athletes (Health Canada, 2011c). While distributors of sports nutrition supplements must ensure accurate and compliant product labelling under the Consumer Packaging and Labelling Act (Canadian Food Inspection Agency, 2010), claims made by sports nutrition supplement-producing companies are not subject to governmental regulation. Health Canada (2011b) provides after-market advisories and warnings about products, and as such, “specific hazards associated with use may not be known until extensive consumer use demonstrates adverse effects” (Mason, Scammon, & Fang, 2007, p. 75). One such example occurred on June 9, 2003 when Health Canada (2011a) released an advisory warning consumers of the ‘*dangers of Ephedra/ephedrine products*’ whereas 184 complaints had been filed about products containing ephedra or ephedrine on or prior to the release of this advisory.³ Subsequent advisories concerning ephedra/ephedrine were released

³ A Suspect Health Product Search of the Canadian Vigilance Adverse Reaction Online Database, <http://webprod3.hc-sc.gc.ca/arquery-rechercheei/index-eng.jsp> (accessed April 13, 2012) for products with the Active Ingredient beginning with ‘ephedra’ or ‘ephedrine’ between 1965-01-01 and 2003-06-09 by initial received date returned 184 adverse reaction reports filed by consumers to Health Canada’s Marketed Health Products Directorate. Pseudoephedrine, a common ingredient in cold remedies, and all other combinations of ingredient names containing ‘ephedra’ or ‘ephedrine’ were excluded. When searching for products with the Active Ingredient ‘ma huang’—the Chinese herbal synonym for ephedra—over the same timeframe, 53 reports were returned. It has not been determined if these two searches yield mutually exclusive adverse reaction reports.

by Health Canada in 2005, 2006 and 2008 (Health Canada, 2008). As will be discussed later, these warning are often disregarded by bodybuilders.

Within this Canadian marketplace, consumers have never had more choice when it comes to supplements; an informal review of a large Canadian-based supplement distribution company website noted more than 100 companies selling products in over 50 supplement categories.⁴ Likewise, there has been a growth of research conducted on testing the efficacy of sports nutrition supplements on trained athletes over recent years. Academic publications such as the *Journal of Strength & Conditioning Research* or the *International Journal of Sport Nutrition and Exercise Metabolism* and organizations such as the International Society of Sports Nutrition have brought legitimacy to the study of the efficacy of sports nutrition supplements. Current research by Moston and colleagues (2012) found that the public opposes the use of banned performance-enhancing drugs in sport, with the focus of doping research, as Thualagant (2012) argues, being located within an elite sport context. Social scientists have addressed the motivations of bodybuilders for consuming illicit steroids (Grogan, Sheperd, Evans, Wright, & Hunter, 2006; Klein, 1986, 1993, 1995; Monaghan, 1999, 2001, 2002; Pedersen, 2010; Wright, Grogan, & Hunter, 2000) but the use of such substances in organized professional and amateur bodybuilding competitions, however, is not always formally sanctioned and further, most bodybuilders do not compete. In contrast, Breivik and colleagues (2009) found moderate public support for the use of legal vitamins and nutritional supplements

⁴ I reviewed the Supplements Canada website, <http://www.supplementscanada.com>, (accessed March 3, 2012) and counted the number of unique sports nutrition supplement categories and companies.

in sport, yet little is known empirically, as Atkinson (2007) notes, about the consumption practices of bodybuilders with legal, over-the-counter sport nutrition supplements.

This research is part of a larger project investigating how and why males engage in bodybuilding practices in their pursuit of achieving health. Participants were asked which sources of knowledge they consult to learn about bodybuilding activities (e.g. weight training techniques, dieting strategies) and performance-enhancing sports nutrition supplements. An understanding of how participants critically assessed the quality of information they encountered was sought, particularly those sources deemed trustworthy and why. The following questions guided this research project: How do bodybuilders learn which sports nutrition supplements to take? How do they know if the supplements they are consuming are effective? How do they know if the products are unsafe or are causing adverse health effects? While participants in this research consulted bodybuilding magazines for information about supplements, they privileged, however, not only the bodily cues felt first-hand but also those expressed by other experienced bodybuilders in interpreting physiological cues and assessing risk when consuming supplements. Further, warnings and recalls put forth by Health Canada over potential detrimental effects caused by the consumption of certain supplements were largely ignored by bodybuilders in this study.

3.1 Literature

3.1.1 Bodybuilding

The realm of bodybuilding became the subject of academic research in the late 1970s and early 1980s with Klein's (1985, 1986, 1992, 1993) ethnographic study of elite competitive

bodybuilders in Venice, California. Bodybuilding as a sport was gaining attention and popularity in the mid- to late-1970s after the release of the bodybuilding documentary, *Pumping Iron*, and thus a 'preponderance of competitive bodybuilders' lived and trained in West Coast gyms that made researching this subculture possible (Klein, 1992). Arnold Schwarzenegger, the star of that film and bodybuilding's most iconic representative, has been credited with bringing the sport into mainstream discourses by aligning his image with cultural notions of masculinity, physical perfection and success in America (Boyle, 2010).

The behaviours and lifestyles of bodybuilders have been interpreted from multiple perspectives. Recent research has examined the sports supplementation processes of a sample of recreational bodybuilders in response to a 'crisis of masculinity' and anxieties that accompany evolving gender roles (Atkinson, 2007). Feminist theorists have addressed the development of a hypermasculine male body as a response to low self-esteem (Klein, 1993, 1995) and as the embodiment of patriarchal power (Gillett & White, 1992; White & Gillett, 1994). It has been argued that male bodybuilders routinely engage in practices of self-objectification, which can result in both psychocultural and sociocultural anxiety (Gillett & White, 1992; Klein, 1992; Monaghan, 1999, 2001) over the dissonance between bodybuilders' achieved or desired physiques and socially accepted ideals of masculine physical appearance.

Other research, in contrast, posits a more positive understanding of bodybuilding can be read. Men engage in body projects through bodybuilding (Monaghan, 1999b; Shilling, 1993) in pursuit of developing ideal type physiques (Bailey & Gillett, 2012; Locks, 2012; Monaghan, 1999b) as part of gender capital construction and in the negotiation of masculine identities (Bailey & Gillett, 2012; Bridges, 2009; Probert, Leberman, & Palmer, 2007). From these

perspectives, participating in bodybuilding can be both pleasurable and empowering. Aligning with Crawford's (1984) 'health as control' position, the health-promoting aspects of living a disciplined bodybuilding lifestyle are not lost while some bodybuilders willingly engage in 'risky' body work (Bailey & Gillett, 2012; Keane, 2005; Monaghan, 2001, 2012). Motivations to engage in bodybuilding vary for men depending on their position in the traditionally heteronormative lifecourse (Bailey & Gillett, 2012) and by their aesthetic and/or competitive aspirations (Pederson, 2010).

Bodybuilding has never had more mainstream appeal and acceptance than it does today.⁵ Viewed as a continuum from novice bodybuilder or fitness enthusiast to hardcore bodybuilding competitor, it could be reasonably argued that the bulk of such a continuum has distanced itself from being a fringe, esoteric subculture. With this expansion, bodybuilding and sports nutrition supplementation—both in vernacular and practice—has become increasingly more scientific and research-based. Subsequently, there has never been more fertile ground for competing knowledge and truth claims.

3.1.2 Social Problems Claims-Making

Pick up any bodybuilding magazine and you will discover the publication is rife with advertisements for sports nutrition supplements. The supplement industry is saturated with companies making truth claims about products that are designed to increase the consumer's

⁵ While out of scope for the current project, it should be noted that female bodybuilding has also been the focus of study over the last two decades. Suggested readings include: Boyle, 2005; Bunsell & Shilling, 2012; Guthrie & Castelnovo, 1992; Roussel, Monaghan, Javerliac, & Le Yondre, 2010; Shilling & Bunsell, 2009; Saltman, 1998; and St. Martin & Gavey, 1996.

strength, muscle mass or decrease body fat. In turn, advertisements often position the reader as inferior (White & Gillett, 1994) through the insinuation that they need to improve their strength, muscle mass or muscular definition. Muscular bodies are presented as a plurality of ideal types; physiques that do not align with or resemble these images are problematized within the bodybuilding community (Loseke, 2003).

Supplement companies engage in claims-making activities (Spector & Kitsuse, 1977) that effectively create normative, common-sense discourses that men draw upon to discuss their bodies in relation to bodybuilding. They present such claims within the pages of bodybuilding magazines and on dedicated websites, which can be understood as arenas that have the carrying capacity to perpetuate the social problems facing bodybuilders: the continual need to get more muscular and/or more defined (Best, 2008). Given that strength, muscularity and muscular definition are concepts relative in nature, truth claims can be constructed in ways that are poignant to all bodybuilders where there is a “taken-for-granted representation of the muscular body as natural and desirable” (White & Gillett, 1994, p. 18).

In bodybuilding magazines—and in health product marketing more generally—unproven and unsubstantiated truth claims about the effectiveness of a product are often presented in the form of ‘before and after’ pictures. In this fundamental marketing strategy, for example, an individual’s physique prior to (allegedly) taking the promoted sports nutrition supplement is shown on the left and on the right is the markedly improved physique of the same individual after consuming the promoted supplement. Traditionally, professional or accomplished competitive amateur bodybuilders are used in such advertisements, with most ‘after’ pictures occurring within days of a competition. Even though the level of musculature

and definition is not reasonably attainable for most readers, these “claims using visual images can be very powerful because they put these pictures directly into our head” (Loseke, 2003, p. 26).

A more recent trend in claims-making styles (Ibarra & Kitsuse, 2003), however, has ‘before and after’ advertisements for sports nutrition supplements not only depicting the physiques of professional and top amateur bodybuilders, but also the physique transformations of ‘everyday men’. These advertisements appeal to a wider cohort of men that engage in bodybuilding activities in pursuit of health and muscularity in negotiating their gender. The result is that sports nutrition supplements, which were once associated with an esoteric bodybuilding subculture, have become part of mainstream consumer culture.

3.2 Methodology

This study used an inductive approach where qualitative interviews were conducted to capture an in-depth understanding of the meanings that men attach to bodybuilding and sports nutrition supplement use. Bodybuilders interviewed for this study were mainly recruited either through pre-established contacts I made in local gyms, or through recruitment posters placed in these facilities. These two gyms, both part of a national chain, are located in a large suburban area (approximate population of 165,000) in a middle-class municipality; median incomes by household types in this city were consistently higher than provincial levels (Statistics Canada, 2006). During the interviews, participants were asked who they considered to be experts in sports nutrition supplements; responses included ‘experienced bodybuilders’, ‘supplement company representatives’, ‘supplement store owners’ and ‘researchers’. From this departure,

purposive sampling (Berg, 2001) was employed where I actively sought the participation of these types of experts.

As a former competitive bodybuilder, I was a complete member (Adler & Adler, 1987) of the bodybuilding social worlds in these gyms. Sharing my experiences with competitive bodybuilding and consuming sports nutrition supplements both in the gym and during the interviews allowed me to develop rapport with participants which, as Hathaway and Atkinson (2005) found, “fostered a context of mutual identification that facilitated more in-depth conversations” (p. 71). Participants were asked open-ended questions about their use of sports nutrition supplements in order to hear what they perceived to be significant information. Based on participants’ initial responses, probing questions ensued in order to better understand the experience of consuming sports nutrition supplements, particularly those that challenged my own experiences. This approach was employed to be aware of my own biases and to remain theoretically sensitive to the data (Glaser & Strauss, 1967).

In total, 32 digitally recorded interviews were conducted with predominantly White male bodybuilders between the ages of 18 and 68 who were living a seemingly heteronormative lifestyle. They took place between September 2007 and June 2008 most often in local coffee shops or in residences’ homes; five interviews were conducted over the telephone. An interview guide containing questions around the topics of bodybuilding experience, aesthetics and functionality of the body, and sources of trusted knowledge was created; the order in which these topics were addressed often depended on how pre-interview conversations progressed. The interviews lasted an average of 52 minutes. While most men participating in this study identified, in some way, with being a bodybuilder, few identified as

being 'hardcore'. In all, half of the men participating in this research had entered bodybuilding contests ranging from local to national-level competitions. Several men, both recreational and competitive bodybuilders alike, confided in having previously taken steroids; in contrast, only two participants expressed an explicitly anti-steroid stance. The participants who most strongly identified with being serious or 'hardcore' had won provincial or national-level bodybuilding competitions, one of whom shared aspirations of competing professionally.

The computer-assisted qualitative data analysis software program, NVivo, has been widely used in qualitative health research. NVivo was used as a database management system for the analysis of interview transcripts. Transcripts were categorized using accepted qualitative coding techniques (Morse & Richards, 2002), and keyword and Boolean searches (Seale, 2002). Coded text segments resided in free nodes, which are 'containers for categories' (Morse & Richards, 2002) and were then compared and merged to clean the dataset as hundreds of free nodes were created during the initial coding stages. Concepts and key themes were created by comparing, and abstracting from, categories that were grounded in the data. During the coding process, memos (Richards, 2009) were constructed to contain my thoughts and reactions as I began to see patterns in the data, and were re-visited when abstracting from the data.

3.3 Phenomenology and the interpretation of consuming sports nutrition supplements

Lay constructions of health (Bloor, 1995; Calnan, 1987; Crawford, 1984; Low, 2004; Pawluch, Cain, & Gillett, 2000; Popay & Williams, 1996) tend to focus on the lived experiences of health

and illness, and have been “significant in influencing a cultural shift away from a wholly bio-medical approach and towards a more integrated and holistic understanding of health and well-being” (Robertson, 2006, p. 176). Bodily experiences have been central in lay constructions of knowledge, which, in turn, is “central to the way people understand their worlds and is crucial to the decisions that they make on a day-to-day basis” (Gillett, Cain, & Pawluch, 2002, p. 372). Very few men in this study consulted with their doctor about taking, or when consuming, sports nutrition supplements.

Monaghan found that many bodybuilders are skeptical of the information medical doctors provide about steroids; I argue this finding can be extended other ergogenic substances such as sports nutrition supplements. As a result, bodybuilders often rely on their own experiences, and those of trusted others, when making decisions about consuming these substances. In this sense, lay perspectives on health are akin to what Monaghan coins ‘ethnopharmacology’, which in relation to steroid use in bodybuilding “comprises a detailed stock-of-knowledge of the pharmacological properties of particular drugs, consisting of a taxonomy of different steroids, dosages, administration routes, (side) effects and complex theories of usage” (Monaghan, 2002, p. 698).

A bodybuilder’s ethnopharmacological knowledge and consumption experience strongly influences his supplement-taking behaviour and is drawn upon to critically assess the efficacy of supplements. A similar stock-of-knowledge (Schutz & Luckmann, 1973) for male bodybuilders is informed by first-hand experience with consuming sports nutrition supplements gained through a trial-and-error process.

3.3.1 Trial and Error

Bodybuilding magazines were cited as a primary source of information about supplements for the majority of men. In fact, all bodybuilders interviewed for this research mentioned reading such magazines at some point during their lives. While advertisements found in these publications were influential in bodybuilders deciding to take a product, it was common for men to draw on their stock-of-knowledge to interpret the truth claims made in advertisements with skepticism.

Author: Would you say your criticism of magazine ads is something that you've developed over the years or were you hesitant from when you first started taking supplements?

Participant: When I first started working out I thought if I took creatine and a lot of protein you know, (and) lift heavy weights that I could get as big as the guys I saw in the bodybuilding magazines. I thought that was a natural, obtainable goal. Clearly it's not. Like training for as long as I have and seeing other people train for a long time—we've done pretty much everything right as far as nutrition and training goes— it's clear to me now that there's more going on there than supplements, training and diet.

This bodybuilder, a 26-year-old firefighter, had nine years of experience with lifting weights and taking sports nutrition supplements at the time of the interview. His stock-of-knowledge was developed through directed, purposeful action and not based solely on the information read in magazines. Crossley (1995), in interpreting Merleau-Ponty, explains that “one does not learn ‘how’ by reading and grasping intellectual principles. One learns by doing, by repetition” (p.

54). In this example, reading magazines provides a theoretical understanding of supplements, while experiencing the effects of supplements through consumption provides a practical understanding of them.

In the vein of 'learning by doing', it was common for bodybuilders to try supplements to gain practical knowledge of them. One bodybuilder, an accomplished competitor and supplement store owner, articulates how he privileges the knowledge he has gained from trying supplements over what is claimed in literature in order to inform his customers.

Participant: For someone to give advice or to kind of sell themselves as someone who knows what they're talking about, they should look the part. There's book smarts but then you have to do trial and error because you have to try the product to be well versed and know the different supplements. I've tried dozens upon dozens of different supplements and some didn't work and some do.

Author: Right. So in that sense, how important is your own experience with taking supplements for your knowledge base?

Participant: Oh, huge, huge. Like I have no problem saying a product is crap regardless of what magazines say. I like to weed out products that I carry in the store that don't work or that are over-hyped.

The trial-and-error process, for some men, entails simply introducing a sports nutrition supplement into their health work regimes. For others, the process of consuming and assessing a supplement can be quite rigorous. Akin to a well-designed clinical trial, a national level

bodybuilding champion keeps his diet and training constant when trying a sports nutrition supplement in order to isolate its effects on his body:

Participant: I try different ones and there's a few on the market that I've tried lately and I really see a difference in my body. I keep my diet and workouts the same—I don't change anything and I just start taking one thing (supplement).

Author: You just change one variable?

Participant: Yeah, I just change one thing and see what, you know, difference it makes for me.

Social research indicates that *cycling strategies* have been employed by bodybuilders as a risk-mitigation strategy to reduce the harm of consuming steroids (Monaghan, 2001). A cycling strategy, traditionally, is characterized by the consumption of a supplement for a period of time followed by a period of discontinuation. Armed with ethnopharmacological knowledge, bodybuilders learn strategies for taking and assessing the effectiveness of sports nutrition supplements by employing cycling strategies to estimate the correct usage of supplements.

One male bodybuilder explains:

I really find that taking extra dosages of glutamine helps with my recovery. They recommend, you know, 1 teaspoon a day. I take 2 or 3 or after each meal or something. I really find that it helps me with my recovery after a workout because, as I mentioned to you, I test them on myself and see what they do. I go a week without taking a

supplement and a week with taking it. I find that my recovery time increases, you know, while I'm taking glutamine.

Another participant offers:

I would take a creatine supplement, usually Cell-Tech which is another MuscleTech product, off and on maybe every three months; I'll buy maybe two tubs, sometimes three, and I'll do it off and on throughout the year.

Current research on creatine, for example, has approached cycling strategies a little differently. Citing a substantial body of literature that indicates the risks of consuming creatine to one's health are minimal, researchers have studied various administration protocols of creatine to maximize the effectiveness of the supplement, including intermittent 'loading phases' (Buford et al., 2007).⁶ This research highlights how the concept of cycling strategies has expanded from their pharmacological roots focusing on harm reduction⁷ to a discussion of optimizing efficacy for some sports nutrition supplements.

Bodybuilders in this study did not merely rely on their own first-hand experiences to shape their supplement-consuming behaviour. A theme that emerged through this research is that participants found the opinions of other bodybuilders to be valued with regards to sports nutrition supplements. In this sense, participants presumed the experiences of their kindred

⁶ A loading phase with creatine supplementation is characterized by the ingestion of a higher amount of creatine in typically the first three to five days of a creatine cycling protocol followed by a lower 'maintenance' dosage in the days that follow. The purpose of a 'loading protocol' is to saturate the muscle stores of creatine and enhance the ergogenic effect of the supplement.

⁷ For example, ephedrine is currently sold legally in Canada as an oral nasal decongestant, which is often recommended not to be taken for more than seven days unless otherwise advised by a health care practitioner.

peers to have occurred in a common arena as their own; that is, their shared interest in bodybuilding *to a similar degree as their own* made their opinions worthy of consideration, if not trust.

3.3.2 Intercorporeality and Trusting Other Bodybuilders

Knowledge is constructed and disseminated in corporeal, intersubjective social contexts. According to Crossley (1995), “This notion of intercorporeality denotes a primordial carnal bond between human beings. It suggests that subjects are joined by their belongingness to a common world” (p. 57). He continues elsewhere that “We rely upon others for resources, recognition, inspiration and their skills, as they rely upon us. And they constrain and enable our actions in multiple ways, as we constrain and enable theirs” (Crossley, 2006, p. 26). Males in this study shared a common interest with other bodybuilders in developing muscular and lean physiques, and thus are, as Monaghan (1999a) states, “united in the ongoing project of enhancing bodily aesthetics” (p. 268). As such, other bodybuilders were considered to be valuable, trustworthy sources of information about bodybuilding practices. A bodybuilder, sports nutrition supplement company representative and former manager at a large national supplement store chain describes the power of peer influence in the consumption of supplements in the bodybuilding community. Patterns of supplement use by bodybuilders, he notes, differ from endurance athletes.

People go from product to product to product based on what their buddy tells them or based on what a friend tells them. I find it funny in this industry because there's almost two kinds of athletes out there: there's your bodybuilder type and then there's your

endurance athlete. Your endurance athletes, such as marathon runners or cyclists, use supplements as well. But what you'll find with those guys is once they find a supplement that works they will stick with that supplement forever. And it's very hard to get them to change because they'll want to make sure they get the best time in their latest race and if they decide to try a new product and their time drops by a minute, minute and a half, they're automatically going to blame the supplement. Whereas in the bodybuilding community or the gym community, people hop from product to product very quickly based on what their buddy is telling them. They're much more open-minded to trying new things because they're always looking for that next big thing to make them bigger, stronger, faster. Word of mouth is very influential in that industry.

Some bodybuilders develop informal social networks with other bodybuilders to share ideas, strategies and experiences. One participant, a national level bodybuilding champion, shares how his stock-of-knowledge is informed by the experiences of other competitors, as well as his own.

I'm one person; I don't just rely on myself or what I've done. I mean I want to open my mind. Even the first-time competitive bodybuilder has a certain opinion about something and, you know, I take it to heart. I'll think about whether, you know, it'll benefit me. Maybe I'll try that. This is a sport where the best sources of information are fellow bodybuilders. A lot of friends of mine compete and we share information all the

time. So based on my experience, their experience, and what other competitors think, I believe this is the best source of information.

For this bodybuilder, his informal social network includes other men who participate in bodybuilding competitions. While some may have more experience with competing than others, his concept of a peer seemingly precludes those who view bodybuilding as a recreational activity. Another participant, who has not stepped on-stage, delineates who he would consider knowledgeable based not only on a presumed serious level of interest, but also on presumed knowledge of one's body:

Okay, well I have a pretty serious level of interest in bodybuilding. I thought of competing but unfortunately I haven't had the chance to do that yet. People who are thinking about competition or people that are right into competitions—people at that level—are the people I'd relate to the most. I would take their advice over anyone else's in the gym because I know they have an understanding of their bodies and what supplements to use and what food to eat.

For him, an earnest contemplation about entering a bodybuilding competition was characteristic of a serious bodybuilder—one whose intersubjective experiences would align with his own. Elsewhere, the gender and physical capital (Bailey & Gillett, 2012; Bridges, 2009; Probert, Leberman, & Palmer, 2007) that men gain through increasing their musculature played an important role in the perceived accuracy of the information they shared. Gillett and White (1992) note, "In certain social arenas, especially those in close proximity to the gym, the presence of the sculpted body commands social and cultural recognition by others (body for

other bodybuilders)” (p. 363). For many participants in this research, a muscular and lean physique represented the embodiment of knowledge. Many men found that it was easier to believe the words of another bodybuilder if he *looked like* he knew what he was talking about.

For those making truth claims about sports nutrition supplements, having congruency between one’s physiological appearance and the message they are sending aids in the believability of their purported claim. This aligns with what Goffman (1959) stated a half-century ago: “In everyday life, of course, there is a clear understanding that first impressions are important” (p. 11). For example, an accomplished academic and researcher in the sports nutrition supplement industry explains the importance that the physical appearance of the claims-maker has on how his or her message is received by others:

I think it's important to not be fat. I'll give you the converse to that. I've seen this professionally for fat scientists—even fat trainers and they're rare, but you see them—giving advice when they're fat. And the odd part is the advice itself might be good but it's a question of authenticity. ‘You told me to do this and you can't do it yourself?’ It might be great advice but there's a disconnection there. Consumers will be like ‘Well I can't listen to you if you're fat.’

The appearance of one’s body then, in part, affects the intersubjective knowledge construction of bodybuilders. What constitutes an appearance that positively reinforces a knowledge claim is negotiated within the bodybuilding life-world. Further, for bodybuilders, the corporeal being-in-the-world not only provides the context for interpreting their own biophysical feedback

experienced when working out, but also to empathize and assess the narratives of other bodybuilders.

3.3.3 Physiological Cues, Context and Risk

From a 'risk society' perspective (Beck, 1992, 1994; Giddens, 1990, 1994) expanding knowledge and conflicting knowledge emanating from various sources leads to uncertainty in some sections of the general public. Bodybuilders learn to interpret physiological cues when working out and consuming sports nutrition supplements through socially acquired meanings in order to "make sense of the contexts, physical and social, in which they train and compete" (Hockey & Allen-Collinson, 2007, p. 115). Men in this study relied on their stock-of-knowledge to establish a risk tolerance for taking sports nutrition supplements. As such, for example, warnings and advisories on the use of ephedrine-based supplements released by Health Canada (2008, 2011a, 2011b, 2011c) signified risks associated with the supplement that contrasted their experiences with consuming it. One participant states, "The whole hype created by the FDA and Health Canada that somehow ephedrine is dangerous is a total falsehood; I've used ephedrine for probably 20 years without experiencing any problems." He, like a few other bodybuilders, felt that government warnings lack credibility because while the combination of ephedrine and caffeine in a sports nutrition supplements is prohibited in Canada, ephedrine remains to be sold as an over-the-counter oral nasal decongestant.

Another participant drew upon his personal experience not only with consuming ephedrine to critically appraise Health Canada's warnings, but also on his involvement in the exercise and fitness industry more generally. In the capacity of being a personal trainer, he

believes the risks associated with ephedra and ephedrine lie more with the people consuming them than with the inherent properties of the substances.

Government warnings basically didn't change my perception on ephedrine because I know that a lot of the damage that was caused by ephedrine was in non-active people. All of a sudden they started taking a bunch of ephedrine, jumped on the treadmill and they went crazy and their body wasn't used to that. If a high performance athlete or somebody that, you know, has a pretty high level of cardio (cardiovascular fitness) takes the same ephedrine that the guy who passed out took they won't have the same problems. So I think that people try to go from one extreme to the other. When your body's not used to getting off the couch and doing even like a basic run, then all of a sudden you take to a gym and you're doing explosive sprints and taking ephedrine, well, there's a greater chance of you having a heart attack, right? People want to get results too fast. They want the magic pill and they want to go from doing zero to all of a sudden you know, jumping into their 'in-shape pants'.

The social world of bodybuilding provides a context for which physiological cues are interpreted. First-hand experience with sports nutrition supplement use provides a backdrop for men to critically assess both the consumption practices of non-bodybuilders and government warnings about certain products.

3.4 Conclusion

The definition of bodybuilding has taken on a more inclusive connotation over recent years. The physiques of hypermuscular professional bodybuilders now represent the most extreme end of the bodybuilding continuum. Male bodybuilders encounter the socially constructed problems of needing to gain more muscle and/or to decrease body fat. These ‘problems’ are applicable to all men who engage in bodybuilding as they are represented by a plurality of ideal body types, which are presented to them through various forms of media.

From this departure, bodybuilding has become mainstream and cultural from its esoteric and subcultural roots. Fittingly, a plethora of information on bodybuilding, weight lifting techniques, exercise programs and dieting strategies is available in a variety of online and print sources. In a largely unregulated industry in Canada, sports nutrition supplements have moved from the shelves of niche market stores into mainstream retail and convenient outlets, as well as being sold over the Internet. Supplement companies can make unsubstantiated claims about the efficacy of their products. They increasingly couch advertisements in scientific terms and reference the findings of university-based research to market the effectiveness of their products. University-affiliated organizations and peer-reviewed journals have gained prominence over recent years in making sports nutrition supplementation a legitimate and worthwhile area of academic study.

To navigate the increasingly complex social world of bodybuilding, men develop stocks-of-knowledge through purposeful and practical action when engaging in bodybuilding activities and supplement consumption. They rely on their phenomenological experience to evaluate truth claims made in advertisements about product efficacy and in assessing personal levels of

risk tolerance. Further, male bodybuilders develop peer networks where they will also place their trust in the first-hand experiences of bodybuilders who have a similar level of interest. Through this intersubjective interaction, men develop an understanding of bodybuilding and supplement use that can counter the formal government warnings calling for the discontinuation of certain supplement consumption.

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Chapter 4

‘My Body is My Business Card’: Muscularity as a Craft Industry

Since the mid-1970s with the release of the film *Pumping Iron*, the sport of bodybuilding has undergone consistent growth and transformation as it moving increasingly into the mainstream public sphere.

From its early ‘hardcore’ roots characterized by men sporting extremely muscular, hypermasculine physiques, bodybuilding is currently a sport featuring a plurality of physique-types that are recognized and legitimized through competitions. In so doing, arguably, it broadens the appeal of the sport for participants who wish to pursue the achievement of a plurality of ideal masculine physique types. It is in this way that bodybuilding has expanded its ‘social field’ thereby restructuring the space of bodybuilding practices and ushering in new definitions attached to those practices. While bodybuilding has expanded from a subcultural, fringe sport to a popular physical activity, so too have bodybuilding industries emerged and become part of mainstream culture that are integral to the sport.

There has been a growing social health consciousness in Western culture that places the responsibility for health achievement at the level of the individual (Crawford, 1980; Goldstein, 2000; Pawluch, Cain, & Gillett, 2000). With this, a parallel and seemingly insatiable consumer demand has emerged for knowledge and products to aid in the achievement of health, or in the pursuit of social ideals of physical attractiveness. It is within this broader cultural movement that we find the expansion of bodybuilding and associated industries where new economies emerge for established participants, and with them, opportunities for financial gain. In the digital age, there is a plethora of competing – and conflicting – information on diets (e.g. high vs. low carbohydrates, high vs. low fat,

how much protein to consume) and training approaches (e.g. high intensity, low repetition vs. high volume) for developing muscle and/or shedding body fat. These conditions foster muscle building as an individualistic, artisan craft industry, wherein capital development and the associated embodied cultural capital as knowledge can be leveraged and converted for economic capital acquisition. This topic has not been addressed in the literature on bodybuilding. There is a need in this literature to move beyond the established confines of the field to examine the intersection between concurrent participation in the sport and in associated economies, particularly as this practice develops and expands.

We see the ease of access to sports nutrition supplements over the past 20 years from niche to mainstream markets – from being sold in specialty stores to being on the shelves of leading grocery and retail stores – as an example of consumerism in a capitalist society. The rapid growth of the supplement industry⁸ is fueled by profits and, as Smith and Westerbeek (2010) have argued, technological advancements in genetic science and media distribution are driven by commercial forces. At the same time, there has been increased marketing of sports nutrition supplements in magazines and television (DeLorme, Huh, Reid, & An, 2012). The expansion of this industry is impressive considering that the body of research on many supplements is not substantial enough to draw conclusions on their efficacy (Kreider et al., 2010), or as Tilburt, Emanuel and Miller (2008) found, “when research shows supplements to be safe but not necessarily effective, there may be

⁸ An Agriculture and Agri-Food Canada report shows that in 2008, the global market for sports nutrition supplements was valued at US\$4.2 billion which was slowed by the global economic recession. While nearly two-thirds of this market rests within the United States, Canadian retail sales of sports nutrition supplements totaled CAD\$114 million. The sports nutrition supplement market is dominated by the sale of protein powders but can also include performance enhancers, metabolic/fat burners, muscle builders, meal replacements, weight gainers and energy formulas. According to Euromonitor International, it is expected that the market for these products in Canada will continue to expand further to reach mainstream, non-traditional consumers and will grow to \$240 million by 2018.

little or no influence in public consumption” (p. 1497). In Canada, the sale of over-the-counter sports nutrition supplements is largely unregulated.

The supplement industry is one example of prominent growth related to bodybuilding. It opens up spaces for men to convert their bodybuilding-derived capital to sell supplements, to provide information to consumers on how to use certain supplements to achieve specific goals, and to trade the use of their physical image to promote products for financial gain. At the same time, a recent article in *Canadian Business* documents the rapid growth of discount gyms (i.e. \$10-40 per month membership dues) in Canada (Nguyen, 2015). This market adaptation meets consumer demand for gym access which historically had been a subcultural bodybuilding domain. It also creates opportunities for bodybuilders to seek employment as fitness trainers and nutrition specialists associated with these facilities.

Bourdieu (1986) addresses how “the different forms of capital can be derived from economic capital, but only at the cost of a more or less great effort of transformation” (p. 252). In this article, interviews with male bodybuilders who work in a bodybuilding-related industries are used as a means of analyzing the process by which embodied knowledge and muscularity as a form of cultural capital are acquired and exchanged for economic capital. This article, then, examines the *re-conversion* of different forms of capital back into economic capital. This approach will move beyond the lens of cultural capital development in sport to examine the process by which this form of capital is exchanged. It contributes to the literature by extending our knowledge (a) on the lives of bodybuilders as the sport and industry changes, and (b) the use of the body in the economies of the flesh. Literature on the sociology of sport has, for the most part, looked at the economics or business of sport and the lived experience of sport in mutually exclusive ways. This article addresses this gap in bodybuilding literature by showing how the two sides are becoming increasingly closer together.

4.1 Literature

4.1.1 The Practice of Bodybuilding

A number of studies have focused on the lived experience of people participating in bodybuilding and bodybuilding related activities. From a ‘carnal’ sociological perspective (Crossley, 1995; Hockey & Allen-Collison, 2007), bodybuilders actively apply learned techniques such as dieting and training approaches to shape their bodies and in turn, interpret the resulting self-inflicted muscle swelling, burning and soreness as enjoyable (Monaghan, 2001). Participating in bodybuilding includes the consumption of supplements for most (Atkinson, 2007; Bailey, 2013) with the insight gained in so doing becoming an essential, trusted source of knowledge informing consumption practices (Bailey, 2013). For some, the ‘ethnopharmacological’ knowledge gained through taking anabolic-androgenic steroids and/or exchanged through online forums (Andreasson & Johansson, 2016; Smith & Stewart, 2012a, 2012b) helps bodybuilders to navigate their way through voluntary and calculated engagement in the ‘risky bodywork’ (Monaghan, 1999, 2002, 2012) of consuming illicit substances. Their participation in bodybuilding helps bodybuilders to develop a lay stock of knowledge and accumulation of cultural capital which thereby influences their perceptions of health, masculinity and risk (Bailey, 2013).

A diverse body of research has been established for why men pursue bodybuilding in the first place. It has been argued that bodybuilders engage in ‘body projects’ (Featherstone, 1999, 2000; Gill, Henwood, & McLean, 2005; Monaghan 1999) whereby the outer body is transformed not by instrument but is shaped over time through weight training and dietary practices (Featherstone, 1999) in pursuit of developing their conception of an ‘ideal physique type’ as a core component of their masculine identity (re)construction throughout the lifecourse (Bailey & Gillett 2012; Probert,

Leberman, & Palmer, 2007). Alan Klein, who brought bodybuilding as a subject into the realm of academic study in the 1980s, has argued that men participate in bodybuilding as a response to low self-esteem and masculine insecurity (1985, 1990, 1993, 1995, 2007), which rather than being quelled through bodybuilding can be exacerbated by the anxiety created through not achieving an ever-evolving 'ideal physical type' or by developing a physique that does not conform to socially accepted norms (Gillett & White, 1992; Klein, 1992; Monaghan, 1999). Such anxieties can also result from a 'crisis in masculinity' stemming from evolving gender roles (Atkinson, 2007) – such as increased job insecurity and the erosion of the male breadwinner – which leads some men to build hypermasculine bodies (Gillett & White, 1992; Klein, 1992, 2007) as a means to embody patriarchal power (Gillett & White, 1992; White & Gillett, 1994) and as a symbol of successful entrepreneurship (Vallet, 2017). Further, while out of scope for the current project, female bodybuilding has also been the focus of study for over 20 years.⁹

4.1.2 The Business of Bodybuilding

A paucity of research has been conducted on the business side of bodybuilding. The marketing and commercialization of elite bodybuilding competitions – such as the Mr. Olympia contest and the Arnold Schwarzenegger Classic – have been evolving where these bodybuilding shows are situated as the pinnacle event, rather than the sole event, within an extreme sports entertainment framework. The 2017 Mr. Olympia Expo, for example, includes a wide range of athletic events – such as boxing, crossfit, karate, mixed martial arts (MMA), powerlifting and strongman competitions – as well as a

⁹ While out of scope for the current project, it should be noted that female bodybuilding has also been the focus of study over the last two decades. Suggested readings include: Bolin, 2012; Boyle, 2005; Bunsell & Shilling, 2012; Guthrie & Castelnovo, 1992; Roussel, Monaghan, Javerliac, & Le Yondre, 2010; Shilling & Bunsell, 2009; Saltman, 1998; and St. Martin & Gavey, 1996.

convention for the sale of apparel, fitness equipment and supplements. There are bikini model contests, as well as various professional events for both men and women, occurring during this Expo. Originally designed as a ‘pure’ bodybuilding experience, Liokaftos (2014) documents how the Olympia weekend, for example, incorporates “other exhibitions and competitions of the ‘extreme sport’ variety that deepen and broaden audience appeal” (p. 323) while being hosted within the booming tourism and night-life industries of Las Vegas.

Recently, Vallet (2017) argues the how the principles and values of capitalism can be seen in the bodybuilding industry through the complementary pillars of the ‘magic triangle’: the show; the media; and the products, gyms and technics at home. These pillars work in concert for bodybuilding to “be attractive to its fans because it creates dreams and then economic desires” (p. 531). Aside from the few elite or ‘champion’ athletes, few bodybuilders can earn a living by being a professional athlete in ‘the show’ pillar. At the same time, implicit in ‘magic triangle’ is the argument that opportunities exist for monetary success in the other pillars, namely for those who are successful in the realms of media, products, gyms or technics at home. The argument I present is that although no participant in this research made a living as an elite or champion bodybuilder, several exchanged their embodied cultural capital for economic capital through participation in pillars noted by Vallet.

4.1.3 Relationship between Practice and Economics of Bodybuilding

Bodybuilding literature often focuses on the lived experience of bodybuilders and little attention has thus far been paid to those participants who monetize their experience in capitalist bodybuilding industries. Smith and Westerbeek (2010) argued that economic, profit-driven influences have a profound impact on the commercialization and growth of sport consumption. Likewise, the expansion of bodybuilding has coincided with the infusion of supplement consumption into everyday life for

many people. This marketplace has created opportunities for economic gain in the supplement industry for a certain population of bodybuilding participants. As such, the pursuit of aesthetic physique enhancement – aided the consumption of supplements – has been driven by commercial and economic interests for a subset of bodybuilders who make their living within a bodybuilding industry. For these men, the economic influence has become a *driving impetus* for their continued development and exchange of cultural capital in bodybuilding industries.

The process of capital exchange occurs mostly within bodybuilding industries, or in the least facilitated by their participation in bodybuilding activities. Bodybuilders likely draw upon multiple forms of accumulated capital (physical, symbolic, social, cultural) for conversion into economic capital. These categories are being used to better understand the muscular body and to allow for a greater breadth of analysis on the conversion process to occur. Used as analytical concepts, the forms of capital are being presented as distinct and independent, whereas several forms could be leveraged simultaneously in practice during the conversion process. The exchanges by capital type, I contend, are driven primarily by one form of capital conversion with others serving as supplementary or facilitating influences.

My research, building on Smith and Stewart's (2012b) 'capital analysis' of an online bodybuilding community and Stewart, Smith, and Moroney's (2013) examination of capital building through gym work, looks to extend the application of Bourdieu's forms of capital using bodybuilding to highlight how, for a faction of participants, the motivation for capital accumulation lies with its exchange for economic capital. In so doing, this paper will expand the frame of bodybuilding and economics beyond Vallet's (2017) analysis on the "characteristics of the 'bodybuilding industry' from the gendered framework relying on 'hegemonic masculinity'" (p. 542). This research contributes to

these conversations by demonstrating how the economics of sport are becoming increasingly intertwined with the lived experience of sport for some participants.

4.2 Methodology

As a former competitive bodybuilder, I was a complete member (Adler & Adler, 1987) of the bodybuilding social world and engaged in participant observation for approximately the year prior to conducting formal interviews. It was commonplace for me to train 5-6 days per week and upwards of two hours per training session. I would make notes on observations or interesting conversations I had with bodybuilders in between sets or immediately following my departure from the gym – taking particular note to positions expressed by bodybuilders that countered my own understanding. Serving as ‘negative cases’ this constant comparative approach characteristic of grounded theory (Glaser & Strauss, 1967) was employed to develop a greater appreciation of complexities within the bodybuilding social world and to challenge any pre-existing notions I brought with me into the concept formation process. When taking notes in the gym, I could do so in an inconspicuous fashion by recording them alongside the poundage, sets and repetitions I completed in a training log that I carried religiously. These field notes were re-visited often prior to interview question design, when analyzing interview transcripts and when writing manuscripts.

In total, 32 digitally-recorded interviews were conducted with recreational and competitive male bodybuilders lasting an average of 52 minutes. These transcripts served as the main source of information for this research. There were 31 individuals participating in this study; one participant was interviewed twice. The ages of participants ranged from 18 to 68. The majority of men were of Caucasian descent and these men lived seemingly heteronormative lifestyles. Male bodybuilders were

recruited to participate in this study through pre-existing contacts and through recruitment posters placed in two gyms. The majority (26 of 32) interviews took place in a suburban area of the Greater Toronto Area where median incomes were consistently higher than provincial levels across all household types. These interviews were conducted in locations of convenience to participants (i.e. their residences, coffee shops, places of business). Of the remaining interviews, two were conducted with participants in the city of Toronto while another four were telephone interviews conducted with key informants located across North America.

Recorded interviews were transcribed and entered into Nvivo, a database management system. Using Nvivo, each transcript was read line by line and coded for key concepts, while keyword and Boolean text searches were also conducted on the entire dataset. The key concepts identified by employing this analytical approach were held in free nodes, or 'containers for categories' (Morse & Richards, 2002) and then compared to note similarities and differences. Free nodes were then categorized by concept and merge to clean the dataset where abstraction into key analytic themes took place to further organize the data.

With over 10 years of training experience at the time I engaged in this research project, I had amassed a fair degree of cultural, symbolic and social capital in developing my physique. I was also positioned as an expert contributor in an upstart bodybuilding magazine that was disseminated across Canada. I had interacted, trained and/or conversed with 25 of the 31 participants prior to conducting a formal research interview. Sharing my experiences with competitive bodybuilding and consuming sports nutrition supplements helped me develop social capital which I leveraged to foster 'a context of mutual identification' (Hathaway & Atkinson, 2005, p. 71) which led to more in-depth interview conversations. My experiences as a serious bodybuilder and published author were also conducive to employing a convenience sample of male bodybuilders that resided in pre-existing social networks.

Purposive sampling techniques were employed in order to get representation of older bodybuilders, as well as from these key informants identified as supplement experts by participants.

During conversations and interviews with participants, it became apparent that several men (13 of 31) made a living within bodybuilding industries. These men had careers that, for the purposes of this research, fit within the following bodybuilding industry occupations: sports nutrition supplement store owner/distributor, personal trainer, contest preparation coach and/or sponsored athlete. These career types are not mutually exclusive; that is, some men earned an income from more than one of these occupations. It is important to note that four male bodybuilders leveraged or exchanged their physical capital for economical capital in occupations residing outside of a bodybuilding industry. Specifically, these men held positions either as a nightclub bouncer, a firefighter, a male exotic dancer, or a clothing model. This article is intended to give voice to these men for whom a financial imperative exists for their continued participation in bodybuilding where forms of cultural capital are exchanged for economic capital accumulation.

4.3 Field of Production

The sport of male bodybuilding continues to expand and evolve well into the 21st century.¹⁰ The roots of the sport reside in the ‘hardcore’ faction where men have competed for the Mr. Olympia title since 1965. Elite competitors have their physiques judged on criteria such as the size, quality (density,

¹⁰ On page 228 of the January 2013 edition of MuscleMag, Dr. Rafael Santonja, president of the International Federation of Bodybuilders (IFBB) states in an interview that 186 countries are affiliated members of the IFBB at the time of publication. By comparison, Blinn writes in an IFBB website that the organization passed the 100 mark in the number of national affiliates in 1977, a number which grew to 173 in 2005.

separation and definition), proportion and symmetry of their muscles¹¹ with it commonplace to see some nearly fat-free competitors tipping the scales at well over 250lbs. Over the past decade and a half, the authoritative governing body of professional bodybuilders, the International Federation of Bodybuilding & Fitness (IFBB), has introduced and revised new bodybuilding divisions that delineate competitors into categories based on both *height and weight*; the Men's Classic Bodybuilding has been recognized as a new sport discipline by the IFBB since 2005, and the Men's Physique Division since 2012, both of which are divisions for men who prefer to 'develop a less muscular, yet athletic and aesthetically pleasing physique' (IFBB 2017a, 2017b). The significance of these added competitive streams is that they legitimize a pluralized set of masculine ideal physique types to appeal to a wider audience and base of participants in the sport.

More now than ever, bodybuilding is becoming more prominent in popular culture. As an example, Paramount Pictures released *Pain & Gain* to major North American movie theatres in 2013 - a film in which the main characters in the storyline were bodybuilders played by Hollywood stars Mark Wahlberg and Dwayne "The Rock" Johnson. A few years later, in 2017, *Baywatch* hit movie theatres - a movie based on the 1990s popular TV series and again starring Johnson and a chiseled Zac Efron - where the muscular and lean physiques of the leading male roles were prominently displayed.

What is clear is that the 'field of production' in bodybuilding has expanded from its extreme roots to more contemporary and commercial appeals of masculinity and muscularity. For Bourdieu (1978):

¹¹ Regarding bodybuilding criteria, Rule 25.1.1 of the IFBB Rule Book (2009 Edition) states, "At this time, the judges will be assessing the overall physique for the degree of proportion, symmetry, muscle size and quality (density, separation, definition) as well as skin tone."

the field of production helps to produce the need for its own products, nonetheless the logic whereby agents incline towards this or that sporting practice cannot be understood unless their dispositions towards sport, which are themselves one dimension of a *particular relation to the body*, are reinserted into the unity of the system of dispositions, the habitus, which is the basis from which life-styles are generated (p. 833).

The bodybuilding lifestyle or 'habitus' (Bourdieu, 1977) – consisting of, among other things, eating nutritious foods, lifting weights – is one based upon consumption. Vernacular commonly expressed in pro-bodybuilding trade publications and websites positions such activities as leading unquestionably to the achievement of positive health. There exists a moralistic undertone characteristic of being healthy which “represents a status, socially recognized and admired and therefore important for our identities” (Crawford, 1984, p. 64) that is achieved through hard work, determination, self-control and self-denial. The outward presentation of health within the bodybuilding subculture, and in Western popular culture alike, is often represented symbolically by the appearance of one's body. In this sense, looking good has been equated to feeling good for many bodybuilders. While a contra positive health position for engaging in bodybuilding has been well-documented in academic literature, this portrayal of equating a bodybuilding lifestyle as being healthy is perpetuated as bodybuilding becomes increasingly engrained in mainstream culture. Commonplace to bodybuilders is the consumption of sports nutrition supplements (Atkinson, 2007; Bailey, 2013) which were once a niche retail market for bodybuilders and fitness enthusiasts throughout the 1990s, sports nutrition supplements can now be purchased in a wide range of retail and convenience stores, as well as online, in North America. The marketing of products to consumers interested in general health has also broadened the consumer base for sports nutrition supplements.

The development of a muscular and well-defined physique is often the impetus for men engaging in bodybuilding activities and, in order to participate in bodybuilding, individuals must consume and/or support bodybuilding industries. From the beginning of one's journey in bodybuilding participation, an exchange of economic capital is inherent in consumption practices. The novice bodybuilder might purchase a membership to gym or obtain equipment in order to lift weights and train anaerobically like bodybuilders. From this departure, an endless list of consumption opportunities within bodybuilding industries exists: apparel, trainers/coaches/training programs, media, foods consistent with a bodybuilding lifestyle, and tanning and shaving products. As Featherstone and Turner (1995) state: "Our sense of self is now fundamentally tied up with personal consumption. 'Man is what he eats' is now replaced by the more general notion that 'people are what they consume'" (p. 8).

It is within this capitalist, market-driven environment that people are afforded concurrent opportunities to consume and to money by converting forms of capital outlined by Bourdieu that were developed via building muscle. While the desire to develop a muscular and well-defined physique may have been what was initially pursued, for some, maintaining such a physique is imperative for those who make a living in a bodybuilding-related industry.

4.4 Capital Development and Conversion

4.4.1 Physical Capital

Physical capital, as employed in this paper, represents physical capacity, or one's ability to 'do something'. Shilling, in writing towards a corporeal sociology, identifies the concept of physical capital as embodied cultural capital which resides implicitly in Bourdieu's work (Shilling, 2004). As an

embodied form of cultural capital, bodybuilders develop physical capital – or what some call ‘bodily capital’ (Monaghan 2004; Wacquant, 1995, 2004) – in applying the learned techniques and skills in building their lean and muscular physiques. These physiques also hold symbolic value within certain social fields.

The physical strength and mental fortitude developed through lifting weights and inciting muscular hypertrophy were proven to be valuable commodities for three participants working in two non-bodybuilding related industries. One man was employed as a nightclub bouncer and his physical capital represented by his strength and power served to help him control crowds and remove unruly patrons through, at times, the use of physical force. His large physical stature held symbolic value, as Monaghan (2004) also found, which helped to deter others from becoming disorderly. When recalling his approach to bodybuilding at that time, he confided:

Back then, did I care about my health? No, not really. I’d take steroids because I wanted results faster. I cared about being strong and looking a certain way, that’s it. A lot of people know me at the club and they’d say, “[Participant’s name], has always been in shape, he’s a strong guy and physically, he’s pretty built.

Two other participants in this study exchanged their physical capital developed through bodybuilding to gain and perform well in the physically-demanding occupation of firefighting. One of these men, who is also a competitive bodybuilder, alludes to the value of being physically strong and in-shape in his role as a firefighter, while also drawing upon his knowledge of proper nutrition (‘cultural capital’) in order to be physically prepared for the demands of his job:

You know, many people don't need all those calories but if you have a physical job like me, being firefighter, you do. Some days, you know, it'll be go, go, go the whole shift. Well I know I'm going to triple my carbs for energy. This could be a week before the (bodybuilding) show. And I'll triple my carbs that day because you know I'm expending so much energy by going up and down flights of stairs in full gear.

The manifest result of developing strength of power through weightlifting proved to be advantageous commodities for these bodybuilders who were employed in occupations that demanded physical acumen.

4.4.2 Symbolic Capital

Symbolic capital is about representation and status. It is about the presentation of a masculine ideal type as something to be desired to an audience. The possessor of a physique worthy of admiration even amongst bodybuilding enthusiasts “derives a scarcity value from its position in the distribution of cultural capital and yields profits of distinction for its owner” (Bourdieu, 1986, p. 245). There were participants in this study who used bodybuilding as a way to develop lean and muscular physiques, who in turn exchanged their image and symbolic status not only for economic remuneration but also for enhancing their social capital. Those who did so via what I call *active methods* would be a participant who earned income as a guest poser at bodybuilding events or a participant who earned income as a male exotic dancer. For these men, they exchanged the symbolic capital of their physiques through performance in front of a live audience.

For an elite bodybuilding and fitness coach, guest posing offered a venue to promote his business and market himself as an elite coach who could relate with his athletes.

Author: At that time, what purpose did a lean and muscular body serve for you?

Participant: It was my business so at the time my mentality was that my body was my business card. No one else could really walk it like I could. The reason I guest posed was because guest posing made it all about everybody else. I was trying to give how I represented myself a good name rather than, you know, just being another doorman in a bar who competes.

Another participant, a male exotic dancer, used bodybuilding to develop not only the symbolic capital associated with having an aesthetically pleasing physique, but also the confidence to earn an income by performing well:

Author: So how important is your physical appearance to your sense of self?

Participant: Very important, yeah. Often how I look transpires in how I feel. It's a little bit of ego; it's a little bit of vanity. Everything tied into that has a reflection of who I am and who I present to the outside world, right? And it helps for work also. Even though I might not be feeling attractive, being lean and muscular helps me feel confident to give off the vibe that I do know what I'm doing. I look the part therefore I must be the part. I always wanted to be big and cut to be attractive for the opposite sex. It was a way to get noticed maybe. That's still my primary motivating factor – to look good for the ladies, right?

Some bodybuilders exchanged symbolic capital for economic capital through *passive methods* such as a sponsored athlete or model. There were three sponsored athletes participating in this study that used the symbolic capital of their lean and muscular physiques to exchange the use of their images in magazine advertisements to endorse supplements for economic capital. The actual use of the endorsed supplements, and/or believing they were effective in building muscle or losing fat, were of little

consequence to the employment opportunity. This was the perspective of the aforementioned bodybuilding and fitness coach. I had known this individual for approximately five years at the time of the formal interview and we had several candid conversations about the use of steroids for physique development.

I mean I was never naive to the non-existent effects of supplements but I was a little naïve into other people's profound belief in either the hope or wishful thinking or even the desire of them to do something positive. So, you know, I always looked at my endorsement of supplements in the early days and think that it was no different than Michael Jordan appearing on a box of Wheaties. No one in their right mind would think Michael Jordan played basketball better because he ate Wheaties. And that was my sort of, you know, rudimentary and naïve approach to endorsing supplements. I didn't think anyone would actually take it seriously that I look the way I looked or my clients looked the way they look because they took such and such a protein powder. It wasn't 'til I gathered more and more experience that I realized that people eat this stuff up – I mean they absolutely believe it to be true.

For this individual, he was able to use his image in magazine advertisements as a medium by which to market himself as one of bodybuilding's top coaches and in turn enhance his social capital.

I'm not the same person I was when I was pursuing a career in the bodybuilding industry. Before the Internet and social media exploded you did whatever could to get the exposure, you know, to been seen and to have a voice. So I rationalize my endorsement of this product or that product as giving me a voice as one of the best coaches in bodybuilding.

Another participant was employed as a personal trainer, wellness coach and clothing model. His motivation in bodybuilding, in part, was influenced by his desire to achieve the desired appearance in order to be hired as a model.

Author: What purpose does a lean, muscular body serve with you?

Participant: Oh, it's almost everything. I'll also do modeling too so that's also motivating me.

It pays. If I don't have a certain physique and I won't do the photo shoot with my shirt off then I won't get paid or I won't get hired.

For these men, the symbolic capital rooted in their aesthetically-pleasing physiques was instrumental – a pre-requisite, really – for conversion to monetary gain through the ‘selling’ of their image for performance or advertisement.

4.4.3 Social Capital

Social capital is about recognition. The recognition sought is not one merely of being seen as ‘a big guy’ by bodybuilders in this study but one of building trusting relationships and developing social networks. For Bourdieu (1986), “social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network or more or less institutionalized relationships of mutual acquaintance and recognition... to membership in a group...” (p. 248). It is here where social capital *indirectly* leads to economic capital through conversion. In fact, it could be argued that actions taken to acquire social capital comes *at the expense of* economic capital accumulation as the “acquisition of a clientele... implies considerable labour devoted to making and maintaining relations” (Bourdieu, 1977, p. 180).

Men in this study most interested in strengthening and exchanging social capital were those who owned supplement stores or who were employed as personal trainers. Each individual shared the importance of being able to relate to their customers, and to add value to the customer experience beyond the immediate transaction of selling a product or completing a training session. This could take the form of sharing training stories or writing diets for free to help their clients achieve their physique goals.

One supplement store owner and champion bodybuilder explains the importance of being approachable and to being open to his clients' needs outside of the store, even if it disrupted what he was to accomplish at the time.

Yeah, training is definitely a stress reliever, yeah. Unless of course you're stopped in the gym a hundred times and asked, "[Name], I'm taking this protein right now but it's giving me diarrhea." I get that a lot while doing my workout. That's why I train at different gyms around the city so I can see different people – I've got a membership at all the gyms. It can be frustrating but you have to stay approachable, you know, you have to be well liked. It just takes one person now to get upset and jeopardize your reputation. I've have bit my tongue many times but I find that I'm really approachable. I make myself available for everyone for any question. That's why the business is doing so well. I'll say, "If you have any questions, give me a shout or e-mail me." I get people calling me from the grocery store asking me, "How many carbs are in potato?" With a lot of the diets I write out I make sure that clients have my contact information so if they have any questions – like when they're grocery shopping – they can call me and they do, they take me up on it.

It is this effort in developing and maintaining social capital that, according to Bourdieu (1986), is a “bound to be seen as pure wastage” (p. 252) from an immediate, narrowly economic standpoint. These social exchanges, however, become profitable for this participant when he leverages his social and cultural capital to exchange for monetary gain when his clients come into his store to purchase supplements.

4.4.4 Cultural Capital

Cultural capital is about the accumulation of knowledge and knowledge exchange. Embodied cultural capital is linked to the body and requires an investment of labour and time that must be invested by the possessor of such capital. To illustrate this point, Bourdieu (1986) offers, “Like the acquisition of a muscular physique or a suntan, it cannot be done at second hand... the work of acquisition is work on oneself (self-improvement), an effort that presupposes a personal cost...” (p. 244).

All participants engaged in bodywork that necessitated a personal investment into developing their physiques and knowledge. For some, their careers in a bodybuilding industry were premised on the exchange of their embodied cultural capital into economic capital. There were two main business models implemented to demonstrate expertise: one that promoted personal experience and bodybuilding-related accomplishments, and one primarily rooted in the achievement of earning academic credentials.

Personal experience

Research has found that in bodybuilding circles, ‘hard-core’ personal experience is often a privileged and trusted form of knowledge (Bailey, 2013; Smith & Stewart, 2012a) over other sources, including

academic or medical credentials (Bailey, 2013; Monaghan, 1999). In the present study, it is the rarity of elite physical development achieved that distinguishes him from the masses and helps legitimize his role as an expert. As Bourdieu (1986) states, “any given cultural competence (e.g., being able to read in a world of illiterates) derives scarcity value from its position in the distribution of cultural capital and yields profits of distinction for its owner” (p. 245) or, as Smith and Stewart (2012b) found, “Bicep size served as a proxy for knowledge” (p. 979).

The most robust example in this study of the personal experience approach was an elite bodybuilding and fitness coach. Sporting a professional caliber physique, this bodybuilder promoted his personal brand by marketing his body through guest posing and supplement endorsements. Images of his physique are positioned on his website and social media accounts, as well as in his vast library of products, including blogs, electronic books, and diet and training programs, thereby alluding to personal experience in bodybuilding because, in his words, “If I was going to advise everyone else then I should damn well know what it's like to be hungry and I should know what it's like to look good.”

Others took a traditional scope to their business endeavours, such as selling supplements out of a brick-and-mortar retail store. For the supplement store owner previously introduced, he would have his competition photos displayed in-store, including those when he won prestigious title. He would also have framed magazine advertisements featuring his physique hanging on the walls. It was also paramount for him to be in-shape year-round given the exchange of his cultural capital (i.e. advising patrons on which supplements, diet strategies and training protocols to use to achieve their goals) to sell supplements was done in-person. When asked what a lean and muscular body serves for him, he responded:

For me and my business it is of utmost importance that I stay in shape all year round. You know even for me to have an off-season, I try and stay under 10% (body fat) because I am a walking billboard for my business. Who's going to believe a fat guy behind a counter? I get asked easily a dozen times, you know, "What do you take?" And at that point it's because you look good, you are in shape, you obviously know your stuff. It's like hiring a fat trainer. No one wants to hire a fat trainer, right? So for someone to give advice or to kind of sell themselves as someone who knows what they're talking about, they should look the part. Definitely, they should look the part.

A personal trainer in bodybuilding and an owner of a martial arts dojo markets his accomplishments of winning national level championships in both bodybuilding and martial arts on his website. He concurs with the importance of looking good for selling the authenticity of his knowledge which leads to the success of his business:

I don't let myself get out of shape is because you know you are your own business card. If I'm going to tell a client of mine that I'm going to get you in the best shape of your life and he's looking at me and I've got a pot belly... he may not smile to my face but I think deep inside he'd be laughing at me. He'll believe me if he sees me 12 months out of the year and my abs are visible and I'm always keeping in shape, so it's like practice what you preach type of thing.

For these men, their physical appearance served as an outward representation of their embodied cultural capital gained through their experience and accomplishments in bodybuilding.

Academic accomplishments

When bodybuilders in this study were asked, “Who do you consider to be an expert on supplements?” many recognized academic researchers either directly or indirectly by identifying clinical studies on supplements as being trustworthy sources of information. The esteemed perception of academic qualification held by participants, is, as Bourdieu (1986) notes, a recognition of an institutional “certificate of cultural competence which confers on its holder a conventional, constant, legally guaranteed value with respect to culture” (p. 248). Participants were not asked who they considered to be experts in bodybuilding, however. Three academic researchers who earned a PhD and/or MD in their field of study and who were affiliated with academic institutions took part in this research. Perhaps not surprisingly, each of these men themselves held scientific research in high-regard – either the expertise gained through attaining an advanced degree or in the first-hand experience in conducting scientific research – with respect to producing accurate and trustworthy information on supplements. One participant opined:

I think there's some criterion for higher education, whether you have a degree or not and some criterion for actually having conducted, executed and interpreted research findings in the lab. I make the contention that if you've never planned and executed a research study then your ability to interpret the current research that's out there is limited. I think that's really what qualifies someone as a true expert in my opinion.

They were also quick to note the breadth and complexity of supplement research, and as such, no one person is an expert on supplementation, per se. One of these men shared his view on expertise in supplementation:

The term "supplement expert" implies someone knows all about supplements. The truth is I'm certainly not an expert on supplements universally. Anyone knows who's gone to the PhD level, you get more micro-focused rather than macro-focused so you learn more and more about less and less so to speak. My area of expertise is sports supplements, then to narrow it down even further, the research that I've done has been in the area of post-workout supplements that can be used for post-workout, energy production and recovery.

The other offered:

Who would I consider to be a supplement expert? Depends what the supplement is. If we're looking at the metabolic and biochemistry and effect on neurology, then there are people in the world that come to me to talk about that. When it comes to sports supplementation, a lot of people who think they're experts are just people pushing a product for which they may have some interest in promoting because they've got shares in a certain company.

These men market their academic credentials as signifiers of cultural capital; the knowledge they possess and information they produce on supplementation is exchanged for economic capital via for-profit enterprise (i.e. founding a company that provides online nutrition coaching for clients and developing coaches) or earned through employment opportunities (i.e. prestigious academic and clinical positions, contributions to lay media outlets [magazines, TV], conducting clinical trials for supplement companies). They are internationally recognized as experts in their fields which, to varying degrees, includes the study of supplementation. Two of these men are active on social media, have thousands of followers, and leverage their advanced degrees in their Twitter handles and Facebook account names, such as '(name)PhD' or 'Dr.(name)'.

One researcher describes his motivation and avenues for conversion of cultural capital to economic capital by expanding his audience:

My real expertise is doing research and publishing that research. The truth is, though, that really typically only benefits the scientific community. I've been fascinated with taking that research and getting it out to more and more people through lay publications. With the same body of data that you've published in a journal you can share it with millions of people versus hundreds. Whether it's publishing books, whether it's publishing articles on my own website, I can take what I found in the research lab or what other researchers have found and share that with as many people as I can through these other media, which also extends to radio and television.

The embodied cultural capital symbolized by their physique was not as central to the exchange process for men possessing academic, institutionalized cultural capital as it was to men relying on their personal experience. How they looked, however, did play an influential role in establishing the authenticity of their knowledge; I have documented elsewhere that being fat as a scientist or trainer can lead to the disrepute of sound advice based on the disconnection between the credibility of message and the physical appearance of the messenger (Bailey, 2013). All three researchers were physically active and had lean and athletic physiques.

4.5 Conclusion

This paper presents an interesting intersection between 'economies of the flesh' and the growth of the knowledge economy as it pertains to health and health products. In a knowledge-based

economy, the use of ideas are primarily used rather than physical abilities (World Bank, 2003), and as such, knowledge-based capital is viewed as ‘assets that lack physical embodiment’ (OECD, 2013). For bodybuilders, building muscle can be viewed as an individualistic, artisan ‘craft industry’ where various forms of capital are developed as assets to convert into economic capital.

Bourdieu’s forms of capital provide a conceptual framework to show how some men developed physical, symbolic, social and cultural capital related to bodybuilding in order to then convert these forms of capital for economic capital. Their physical abilities – or physical capital – were transferrable assets for bodybuilders employed in non-bodybuilding industries such as firefighting or nightclub security. For others, knowledge in the form embodied cultural capital was developed through the phenomenological experience of participating in bodybuilding activities in order to build muscle and/or lose body fat. This knowledge, along with the symbolic value held in their physical appearance, was leveraged within established networks to make money. As such, their participation in the knowledge economy surrounding bodybuilding was facilitated vis-à-vis capital development gained through the physical act of muscle building. By exploring the economic imperative present in the lives of bodybuilders, this paper contributes to knowledge of sporting bodies by demonstrating how the economies of sport are becoming increasingly intertwined with the lived experience of sport for some participants.

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Chapter 5

Conclusion

The chapters comprising this ‘sandwich style’ dissertation contribute to our collective understanding of men who engage in health work through bodybuilding in the sociological areas of masculinity, health and aging. This ethnographic research leveraged participant observation and in-depth inductive interviews to capture the participants’ experiences and perspectives, and applied the theoretical frameworks of social constructionism, phenomenology, and cultural reproduction to gain a greater understanding of this data. In this concluding chapter, I outline key findings and contributions to knowledge of each article, as well as limitations inherent in my body of research in general, and specific to each article. I will also offer thoughts on future research within the literature on bodybuilding, as well as future research opportunities with respect to the sociology of health and masculinity.

I had the good fortune of interacting with dozens of men who shared their experiences with health, masculinity and bodybuilding to inform this research. Participants sharing their experiences during one of the 32 interviews completed revealed that diverse levels of educational attainment are represented from high school graduates to those with doctorate degrees, as well as various blue- and white-collar occupations such as labourers, firefighters, researchers, and physicians. Recruitment techniques, including purposive sampling, resulted in a broad spectrum of bodybuilding experience being shared, ranging from recreational bodybuilders to competitive bodybuilders, three of whom won provincial, national and/or international-level competitions.

Before continuing, it is important to acknowledge that this doctoral research is focused on men's pursuit of health and masculinity, and therefore does not contribute to an established and growing body of literature that addresses female bodybuilding and the negotiation of femininity for participants of the sport. The composition of research participants represented a 50-year span in the life course (i.e. 18-68 years). A general limitation is that only three men were interviewed to represent older bodybuilders, which, for this study, was characterized by nearing or reaching significant life milestones such as retirement or being a grandparent. As such, a more extensive set of older men participants would lead to a more substantial narrative base on the pursuit of health through bodybuilding to draw upon, and would provide opportunities to explore if greater variation in experiences exist amongst older bodybuilders.

In **Chapter 2**, Dr. James Gillett and I contributed to the collective understanding of the health work and motivations of bodybuilders across the life course framed along an aesthetic-functionality continuum. In this paper, we present how masculine identities are re-constructed by men as they age, evolving broadly from the primary goal of developing an attractive lean and muscular physique in earlier years to a focus on developing a physique capable of performing tasks to foster personal independence later in life. Participants were also asked which supplements they consumed to support their goals from the growing and evolving number options at their disposal, and perhaps not surprisingly, younger bodybuilders were more apt to consume muscle building and/or fat burning supplements, while supplements aimed at proactive health maintenance and joint support were favoured as men aged. Further, tolerance of health risk perceived by participants lessened over time.

In **Chapter 3**, as sports nutrition supplement industry has expanded over the past 10-15 years, so too have advancements in online platforms and the onset of social media outlets to facilitate the creation, sharing and accessing of information. The findings of this research, however, are based

predominantly on offline sources of information, as well as offline social environments. Data collection for this research (2007-2008) occurred at a time when online information was not as robust as the present. No participant referenced online bodybuilding communities or forums as environments where they accessed or shared information. These online platforms have since been found to be important self-help venues for information sharing and masculine identity negotiation (Andreasson & Johansson, 2013; Andreasson & Johansson, 2016; Smith & Stewart, 2012a, 2012b). Interviews were conducted during a period that either pre-dated social media platforms such as Instagram, which first released an iOS app on October 6, 2010 (Siegler, 2010), or where social media platforms were in their relative infancy, such as Facebook, which was founded on February 4, 2004 (Facebook, 2021). These digital tools are used by bodybuilders for self-promotion, knowledge construction and claims-making. Further, Instagram as a digital platform is gaining greater attention as a tool being used in the negotiations of gender identity (Marshall, Chamberlain, & Hodgetts, 2019; Marshall, Chamberlain, & Hodgetts, 2020; Rahbari, 2019).

In **Chapter 4**, I focus on the exchange of acquired cultural capital for economic capital facilitated within evolving bodybuilding industries which provide avenues for some bodybuilders to make a living. My interest in the economics of bodybuilding emerged as a theme through the analysis of transcribed interview data. It became apparent that for several participants in my research project, bodybuilding was much more than a hobby or past-time. For these individuals, developing a muscular and lean body through bodybuilding was a form of capital or currency that could be leveraged and exchanged during the transaction of selling a product or service. This analysis contributes to a more fully developed understanding of the interrelationship between the social, cultural and economic dimensions of sport participation in late modern societies.

While there exists a robust base of literature applying Bourdieu's notion of cultural capital accumulation in sporting environments, including research in fitness or bodybuilding communities (Bridges, 2009; Hutson, 2013; Smith Maguire, 2008; Smith & Stewart, 2012a; Stewart, Smith, & Moroney, 2013), my dissertation work focuses specifically on the narratives of bodybuilders who actively engaged in the conversion of cultural capital into economic capital. As stated earlier, data collection for this research was completed when online information and social media platforms were either not as developed as today, or simply did not exist. It would be interesting to conduct this research with bodybuilders who employ online and social media resources to build cultural capital through their personal and professional brand in order exchange for economic capital. Emerging literature has begun to address the conversion of labour undertaken by the emerging industry of social media influencer to influence identity construction and economic capital conversion in the bodybuilding subculture (Wellman, 2020).

The years it has taken for me to prepare this sandwich thesis, as I addressed at the onset of this dissertation, has afforded me the opportunity to see the evolution of bodybuilding as a sport over a decade and a half, as well as to understand the evolution of various perspectives presented in academic literature. Culturally, men have greater avenues by which to construct masculine identities than traditional and stereotypical heteronormative ways. As such, it could be argued that while a lean and muscular body still holds social currency, it does so with a depreciating value.

As stated in Chapter 4, bodybuilding competitions over the past decade and a half have evolved to include more competitive categories, such as Men's Classic Bodybuilding and Men's Physique Division, that place less emphasis on sheer muscle mass. Liokaftos (2017) and Andreasson and Johansson (2019) address the historical evolution of bodybuilding, including increasing emphasis on 'hardcore' or 'freaky' presentations of embodied practice characterized by extreme muscularity

beginning in the 1980s and 1990s, as well as the accepted pervasive use of anabolic and androgenic steroids (AAS) as tools to develop such physiques. With reports of the current Mr. Olympia 2020 Champion, Mamdouh “Big Ramy” Elssbiay, standing between 5’10’ and 6’0” and weighing between 290-300lbs on-stage – an Olympia champion body size only rivaled by former 8-time Mr. Olympia Champion, Ronnie Coleman – it stands to reason that ‘freaky’ still holds currency.

An expected continued direction for sociological literature on bodybuilding and masculinity, however, is in the area of masculine identity construction, health work conducted through bodybuilding, and the role of fitness doping. Andreasson and Johansson (2019) posit that in a fourth phase (1990s) in the historical development of gym and fitness culture, the “massive bodybuilding body is replaced with the well-defined and moderately muscular fitness body” (p. 1) with strong commercial ties to fitness doping. It is here during this *fitness revolution*, they argue, that gym and fitness culture shifted from hardcore bodybuilding and drug-use practices, and shifted to more inclusive spaces where people could pursue fitness and leisure activities. A review of current mainstream Canadian gyms – Anytime Fitness, Crunch Fitness, GoodLife, and Planet Fitness to name a few – all provide mission and core value statements on their websites promoting an inclusive, non-judgmental environment for people to exercise and improve their health. Less pronounced in such environments might be the intercorporeal culture of face-to-face dialogue on drug use or sale of performance and image-enhancing drugs (PIEDs) (Andreasson & Johansson, 2019; Liokaftos, 2018), replaced by the increasing availability of such substances from online marketplaces.

In terms of future research, an explicit area for continued exploration is in what Andreasson and Johansson (2019) call the fifth phase of gym and fitness culture – a globalised and virtual drug market (p. 9). How do bodybuilders access performance and image-enhancing drugs (PIEDs) – which I consider inclusive of both AAS and sports nutritional supplements – online, and for what purpose?

What role do online bodybuilding communities play in facilitating such access? And in re-visiting Chapter 3, how do bodybuilders come to know and trust online sources of information and PIEDs? Secondly, I anticipate future research to build upon Liokaftos' (2018, 2019) work on the growth of natural, drug-free bodybuilding as both an alternative to, and resistance of, drug-enhanced bodybuilding, which has been under-represented in bodybuilding literature and public discourse to-date. The growth of natural bodybuilding is also coinciding with the prevalence of overtly inclusive and health-promoting gym environments. How do men construct and negotiate masculine identities through participating in natural bodybuilding, and how do those social processes differ from drug-using bodybuilders? The bodybuilders in my research who claimed, as a self-declaration, to be drug-free negotiated masculine identities along the same lines as bodybuilders who used PIEDs (i.e. see Chapter 2), but provided narratives that more often centred on health and healthful practices without 'cheating' or "going to the dark side," as one participant shared referring to abstaining from PIED consumption. Lastly, I anticipate that future research will contribute to our evolving understanding of bodybuilding membership and presence provided by emerging research on bodybuilders active on social media (Wellman, 2020) and the use of social media platforms, such as Instagram, in the negotiation of gender identities for bodybuilders (Marshall, Chamberlain, & Hodgetts, 2019, 2020; Rahbari, 2019).

Taken as a collective, this dissertation contributes to our understanding of how men pursue health work and masculine identity construction by participating in bodybuilding at various stages in a heteronormative life course trajectory, how they come to trust the ethnopharmacological understanding of supplement consumption developed through their lived experience and those of trusted others, and how, for some participants, engaging in bodybuilding activities to develop forms of cultural capital are then leveraged and exchanged for economic capital. This body of research

provides further understanding into the livelihoods of participants who self-identify as bodybuilders, thereby capturing a breadth of experiences and avoiding a narrow, homogeneous, and limiting perspective of 'bodybuilders' as being stereotypically hypermasculine and hardcore.

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Appendix A

Female Bodybuilding

Although beyond the scope of my research, there is a body of literature focusing on the women bodybuilders. The sport of female bodybuilding began to draw academic attention in the 1990s. By this time, the Ms. Olympia contest, which debuted in 1980, had been in existence for over a decade. Over that time, the popularity of the sport for women grew, as did the musculature of participants. Bolin (2012) documents the watershed moments in the history of female professional bodybuilding, and the evolution of the sport from the 1980s where champions exuded ‘orthodox notions of femininity’ by being ‘athletic, slim, and graceful’ to the 1990s where champions ushered in physiques that were harder and hyper-muscular (pp. 35-36).

Within this context, women bodybuilders have been interpreted as engaging in a form of ‘edgework’ by pushing the boundaries of female muscularity (Worthen & Baker, 2016), by complying or resisting traditional notions of female beauty (Guthrie & Castelnovo, 1992; St. Martin & Gavey, 1996), and by participating in the blurring of gender norms (or what Saltman [1998] calls “gender multiplicity”). This tension between (hyper)muscular physiques of female bodybuilders and cultural normative ideals of female beauty is judged both during a competition and in broader social contexts (Bolin, 2012; Boyle, 2005; Bunsell & Shilling, 2010; Roussel, Monaghan, Javerlhiac, & Le Yondre, 2010; Shilling & Bunsell, 2009; St. Martin & Gavey, 1996). For professional competitors, Bolin (2012) outlines how the International Federation of Bodybuilding and Fitness (IFBB) made changes to the criteria for judging women in 2001 to draw “attention to healthy appearance, the face, makeup, and skin tone” (p. 38) to emphasize femininity. Further, rule changes were introduced curb the level of muscularity that would be deemed acceptable for women bodybuilders. For example, on December

6, 2004, the IFBB sent out a notification to women competing in the Bodybuilding, Fitness or Figure categories to decrease the level of musculature by 20% for ‘aesthetics and health reasons’ (IFBB, 2004).

Elite women’s bodybuilding declined in popularity since the mid- to late-1990s, including decreasing prize money for Ms. Olympia champions (Bolin, 2012, pp. 50-51), culminating with the discontinuation of the Ms. Olympia contest after 2014. The competition remained absent until December 18, 2020 when the IFBB re-introduced the Ms. Olympia contest as part of the Olympia Weekend (IFBB, 2020). During the period of decline of female bodybuilding, the IFBB introduced other divisions for female categories that aligned more closely with traditional notions of femininity and feminine presentation, such as the Fitness, Figure and Bikini divisions. The current women’s Physique division includes the most muscular competitors – yet much smaller than former Ms. Olympia bodybuilders – with judging criteria including hair and makeup, a smooth and healthy skin tone, and the competitor being viewed “with the emphasis on a healthy, fit, athletic-looking, muscular physique, in an attractively presented ‘total package’” (IFBB, 2021, p.9). Recent literature on women bodybuilding and Figure class competitors finds positive consequences of participating in the sport, such as empowerment (Aspridis, O’Halloran, & Liamputtong, 2014) and psychological well-being and self-determination (Suffolk, 2015). At the same time, Tajrobehkar (2016) finds in her study of Bikini competitors the negotiation of hegemonic femininity and implied heterosexuality to meet the judging criteria through the presentation of embodied cultural tensions, such as “a body that has claimed its self-ownership, yet offers complete accessibility”, and one that “is hard, yet soft” (p. 294).

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Appendix B

Recruitment Poster

ARE YOU A BODYBUILDER?

DO YOU USE SUPPLEMENTS?

I am looking to interview male bodybuilders who are 18 years of age or older about their experiences using supplements.

The Researcher

My name is Brian Bailey and I am a PhD student in the Department of Sociology at McMaster University. This research project is part of my PhD dissertation.



If you are interested in learning more about this study, please speak with me (Brian) in the gym or contact me at (905) 592-0179 or email me at:

supplementstudy@hotmail.com

Appendix C

Interview Guide

TYPES OF QUESTIONS ASKED

Generally speaking, I am guided by the research question:

How do males experience using dietary supplements for the purposes of bodybuilding?

I will have conversations with participants around three main topics:

1. Experiences with Dietary Supplements
2. Dietary Supplements and Health
3. Dietary Supplements and Knowledge

1. Experiences with Dietary Supplements

1. How did you start using dietary supplements?
2. Why do you use supplements?
3. Can you tell me about the different types of supplements you have used?
4. How do you feel when you take supplements?
5. Overall, do you believe that dietary supplements are safe to take?
 - a. If so, could you explain why you feel this way?
6. Do you feel that some supplements are safer than others to take?
 - a. If so, could you explain why you feel this way?

2. Dietary Supplements and Health

7. Tell me about your general health
8. What does it mean to you to be in good health?
9. How important are dietary supplements for your health?
10. Do you need supplements to be healthy?
11. Has using supplements ever caused a health problem?
12. Has the use of supplements helped you overcome an illness or health problem?

3. Dietary Supplements and Knowledge

13. Tell me about the sources of information you consult when planning to use supplements.
14. Tell me about the sources of information you consult when using supplements?
15. What is it about that/those source(s) that makes it/them/him/her trustworthy?
16. How important are your past experiences with using supplements when deciding which supplements to take in the future?
17. Do you rely on your doctor as a source of knowledge when using supplements?
18. How do you determine what makes one source of information better than another?

4. Closing Questions

19. Is there anything you would like to add to our discussion today on dietary supplements?
20. Is there anything you feel is important with regards to dietary supplements that we haven't talked about?

Appendix D

Consent Form

“Learning How and Why to Take Dietary Supplements: A Study of Health and Male Bodybuilding”

PURPOSE OF STUDY

The goal of this study is to understand how and why you use dietary supplements. This includes learning about which sources of knowledge you use to help you decide which supplements to take, how to take them, and how they will benefit your health.

TYPES OF QUESTIONS ASKED

My research question is: How do males experience using supplements for the purposes of bodybuilding? I will ask you questions about three main topics:

1. How did you start using dietary supplements?
2. How do dietary supplements impact your health?
3. What forms of knowledge do you use to learn about dietary supplements?

WHAT CAN YOU EXPECT FROM PARTICIPATING IN THE STUDY?

- I will collect information through face-to-face interviews.
- Interviews can also be conducted over the telephone at a time that is convenient for you.
- The interview will last about 1 hour. The interview can be divided into shorter sessions if you prefer.
- Notes will be taken during the interview, and with your permission, the interview will be digitally recorded. This audio recording will be used on a password-protected computer and will be stored on CDs, which will be kept in a locked box. Files on computer will be erased at the end of this project.

YOUR RIGHTS AS A RESEARCH PARTICIPANT

If you agree to participate in this interview, you are not required to answer any questions if you do not want to, and you can end the interview at any time. If you decide to withdraw from the study at the end of the interview or at a later date, you can choose to have your responses destroyed to that point if you wish, or you can choose to let me keep them.

WHAT RISKS MIGHT OCCUR FROM PARTICIPATING IN THE STUDY?

Your participation in this research is voluntary and you have the right to withdraw at anytime. If you choose to withdraw from the study you may ask for all your responses to be removed from the study, or if you would like you can let me keep your responses up to that point. Your identity and responses will be kept confidential, unless in the rare case that the legal authorities ask for your information.

WHAT BENEFITS MIGHT OCCUR FROM PARTICIPATING IN THE STUDY?

By participating in this research, you could share your thoughts about health-related issues and share your experiences with using dietary supplements. You might have a chance to think and talk about what you consider important in terms of your health through our interactions.

This study contributes to existing research on health, the role of dietary supplements on health, and the ways in which males use different types of knowledge when pursuing health through sport.

Health promotion strategies (e.g. Health Canada's *Healthy Weights* and *The VITALITY Approach*) do not tell people to use dietary supplements in order to be healthy, so this study will help researchers understand how and why males take dietary supplements.

WHAT IS BEING DONE TO KEEP YOUR INFORMATION CONFIDENTIAL AND YOUR PARTICIPATION CONFIDENTIAL?

A number has been assigned to this interview rather than your name, and you will not be identified in any way –by name or by identifying descriptors—in any articles that may arise from this research. I will do everything legally possible to maintain confidentiality. However, it is possible that someone else from your gym might guess your identity and you should keep that in mind in deciding what to reveal.

Your recorded responses will also be assigned a number and will not be identifiable in any results presented. These audio recordings will be kept secure in a locked cabinet. The audio recording itself will be erased when it has been transcribed. I will then re-contact you to send you a copy of the written transcription to check over for accuracy. If you choose to withdrawal from the study you can choose to have your audio-recorded interview destroyed if you wish, or you can let me keep it.

A backup recording device will be used, with your permission, to ensure against mechanical failure and will be treated with the same care as the main recordings. Further, when the research tapes are not in use, the data (tapes and transcripts) will also be secured in a locked filing cabinet accessible only to myself. Lastly, all information you give me will be stored on a password protected computer with transcripts being stored on CDs, and no data will be used on public access computers.

Research Contact Information

If you wish, you may contact the Protocol Officer for Ethics in Research, SREC and MREB secretariat, GH-306 ethicsoffice@mcmaster.ca (905) 525 – 9140 ex. 23142 for more information about your rights as a research participant.

You may also contact Brian Bailey at Brian.Bailey@learnlink.mcmaster.ca or (905) 592-0179 at anytime. Furthermore, if you have any questions about the conduct of the research project, you may contact Dr. James Gillett, research supervisor, at gillett@mcmaster.ca or (905) 525-9140 ext. 27424.

Consent

I have been given the opportunity to ask questions about the interviews, and the questions I have asked up until this point have been answered adequately. I understand that I can also ask questions in the future and that I will not be financially compensated for my participation. Furthermore, if after completed the study I wish to discuss my interview and the comments made I can contact Brian Bailey at anytime and we can arrange to meet and look at my interview. At this meeting I can ask to have comments changed or removed from the study.

There are **two copies** of this consent form, one of which I may keep.

I agree to participate in the research study by participating in a research interview. Further,

A) I agree to the taping of the interview _____

B) I prefer that the interview not be taped _____

Interviewer's Signature: _____ Date: _____

Participant's Signature: _____ Date: _____