

THE RELATIONSHIP BETWEEN THE READING OF FITNESS MAGAZINES AND  
CONCERNS WITH LEANNESS AND MUSCULARITY AMONG COLLEGE MEN

By

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by

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This dissertation is dedicated to my mother, who made my education a priority, and who instilled in me the belief that I could accomplish anything.

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The purpose of this dissertation was to gain a better understanding of the relationship between the reading of men's fitness magazines and concerns related to leanness and muscularity. Previous research had found an association between the reading of these magazines and internationalization of the fit ideal, body dissatisfaction, and eating disorder attitudes among college men. However, little was known about the nature of this relationship.

The dissertation combined a quantitative content analysis of *Men's Health* and *Men's Fitness* magazines published from 1999 to 2003, with qualitative, in-depth interviews with 13 male undergraduates. Findings suggest that fitness magazines disseminate only one type of male physique as healthy, fit, and attractive: the lean and muscular physique, characterized by chiseled abdominal muscles. Dissemination of this ideal may have the positive effect of promoting involvement in healthy activities, such as exercising with weights. However, the ideal is an extreme, unrealistic representation,

which may contribute to body dissatisfaction and engagement in unhealthy, appearance-driven pursuits. In fact, few men can achieve the ideal without doing so.

Interviews with college men suggest that they may be internalizing the ideal and engaging in behaviors designed to attain it, such as limiting carbohydrates and/or fat in their diets, increasing consumption of protein, exercising (particularly with weights), and using performance-enhancing supplements such as whey protein, creatine, caffeine, and ephedra to reduce body fat and increase muscle mass. Some of these behaviors, particularly the use of supplements, could lead to serious health problems.

Overall, the interviews did not suggest that exposure to the magazines was a significant factor in motivating either men's acceptance of the lean and muscular ideal or their involvement in behaviors linked to the pursuit of that ideal. Rather, findings suggest that other influences, such as previous involvement in competitive sports or interactions with friends who engage in these behaviors, may contribute to an interest in body change that precedes the reading of fitness magazines. More research is needed to determine whether—and if so among which readers—exposure to fitness magazines may serve to reinforce existing concerns related to achieving a lean and muscular physique.

## CHAPTER 1 PURPOSE AND SIGNIFICANCE OF THE STUDY

The past 20 years have seen the development of a substantial body of research linking the thin female beauty ideal portrayed in the media with a range of health problems among adolescent girls and women, including body dissatisfaction and eating disorders (Becker, Burwell, Gilman, Herzog, & Hamburg, 2002; Field et al., 1999; Groesz, Levine, & Murnen, 2002; Harrison, 2000; Harrison & Cantor, 1997; Hofschire & Greenberg, 2001; Levine & Smolak, 1996; Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Stice, Spangler, & Agras, 2001). Less attention has been paid to the ways in which the lean and muscular male body ideal disseminated in the media may contribute to body dissatisfaction and harmful weight control and muscle development behaviors among men.

### **History of the Male Body Ideal**

Sociocultural standards of beauty for males emphasize strength and muscularity. When asked about body type preferences, boys as young as 5 or 6 prefer the mesomorphic type (well-proportioned, average build), rather than ectomorphic (thin) or endomorphic (fat) (Kirkpatrick & Sanders, 1978; Mishkind, Rodin, Silberstein, & Striegel-Moore, 1986). Within the mesomorphic category, a majority select the muscular mesomorphic body type, a V-shaped “muscleman”-type body “characterized by well-developed chest and arm muscles and wide shoulders tapering down to a narrow waist”

(Mishkind et al., 1986, p. 547). Men who meet this ideal are considered more attractive and receive more social benefits (Grogan, 1999; Mishkind et al., 1986).

Research on media portrayals of women consistently has shown that, since the 1960s, the media has promoted a thin body ideal for women (Chernin, 1981; Gagnard, 1986; Garner, Garfinkel, Schwartz, & Thompson, 1980; Striegel-Moore, Silberstein, & Rodin, 1986; Wiseman, Gray, Mosimann, & Ahrens, 1992). Although the role of the media in promoting the muscular male ideal has not been examined to the same extent, there is increasing evidence that the media contribute to the dissemination of a lean and muscular male sociocultural standard of beauty, and that this ideal has become more muscular over the past two decades.

The broad-shouldered, narrow-hipped male body was idealized in the art of ancient Greece and Rome. In the mid-1800s, however, attention shifted to the female body, and “from then until the 1980s, the male body was rarely idealized in art, except in paintings and photography aimed at gay male audiences” (Grogan, 1999, p. 17). The focus on the male body reemerged in the 1980s and 1990s, when idealized images of naked or half-naked men became common in mainstream Western media.

Bordo (1999) suggests that these types of advertising images, featuring Adonis-like, sensual men, were introduced into the mainstream media by fashion designers such as Calvin Klein in order to appeal to a wide audience of consumers. The use of these types of images, which previously had been found mainly in media targeting gay men, reflected advertisers’ recognition of the growing disposable income of gay males ages 20-40, as indicated by surveys conducted by *The Advocate* in the late 1970s (Bordo, 1999). In an attempt to reach these consumers without alienating heterosexual audiences, these

advertisers began to use erotic images of males, combined with symbols and messages that could be recognized by gay audiences but were not offensive to straight readers (Bordo, 1999). This dual marketing approach, in which “the male body becomes a blank canvas on which the viewer can project meaning,” made it possible for advertisers to develop campaigns popular with homosexual men as well as heterosexual men and women (Rohlinger, 2002). The lean and muscular male body physique is now featured in numerous advertisements (Grogan, 1999).

Pope, Phillips, and Olivardia (2000) contend that a lean and highly muscular male body ideal, a “hypermale” look that was made possible by the development of anabolic steroids, also has become popular in the media. First used by body builders in the 1940s and 1950s, anabolic steroids contribute to the development of a body shape characterized by a disproportionate amount of muscularity in the shoulders and upper arms—a “more male than male” look (p. 36). The hypermale look does not represent healthy body development; it is an unnatural build that is only achievable through steroid use.

### **Evidence That The Ideal Has Become More Lean and Muscular**

Studies provide support for the idea that the male body ideal portrayed in the media has become more lean and muscular since the 1980s (Law & Labre, 2002; Leit, Pope, & Gray, 2001; Spitzer, Henderson, & Zivian, 1999). Content analyses of *Playgirl* magazine have found that models have become increasingly muscular over the years (Leit, Pope, & Gray, 2001; Spitzer, Henderson, & Zivian, 1999). Another study, which examined changes in the images of men in *Rolling Stone*, *GQ*, and *Sports Illustrated* from 1967 to 1997 found that the frequency of highly muscular, very low fat body images for men increased significantly during the 30-year period (Law & Labre, 2002).

Images of lean and muscular men also have become common in numerous health, fitness, and bodybuilding magazines for men. Although magazines targeted toward male bodybuilders have been around since the 1930s, these typically have been oriented toward “serious” bodybuilders, men for whom developing and defining their muscles was at least an intensely pursued hobby if not actually a profession. It was only in the late 1980s, when *Men's Health* and *Men's Fitness* were launched, that men's magazines began to promote the desirability of “six-pack abs” and perfect pectoral muscles to average men who are neither professional athletes nor Mr. America-type bodybuilders.

The lean and muscular male body ideal also is evident in other media targeting men, including magazines, television, and movies. Adolescent males are among the largest audiences for televised wrestling matches produced by World Wrestling Entertainment (WWE, formerly called the World Wrestling Federation). These matches, featuring choreographed violent movements and soap opera-like plots, are populated by extremely muscular characters. A study that identified adolescents’ favorite actors and actresses found that Arnold Schwarzenegger, Jean Claude Van Damme, Sylvester Stallone, Steven Segal, and Wesley Snipes were all included in adolescent males’ top 10 list (Distefan, Gilpin, Sargent, & Pierce, 1999). None of these muscular actors made it to the adolescent females’ list of top 10 favorites.

### **Problems Related to Achieving the Lean and Muscular Ideal**

Although the impact of the mediated male ideal has not been explored to the same extent as that of its female counterpart, studies suggest that exposure to the lean and muscular ideal may contribute to body dissatisfaction and related problems among men. A study of the relationship between media consumption and eating disorders found that exposure to thinness-depicting and thinness-promoting media had a significant impact on

college men's endorsement of personal thinness and dieting (Harrison & Cantor, 1997). Another study explored the role of the media in promoting weight concerns among children ages 9 to 14. This national survey found that boys and girls who were making a considerable effort to look like same-sex figures in the media were more likely than their peers to develop weight concerns and become constant dieters (Field et al., 2001). For both men and women, exposure to images of attractive, same-gender models has been found to increase body dissatisfaction (Grogan, Williams, & Conner, 1996). Most recently, an experiment with male college students found that exposure to advertisements featuring muscular men increased the discrepancy between the subjects' perceived level of muscularity and the level of muscularity that they would like to have (Leit, Gray, & Pope, 2002).

Studies suggest that eating disorders and disordered eating behaviors are increasing among men. A study comparing male and female patients admitted for inpatient eating disorders service at The New York Hospital between 1984 and 1997 found that males constituted an increasing percentage of total admissions (Braun, Sunday, Huang, & Halmi, 1999). In another study, 20% of 93 undergraduate men at an Australian university displayed attitudes and behaviors characteristic of eating disorders and disordered eating, such as limiting intake of food for weight/shape reasons and eating only one or two meals a day (O'Dea & Abraham, 2002).

Other behaviors related to the achievement of the lean and muscular ideal, such as the use of steroids and performance-enhancing supplements, also are on the rise among men. Data from the Monitoring the Future Survey indicate that while use of most illegal drugs is leveling off or decreasing, anabolic steroid use among adolescent males is on the

rise (Johnston, O'Malley, & Bachman, 2003). This annual survey of illegal drug use among young people in grades 8, 10, and 12 indicated that, from 1998 to 1999, steroid use among young adolescent boys increased about 50% (from 1.6% to 2.5% in 8th grade, and from 1.9% to 2.8% in 10th grade), and that this increase has held steady in subsequent years.

The use of performance-enhancing nutritional supplements marketed as supporting the achievement of leanness and muscularity (e.g., Ripped Fuel, Hydroxycut) also has become more popular among males. A recent survey found that 67% of young people ages 15-17 were familiar with these types of supplements (BlueCross BlueShield, 2001). The top reason for using performance-enhancing supplements was performing better in sports, followed by building muscle, and looking better—a reason reported by 16% of respondents.

### **Media as a Sociocultural Risk Factor**

Research conducted with women suggests that media images of difficult-to-achieve body ideals can be viewed as a sociocultural factor promoting body dissatisfaction and unhealthy weight control behaviors (Fallon, 1990; Heinberg 1996). Although sociocultural pressures may be exerted by other actors, such as family and friends, it has been suggested that the media are the most powerful communicators of body ideals due to their accessibility, popularity, and pervasiveness (Heinberg, 1996; Mazur, 1986).

Before the development of electronic media, ideals of beauty had long been disseminated via art, music, and literature. However, as argued by Freedman (1986), the impact of today's visual media is different than that of the visual arts of the past. Historically, artistic depictions of human bodies were romanticized and perceived as unattainable. In today's media, however, the boundaries between fantasy and reality are

blurred. Although images of models are endlessly manipulated and perfected via airbrushing, soft-focus cameras, and other techniques, they are presented as realistic and achievable representations of actual people. Moreover, television, magazines, and other media continuously disseminate information on how to achieve the idealized physiques. This suggests that the media today may have a more powerful influence on viewers' body image than the idealized artwork of the past.

Magazines are a type of mass media that is ideally suited both to disseminating the male body ideal (via large, vivid images of lean and muscular models) and providing information on ways to achieve it via editorial copy and advertisements on weight lifting, exercise, nutritional supplements, and other related topics. Although research on the content and uses of men's fitness magazines is lacking, a recent study found that the reading of fitness magazines was associated with the internalization of the male ideal as physically fit, as well as with body shape dissatisfaction and disordered eating (Morry & Staska, 2001).

Two theories may help explain the mechanism through which men's magazines may encourage muscularity concerns and behaviors among men: social comparison theory and social learning theory. According to social comparison theory (Festinger, 1954), magazines featuring lean and muscular male models may provide a beauty standard for social comparisons that may lead to a discrepancy between perceived and desired levels of muscularity. Once a discrepancy is perceived, the person making the comparison will try to eliminate it by engaging in behaviors designed to approximate the physical ideal.

Social comparison theory can help explain how the images of lean and muscular males featured in fitness magazines may contribute to body dissatisfaction and behaviors designed to reduce the discrepancy between people's current physiques and perceived ideals. However, it does not address the possible role that these magazines may play in disseminating information on how to achieve the ideal body via weight control and muscle building behaviors. Social learning theory may be more useful in this regard.

As proposed by social learning theory (Bandura, 1977), human beings learn not only through personal experience but also by observing others, including through the media. Viewed from this perspective, fitness magazines can be seen as providing instructions on how to achieve the ideal via exercise, weight lifting, nutritional supplements, diets, and other means. Social learning theory suggests that media content can serve as the basis for "(a) learning novel or new behaviors (change effects), (b) the facilitation or inhibition of already learned behaviors, or (c) the prompting of learned behaviors (both reinforcement effects)" (Perse, 2001, p. 192). Thus, the reading of fitness magazines may reinforce existing behaviors as well as encourage the modeling of new ones.

### **Audience Factors**

The theories described above suggest that the fitness magazines could contribute to a desire for leanness and muscularity, provide instructions on how to achieve the ideal body, and provide reinforcement to men already concerned with body shape change. However, men who read fitness magazines are not passive recipients of information. In order to examine the possible effects of these types of texts, it is necessary to also explore the active role of audiences in selecting and interpreting their contents.

Unlike early media research presuming powerful effects of the media on passive audiences, current theories and perspectives conceive of the audience as active and of media effects as moderated by individual and social influences. These theories view media effects as conditional on characteristics of the audience, such as individual characteristics, social categories (e.g., gender, age, ethnicity, educational level), and social relationships. As noted by Perse (2001), these audience variables “can act either as a barrier to media effects or as a lens to enhance the likelihood of media effects” (p. 35).

One of these audience-based perspectives originated from the work of cultural studies scholars at the University of Birmingham’s Centre for Contemporary Cultural Studies in the 1960s and 1970s. This type of research, which has been termed “audience reception studies,” examines how audiences interpret media texts and how these interpretations are influenced by social and cultural factors (Alasuutari, 1999).

As proposed by Stuart Hall’s encoding/decoding model (Hall, 1999), a media text can be decoded, or interpreted, in at least three ways. The first is the *dominant-hegemonic* position, in which the viewer decodes the message according to the intentions of its producers (conducts a *preferred* reading), thereby accepting the dominant ideology with which the message is encoded. The second is the *negotiated* position, “what most people do most of the time” (Hall, 1994, p. 265), where the viewer recognizes the embedded ideology but accepts it only partially. Lastly, the viewer may approach the program from an *oppositional* position, recognizing the dominant codes and decoding them in a contrary way, reconstituting the message using an alternative framework of reference.

Hall’s encoding/decoding model brought attention to the idea that the messages encoded by media producers and decoded by the audience are not necessarily the same.

Moreover, Hall argued that because media content is polysemic, or open to interpretation, different audiences may interpret texts very differently. Most recently, audience reception studies have brought attention to the fact that although texts are polysemic and audiences active, the cultural environment plays an important role in both the construction and the interpretation of media texts (Alasuutari, 1999).

As applied to the topic of this dissertation, audience analysis research suggests that different readers may interpret fitness magazines in varied ways. However, the overall cultural environment sets up the parameters within which these types of messages are produced and consumed. For example, because men's fitness magazines are created within a market-driven society, their contents may be expected to promote the consumption of products related to physical fitness. Similarly, although in theory an unlimited number of readings is possible, these readings will be conducted within the context of mainstream American culture, which promotes concerns with beauty, youth, and physical perfection.

The unique ways in which readers interact with texts also is addressed by *schema theory*, which focuses on the cognitive processes through which individuals process information. This theory brings into attention the importance of stored, organized knowledge that has been abstracted from previous experiences, to the processing of new information (Graber, 1988). As noted by Perse (2001), preexisting schemas influence what is learned because they affect categorization, perception, and retention. Moreover, the processing and learning of information are related to the schema that is primed at the time, or is at the top of the mind (Perse, 2001).

Although this theory is psychological in nature, the fact that stored knowledge is derived from previous experience brings into attention the importance of social factors, such as interpersonal relationships and familial and cultural background, which contribute to the formation and priming of schemas. Schema theory suggests that the reader's existing knowledge and experience base serves as a filter through which the contents of fitness magazines will be processed.

The theoretical framework described above suggests that readers of men's fitness magazines may interpret these texts in very different ways, including ones that may not be anticipated by the publishers of these magazines. Different readers may be affected by leanness- and muscularity-promoting media content in very different ways. Personal characteristics such as body size, existing body image preoccupation, personality, reasons for reading the magazines, ability to learn based on cognitive and skills, ability to replicate the modeled activities, and other variables will affect the way in which these images and messages are interpreted and acted upon. So will demographic variables such as age, ethnicity, socio-economic level, and education; as well as interpersonal relationships.

Because young men's uses and interpretations of fitness magazines may vary, the methodology for this study combined a content analysis of fitness magazines with in-depth interviews with college men. The rationale for combining these two methods is discussed in greater detail in Chapter 3.

### **The Study**

As noted earlier, recent research has found an association between the reading of men's fitness magazines and internalization of the fit ideal, body dissatisfaction, and eating disorder attitudes among college men (Morry & Staska, 2001). This study used a

combination of quantitative and qualitative research methods to explore the nature of this relationship. The main research question it explored was: **What is the relationship between the reading of fitness magazines and concerns related to leanness and muscularity among college men?**

In order to obtain a better understanding of this relationship, it was critical to explore two aspects of the research question: text and audience. Therefore, the study combined a content analysis of men's fitness magazines with in-depth interviews with college men. The goal of the content analysis was to examine the contents of men's fitness magazines and how they may promote concerns related to leanness and muscularity. The interviews sought to ascertain college men's perceptions regarding the male body ideal and its achievement and examine any differences between readers and non-readers of these types of titles.

The possible relationship between exposure to the lean and muscular male body ideal and involvement in harmful weight control and muscle-building behaviors is a complex topic that is only now beginning to be examined. At a time when a substantial number of health problems in this country are associated with increasing rates of obesity, the lean and muscular male body ideal disseminated by the media may be viewed as having the positive effect of promoting physical activity, including involvement in athletics and weight-bearing exercises. However, the muscular ideal increasingly featured in the media—characterized by large muscles and lean tissue, rippled abdominals, and extremely low body fat—is an extreme goal that, like the thin, tall, busty female body ideal, is neither achievable by most men nor required for optimum health. In fact, men of all ages may pursue unhealthy activities in order to achieve the ideal.

This dissertation contributes to the growing body of literature on the effects of the lean and muscular male body ideal in a number of ways. It is the first study to categorize the contents of men's fitness magazines and to explore the relationship between the reading of these titles and the development of concerns related to leanness and muscularity. By including in-depth interviews with college males, this study contributes to the limited existing research on men's perspectives regarding the male body ideal and its achievement. More importantly, by combining media effects theories with theories concerning the audience's interactions with texts, the study provides insights into the ways in which personal, interpersonal, and social factors affect the selection and interpretation of media content.

## CHAPTER 2 REVIEW OF THE LITERATURE

The past 20 years have seen the emergence of two trends: the male body ideal disseminated by the media has become more muscular, and body dissatisfaction and related problems have been increasing among males (Braun et al., 1999; Cohane & Pope, 2001; Johnston, O'Malley, & Bachman, 2003; Law & Labre, 2002; Leit et al., 2001; Metzl, Small, Levine, & Gershel., 2001; Pope et al., 2000b). However, the possible association between these two trends is only now beginning to be examined through research.

### **The Male Body Ideal Has Become More Muscular**

Recent suggest that the male body disseminated in the media has become more muscular over the past 20 years. A study comparing the body mass index (BMI) of American men ages 18 to 24 with those of *Playgirl* models found that while men's BMI increased only slightly from 1986 to 1997, the BMI of Playgirl models increased dramatically (from 24.81 to 27.69) (Spitzer et al., 1999). While the *Playgirl* models seemed to gain muscle mass over the years, men in the general population seemed to have gained body fat. A subsequent content analysis of *Playgirl* centerfolds provided support for the finding that *Playgirl* models have become increasingly muscular over time (Leit et al., 2001). The authors estimated the body mass index (BMI) and fat-free

mass index (FFMI)<sup>1</sup> of centerfolds featured in all *Playgirl* magazines published between 1973 and 1997. They found that while the centerfolds' BMI and FFMI increased over the years, their body fat declined, with the models becoming increasingly dense and muscular over time.

Research also indicates that boys' action figures have become increasingly muscular over time. A recent study compared action figures today—including GI Joe and *Star Wars* characters—with their original counterparts (Pope, Olivardia, Gruber, & Borowiecki, 1999). The authors found that many action figures have acquired the physiques of bodybuilders, with particularly impressive gains in the shoulder and chest areas. Some of the action figures not only have grown more muscular but also have developed increasingly sharp muscle definition, such as rippled abdominals. As noted in the study, if the GI Joe Extreme were 70 inches in height, he would have larger biceps than any bodybuilder in history.

Another trend that supports the idea that the male body ideal is becoming more muscular is the tremendous increase in the popularity of weight training machines, gym memberships, performance enhancing supplements, and bodybuilding and fitness magazines. A study of the number of health and fitness centers operating in Dallas, Texas, found that a 50-fold increase occurred from 1960 to 1992, a time when the metropolitan area grew only 2.15 times (Petrie et al., 1996). From 1993 to 2000, consumer spending for exercise equipment in the United States increased from 2.6 billion to 3.6 billion (Sports Business Research Network, 2001). Retail sales of sports supplements increased 6% from 1999 to 2000—from \$525 million to \$555 million—and

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<sup>1</sup> The FFMI, a measure of overall muscularity, is calculated using the following formula:  $FFMI = LBM/H^2 + 6.1 \times (1.8 - H)$ , where LBM is the man's "lean body mass" and H is his height.

is projected to reach \$656 million by year 2005 (MarketResearch.com Academic, 2001). These products are widely advertised in fitness magazines for men, a category that has experienced tremendous growth in the past decade.

The muscular male ideal is also evident in many other media targeting males, including television and movies. Adolescent males are among the largest audiences for televised wrestling matches produced by the World Wrestling Entertainment (WWE). These matches, featuring choreographed violent movements and soap opera-like plots, are populated by extremely muscular characters. A study that identified adolescents' favorite actors and actresses found that Arnold Schwarzenegger, Jean Claude Van Damme, Sylvester Stallone, Steven Segal, and Wesley Snipes were all included in adolescent males' top 10 list (Distefan et al., 1999). None of these muscular actors made it to the adolescent females' list of top 10 favorites.

### **Possible Problems Associated with the Muscular Ideal**

Some of the problems that may be associated with the muscular male body ideal are body image disturbances, eating disorders, and use of steroids and untested dietary supplements. As described below, research suggests that these problems are increasing among men.

#### **Body Image Disturbances**

Body image is generally understood as “the internal representation of your own outer appearance”—how each person perceives his or her body (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999, p. 4). Because people's perceptions and feelings regarding their bodies may vary from extremely positive to extremely negative, Thompson et al. (1999) have suggested that body image may be conceptualized best using a continuum model, “with levels of disturbance ranging from none to extreme and

most people falling near the middle of the range, experiencing moderate concern, distress, or dissatisfaction” (p. 7). At the high end of the scale is body dysmorphic disorder, an extreme preoccupation with a real or imagined appearance defect, which is discussed later in this section.

### **Body dissatisfaction**

According to Thompson et al. (1999), body image disturbances may take many forms, such as affective (upset, distress, or anxiety about one’s appearance), cognitive (unrealistic expectations about a certain appearance feature), behavioral (avoidance of situations that elicit body image scrutiny), or perceptual (overestimation of body size). Different individuals may manifest different aspects of body image disturbance.

The authors suggest that body dissatisfaction, a component of body image disturbance that addresses primarily affective aspects, may be “the most important global measure of distress because it captures the essence of one's subjective evaluation” (Thompson et al., 1999, p. 9). Body dissatisfaction has been found to be the most consistent predictor of the onset of eating disturbances and may even mediate the connection between other risk factors and these disorders (Killen et al., 1996; Stice & Agras, 1998; Thompson, Covert, Richards, Johnson, & Cattarin, 1995; Thompson et al., 1999).

Rodin, Silberstein, and Striegel-Moore (1985) suggest that body dissatisfaction has become so common among women in Western society as to constitute a normative discontent. Although men in our society may be more satisfied with their bodies than women are, they are not immune to body image concerns. Recent studies suggest that men of all ages are dissatisfied with their bodies and that body image concerns may differ by generation, with younger men desiring to lose fat and increase muscularity and older

men being mostly preoccupied with losing weight (Cohane & Pope, 2001; Davis & Cowles, 1991; Drewnowski & Yee, 1987; Mishkind et al., 1986; Silberstein, Striegel-Moore, Timko, & Rodin, 1988). While women tend to be most dissatisfied with their middle and lower bodies and their breasts, men have been found to be most unhappy with their middle and upper bodies, particularly abdomens, chests, and upper arms—body parts that frequently are emphasized in the media (Garner, 1997; Grogan, 1999; Hoyt & Kogan, 2001).

Body image concerns often become salient during adolescence—a time of transition characterized by physical growth spurts, sexual maturation, psychological distress, distancing from parents, and increased concern about appearance and popularity. Body shape changes, with adolescent females developing broader hips and adolescent males broader shoulders. After the adolescent growth spurt, adolescent males are taller and heavier than their female counterparts and also have greater strength and musculature (Offer, Schonert-Reichl, & Boxer, 1996).

Research on normative adolescent development indicates that females experience more body dissatisfaction than males (Block & Robins, 1993; Brack, Orr, & Weisberg, 1988; Kling, Hyde, Showers, & Buswell, 1999). While adolescent females experience decreased feelings of attractiveness, adolescent males experience improved moods and body image and greater satisfaction with their weight (Offer et al. 1996). This finding is hardly surprising, given that the physical changes precipitated by puberty often bring adolescent males closer to the male body ideal while distancing adolescent females from the thin sociocultural standard of beauty for women. As noted by Koff, Rierdan, and Stubbs (1990) in a study examining the relationship between body image and self-

concept among ninth-grade males and females, “to the extent that appearance is an important male dimension, the ninth-grade males in this study are beginning to approximate the mature male body ideal as they experience pubertal change, and thus are likely to experience increasing satisfaction with their bodies in a global, accepting way” (p. 64).

A study on body image among adolescent male football players and cross-country runners provides support for the idea that approximating the male body ideal contributes to greater body satisfaction among males (Parks & Read, 1997). In this study, football players expressed greater satisfaction with their physical attractiveness and upper body dimensions than cross-country runners. The authors suggest that football players’ greater satisfaction with their bodies may relate to their ability to fit the male ideal body type (mesomorphic). Cross-country running, on the other hand, requires a lean physique and therefore may place athletes in conflict with the cultural belief that males should possess a muscular body.

The vast majority of athletes in this study expressed dissatisfaction with their bodies, with 83% reporting dissatisfaction with their current weight. Approximately 80% of football players and 43% of cross-country runners wanted to gain weight, while 15% of football players and 20% of cross-country runners wanted to lose weight (Parks & Read, 1997). Adolescent males in both groups wanted to be taller.

A survey of weight loss and weight/muscle gain behaviors among Connecticut adolescents found that weight preoccupation was prevalent among youth from all socioeconomic backgrounds (Newmark-Sztainer, Story, Falkner, Beuhring, & Resnick, 1999). The study, which surveyed a statewide sample of public school students, found

that adolescent males and females were engaging in a variety of behaviors-from exercising to dieting and steroid use-in order to control their weight.

The finding that adolescent males are experiencing body dissatisfaction also was supported by a recent review of 17 studies on body image among males ages 18 and younger (Cohane & Pope, 2001). Researchers found that although males were more satisfied with their bodies than females were, students of all ages reported body dissatisfaction, often associated with reduced self-esteem. While female students generally wanted to be thinner, most male students desired to be bigger.

A recent study of body image among 209 students in grades 5, 8, and 12 of private schools in a large southeastern city found that body image satisfaction among boys declined progressively from the 5th to the 12th grade (Polce-Lynch, Myers, Kliewer, & Kilmartin, 2001). While fifth and eighth-grade boys reported higher body image satisfaction than their female counterparts, this difference disappeared by grade 12.

By the time they reach college, men and women may experience similar levels of body dissatisfaction. Approximately 95% of college-age men interviewed by Mishkind et al. (1986) expressed dissatisfaction with some aspect of their bodies. However, studies suggest that while most women would like to lose weight, men are equally divided between those wanting to be heavier and those wanting to be thinner (Drewnowski & Yee, 1987; Silberstein et al., 1988). Drewnowski and Yee (1987) found that while 85% of female freshman college students wished to lose weight, 40% of males wanted to lose weight and 45% wanted to gain weight. A second study duplicated these findings, with similar numbers of undergraduate males (78.2%) and females (77.3%) choosing an ideal figure that was different from their current size (Silberstein et al., 1988). Again, unlike

females, males were more likely to want to be larger (46.8%) than to want to be thinner (40%). The study also found that a man's self-esteem was affected by his degree of body dissatisfaction.

A more recent study of body size preferences took into account whether or not the respondent was overweight according to the Metropolitan Life Insurance Company chart (Raudenbush & Zellner, 1997). Researchers found that male respondents who were overweight wanted to be thinner, while normal weight men wanted to be heavier.

Studies suggest that older males also experience body dissatisfaction. However, their concerns may differ from those of younger men. While some studies have found that older men are more satisfied with their bodies than younger men, others have found the opposite (Davis & Cowles, 1991; Lynch & Zellner, 1999; Rozin & Fallon, 1988). Lynch and Zellner (1999) suggest that these mixed findings may reflect the fact the previous research often used drawings adapted from Stunckard, Sorensen, and Schulsinger (1983) that varied only in levels of body fat. Using these types of figures, Rozin and Fallon (1988) found that younger men were more satisfied with their bodies than older men. In another study, Davis and Cowles (1991) found that older men desired to lose weight while younger men wanted to gain weight. Studies using these types of figures also have suggested that undergraduate men were more satisfied with their bodies than women (Fallon & Rozin, 1985; Zellner, Harner, & Adler, 1989). However, these studies failed to take into account levels of muscularity.

In order to identify concerns related to muscularity, Lynch and Zellner (1999) created a set of male figure drawings illustrating differing degrees of muscle mass. They found that adult men (ages 30-60) were more satisfied with their current bodies than

college men, who desired to be more muscular. Approximately 84% of college males but only 44% of adult men indicated a desire to be larger. Among the four groups (adult males, adult females, college males, and college females) that were asked to indicate their preference regarding the male body ideal, college males selected the highest level of muscularity. In another study, 85% of male college undergraduates indicated wanting to be more muscular (Vartanian, Giant, & Passino, 2001). Taken in conjunction with the existing literature on male body dissatisfaction, these studies suggest that the source of body dissatisfaction may differ by generation, with younger men being concerned with achieving greater muscularity and older men being more preoccupied with losing body fat.

To address the need to take into account both body fat and muscularity, Pope et al. (2000b) developed a computerized body test image for men—the “somatomorphic matrix”—featuring images that vary along these two dimensions. The use of this type of instrument may provide greater insight into body image concerns among men. Another scale that includes levels of fat and muscularity also has been developed and used to categorize images of men in popular magazines across three decades (Law & Labre, 2002).

Qualitative studies that have asked men about their perceptions regarding the male body ideal have found that men would like to look more muscular but are not motivated to do so because they do not think it is a very important goal (Grogan, 1999; Labre & Walsh-Childers, 2002). Undergraduate male students at the University of Florida who participated in focus groups identified the male body ideal as the lean and muscular physique featured in the media (Labre & Walsh-Childers, 2002). Participants noted that

they would like to achieve that look, particularly to attract women. However, they were unwilling to “work that hard” or to endanger their health by using anabolic steroids.

Research on body dissatisfaction among men has focused primarily on Caucasian men living in the United States. Few studies have addressed body dissatisfaction among members of different ethnic groups in the U.S. or among men in other countries.

However, a recent study found that Asian college males attending an American university were more dissatisfied with their bodies than their Caucasian counterparts (Barnett, Keel, & Conoscenti, 2001). Although both groups desired the same body size, the Asian students, unlike the Caucasians, perceived themselves as smaller than the ideal.<sup>2</sup>

Using the somatomorphic matrix described above, Pope et al. (2000a) examined body image concerns among college-age men in Austria, France, and the United States. They found that while the discrepancy between current and desired levels of body fat was small, the same was not true for muscularity. In all three countries, men chose a body ideal that was about 28 pounds more muscular than themselves and estimated that women preferred an even more muscular body.

Although more research is certainly needed, these studies suggest that Caucasian American men may not be alone in experiencing concerns related to muscularity.

### **Body dysmorphic disorder and muscle dysmorphia**

At the high end of the body image disturbance continuum is body dysmorphic disorder (BDD), a disturbance characterized by excessive preoccupation with a nonexistent or slight defect in body appearance, usually regarding a particular body part

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<sup>2</sup> The scale used in this study only took into account body size, not muscularity. This may help explain why the Caucasian students did not indicate a discrepancy between their current body and their perception of the male body ideal.

such as face, skin, or hair, which is distressing or interfering with the person's life (American Psychiatric Association, 2000). The essential characteristic of this disorder is the extent of a person's preoccupation with an aspect of his or her appearance. The person may demonstrate an extreme level of distress over a minor appearance problem. In other cases, there may not be any appearance defect at all (Thompson et al., 1999). BDD is the only category in the Diagnostic and Statistical Manual of Mental Disorders (APA, 2000) that is specific to a dysfunctional body image.

Based on the findings of several studies involving interviews with male and female bodybuilders, Pope et al. (1997) identified muscle dysmorphia as a form of BDD characterized by pathological preoccupation with degree of muscularity. As noted by the authors, the “essential feature of muscle dysmorphia is a chronic preoccupation that one is insufficiently muscular (or sometimes, especially in the case of women, both muscular and lean)” (p. 550). Patients become consumed by weightlifting, dieting, and associated activities to the point of forgoing personal relationships and endangering their health.

Individuals with body dissatisfaction, BDD, or muscle dysmorphia often have been found to experience co-occurring problems, such as eating disturbances and depression (Thompson et al., 1999). Similar to men and women with eating disorders, men diagnosed with body dysmorphia have been found to experience mood and anxiety disorders (Olivardia, Pope, & Hudson, 2000). Anabolic steroid use also has been found to be common among bodybuilders exhibiting the characteristics of muscle dysmorphia, particularly males (Olivardia et al., 2000; Pope et al., 1997). Body image disturbances of all types therefore can be viewed as being associated with a host of other disorders and problems.

## **Eating Disorders**

Eating disorders traditionally have been much less common among men than among women. In clinic samples, about 10-20% of patients with anorexia nervosa are male (Andersen, 2002). However, recent community-based epidemiological studies of anorexia nervosa and bulimia nervosa suggest a ratio of one male case to about six female cases (Andersen, 2002).

Men and women who have eating disorders have been found to have similar clinical characteristics, suggesting that eating disorders are similar illnesses in both groups (O'Dea & Abraham, 2002; Olivardia, Pope, Mangweth, & Hudson, 1995; Woodside et al., 2001). Both men and women with eating disorders are likely to exhibit other co-morbid major psychiatric disorders as well as companion personality disorders, with the most common of these being mood disorders, substance abuse, anxiety syndromes, obsessive-compulsive disorders, and personality disorders (Andersen, 1999; Carlat, Camargo, & Herzog, 1997; Striegel-Moore, Garvin, Dohm, & Rosenhelk, 1999; Woodside et al., 2001). However, male eating disorder patients are more likely than female patients to have substance abuse as a comorbid condition. Male patients also have been found to have a lower bone mineral density and to be more severely afflicted by osteopenia and osteoporosis than their female counterparts (Andersen, 2002).

A recent study suggests that eating disorders among males may be increasing and that, among males, these disorders are more likely to be associated with athletic pursuits (Braun et al., 1999). The study compared 51 males and 693 females admitted to the inpatient eating disorders service at The New York Hospital between 1984 and 1997. Researchers found that males constituted an increasing percentage of total admissions. Although there were many similarities between male and female patients, differences

included a later onset of eating disorders among males than females and a greater involvement of males than females in an occupation or athletic pursuit in which control of weight was important for good performance, such as running, weight lifting, wrestling, baseball, basketball, and football. Males also were less likely than females to use diet pills and laxatives to control their weight.

As is the case among women, the desire to lose weight seems to be more prevalent among particular groups of men, such as wrestlers and bodybuilders (Powers, & Johnson, 1999). Wrestlers are seven to 10 times more likely to develop an eating disorder than other men, which approximates the increased risks faced by women who study ballet versus women in general (Andersen, 1995). Research also suggests that homosexual males may be at a greater risk for developing body dissatisfaction and eating disorders, with gay males representing 20% of eating-disordered males (Andersen, 2002; Carlat et al., 1997; French, Story, Remafedi, Resnick, & Blum, 1996; Olivardia et al., 1995). It has been suggested that this increased prevalence may occur as a result of the greater value placed on slimness in the gay community (Siever, 1994). Yet another risk factor for men may be obesity, which has been found to be more common among male than female bulimics (Carlat & Camargo, 1991). Unlike women, who generally feel fat before dieting but are of normal weight, boys and men who develop eating disorders often are mildly to moderately obese when they begin to diet (Andersen, 1999).

A survey of Connecticut adolescents conducted by Newmark-Sztainer et al. (1999) found that adolescent males were engaging in a number of disordered eating behaviors to control their weight, including dieting (12.4%), vomiting (1.7%), using laxatives or diuretics (1.6%), and taking diet pills (1.2%). Approximately 21.2% of adolescent males

reported eating more food or using food supplements in order to gain weight and/or muscle.

In another study, 20% of 93 undergraduate men at an Australian university displayed attitudes and behaviors characteristic of eating disorders and disordered eating, such as limiting intake of food for weight/shape reasons and eating only one or two meals a day (O'Dea & Abraham, 2002). A quarter of the participants reported worrying about their shape and weight, and a third reported exercising for reasons related to weight and shape. As noted by the researchers, the college men in this study “did not differ from a comparable group of female students in eating attitudes, undereating, and overeating behaviors or psychological feelings” (p. 275), arguing that the normative discontent with body shape found among women is increasingly becoming the norm among young men.

Men who are attempting to gain weight may be at risk for developing binge eating disorder, which is characterized by eating large amounts of food in a short period of time, accompanied by feelings of depression, guilt, disgust, or being out of control (Fairburn & Walsh, 1995). This disorder, which is as common among males as among females, may place adolescent males at risk for obesity and the complications associated with it, including heart disease and diabetes (Andersen, 2002). Because overeating among adolescent males may not attract attention, the binge eating disorder may not be recognized and treated (Andersen, 1995).

There is evidence that other eating disorders such as anorexia nervosa and bulimia nervosa also may remain undetected among males. A recent study found that males with eating disorders were more likely to delay seeking treatment, perhaps due to embarrassment at having what is considered a female problem (Carlat et al., 1997). The

prevalence of eating disorders among this population therefore may be higher than suggested by estimates based on the number of males seeking treatment for these disorders.

### **Use of Anabolic Steroids**

Data from the Monitoring the Future Survey indicate that while use of most illegal drugs is leveling off or decreasing, anabolic steroid use among adolescent males is on the rise (Johnston, O'Malley, & Bachman, 2003). This annual survey of illegal drug use among young people in grades 8, 10, and 12 indicated that, from 1998 to 1999, steroid use among young adolescent boys increased about 50% (from 1.6% to 2.5% in 8th grade and from 1.9% to 2.8% in 10th grade). The prevalence rates for subsequent years continue to show an upward trend, with estimates of 2.5% in 8th grade, 3.0% in 10th grade, and 3.5% in 12th grade (Johnston, O'Malley, & Bachman, 2003). From 2000 to 2001, disapproval of steroid use among male students in grade 12 experienced a significant decrease. Data from this study also suggest that the perceived availability of steroids is high, particularly in the upper grades.

Other surveys of high school and middle school students have identified the prevalence of steroid use among males to be between 2.3 and 6.5% (Yesalis, Bahrke, Kopstein, & Kennedy, 2000). The Connecticut survey of weight loss and weight/muscle gain behaviors among adolescents referenced earlier, for example, found that 0.5% of females and 2.3% of males had used steroids in the past week (Newmark-Sztainer et al., 1999). Among male adolescents, steroid use was more common among students with a body mass index (BMI) lower than 15 (5.1%), students reporting low family socioeconomic status (4.4%), Hispanic/Latino (3.5%) and other/mixed ethnicity students (4.4%), and younger students (2.9% of 7th graders). As the authors noted, the "high rates

of steroid use among boys with low BMI values are inconsistent with the image that only large athletes (e.g., weight lifters and football players) are at risk for steroid use” (p. 46).

The finding that steroid use was higher among younger students is supported by a study conducted with Massachusetts middle school students (Faigenbaum, Zaichkowsky, Gardner, & Micheli, 1998). Results indicated that approximately 2.6% of males and 2.8% of females ages 9 to 13 had used steroids. While for middle school females steroid use peaked at age 12 (5.1%), for males it did so at age 13 (5.3%). Researchers suggested that the decrease in use of steroids by female adolescents after age 12 may be related to a decrease in this group’s participation in sports during adolescence. The males most likely to use steroids were those involved in gymnastics and weight training. However, steroid use also occurred among male students who were involved in a variety of sports, including basketball, football, baseball, and hockey. The study also indicated that steroid users were more aware of the benefits of using the drug than nonusers, less aware of risks, and more willing to use steroids in the future.

The use of anabolic steroids is associated with many health risks. The known or suspected physical consequences of anabolic steroid use include cosmetic effects (such as acne and development of abnormal breast tissue), as well as heart disease, liver toxicity, liver tumors, and infertility (Friedl, 2000). Steroid use by children also can lead to stunted growth (Goldberg & Elliot, 2000). In addition, intravenous steroid use can contribute to the transmission of diseases such as HIV/AIDS and hepatitis B and C. A study of adolescent steroid users found that one in four had shared needles (Durant, Rickert, Ashworth, Newman, & Slavens, 1993). In addition, steroids also may serve as a gateway to other injectable drugs (Pope et al., 2000b).

In addition to physical consequences, the use of anabolic steroids also has been associated with mood disorders and aggression. A study comparing athletes who used steroids to those who did not found that the most important difference between them was in regard to mood disorders, including major depression and manic episodes (Pope & Katz, 1994). “Several users reported that they were expelled from their homes by parents, wives, or girlfriends because they became intolerably aggressive. Nearly all of these individuals denied comparable behavior before steroid use” (Pope & Katz, 1994, p. 379). The authors conclude that the use of steroids, particularly in high doses, may cause serious mood disorders among athletes, resulting in health problems for the user and possibly for the victims of his irritability and aggression.

Anabolic steroids are considered a controlled substance that can be used legally for medical purposes only. However, many athletes, bodybuilders, and others use steroids to enhance athletic performance and/or physical appearance (Wroblewska, 1997). About 50% to 80% of steroids used for nonmedical purposes are purchased on the black market—smuggled from other countries, diverted from pharmaceuticals, or manufactured in clandestine labs (Kleinman & Petit, 2000). Although the black market is the major source of the anabolic steroids consumed by athletes, other sources include physicians, pharmacists, veterinarians, and coaches, who may supply anabolic steroids to team members to prevent them from using street drugs that may be contaminated (Kleinman & Petit, 2000; Wroblewska, 1997).

### **Use of Performance-Enhancing Dietary Supplements**

Adolescent males wishing to increase their muscularity also have at their disposal a number of easily accessible and legal performance-enhancing dietary supplements (also

called “sports supplements” or “ergogenic aids”).<sup>3</sup> Like other dietary supplements, these substances are overseen by the Federal Drug Administration (FDA), which does not require premarket testing of these products for safety and efficacy.

The 1994 Dietary Supplement Health and Education Act (DSHEA) allows supplement makers to bring vitamins, minerals, and botanicals to market without being subject to clinical trials. Although supplement manufacturers cannot claim that their products “diagnose, mitigate, treat, cure, or prevent” a specific disease, they are allowed to use scientific literature to make claims regarding how their products may affect the structure and function of the body (DSHEA, 1994). This means that claims regarding enhanced athletic performance—be they valid or not—can be made without FDA authorization. Supplement makers are allowed legally to market their products as contributing to increased power, strength, and lean muscle development, without having to substantiate these claims.

The FDA also does not require dietary supplements to be tested to ensure that they contain the ingredients listed in the product labels. As a result, actual contents may vary, and manufacturers can substitute part or all of a product with inferior, cheaper ingredients. In addition, supplement makers are not required to collect information on adverse effects and present reports to the FDA. Because reporting of adverse effects is voluntary, it is estimated that the FDA receives reports of less than 1% of all adverse events associated with dietary supplements (DHHS, 2001). Of these, fewer than 10% are received directly from manufacturers. In addition, a recent study indicates that for the

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<sup>3</sup> It has been suggested that given the lack of evidence on the efficacy of ergogenic dietary supplements, the term “ergogenic prospects” might be more appropriate (Kern, 2000).

majority of the adverse effects reports that are received, the FDA is unable to determine the ingredients of the mentioned products (DHHS, 2001).

Performance-enhancing dietary supplements, or ergogenic supplements, are nutritional substances that may enhance energy production, use, or recovery and thereby provide athletes with a competitive advantage (Ahrendt, 2001). Although sports supplement makers initially targeted bodybuilders and athletes as their primary audience, marketing reports suggest that these companies are now attempting to broaden their reach to the average consumer: “Many sports supplement marketers see the mass market as the best way to increase sales and are now moving strategically to enter the mainstream arena” (MarketResearch.com, 2001, p. 17). New marketing strategies include the use of models who are not as muscular as bodybuilders, the placement of ads in mainstream media, such as TV sports shows and health and fitness magazines, and the development of nutraceutical formulas for fitness or performance needs, rather than for bodybuilding (MarketResearch.com, 2001).

A recent survey found that 67% of young people ages 15-17 were familiar with these types of supplements (BlueCross BlueShield, 2001). The top reason for using performance-enhancing supplements was performing better in sports, followed by building muscle, and looking better-the reason reported by 16% of respondents.

One of the most popular performance-enhancing supplements is creatine, a supplement used to improve athletic performance and increase muscle mass. Creatine is a substance that is naturally produced by the liver, kidney, and pancreas from a combination of three amino acids (methionine, arginine, and glycine) and also is obtained in small amounts from protein-rich foods such as meat and fish. Approximately 95% of

creatine in the body is found in muscle (Rubinstein & Federman, 2000). Discovered by a French scientist in 1832, creatine is believed to increase muscle strength during short bursts of activity and decrease recovery time between workouts (Metzl, 1999). Most people produce about 1 or 2 grams of creatine per day and obtain a similar amount from their diet.

The first synthetic version of creatine was produced in the 1950s (Puri, 1998b). However, the supplement did not become known in the U.S. until the 1992 Summer Olympics, when the success of athletes such as British sprinters Linford Christie and Colin Jackson was attributed to creatine use (Bamberger, 1998; Puri 1998b). A year later, creatine monohydrate was introduced into the American market by Experimental and Applied Sciences (EAS), then a small, privately owned company (Puri, 1998b). Other sports supplements manufacturers, such as Weider, General Nutrition Center, and Twin Laboratories (Twinlab), soon joined EAS in producing and marketing creatine, which has become the most popular performance-enhancing supplement, with annual sales estimated at \$600 million (“LifeSmart Nutrition Files Patent,” 2001). Creatine supplements are now widely available in health and natural product stores, health clubs and gyms, sporting good stores, drugstores, and supermarkets, and are sold in various forms, including flavored and unflavored powders, pills, sports drinks, bars, chewing gum, and toothpaste-like gels.

The benefits of creatine on athletic performance are debated. Some studies suggest that creatine may enhance athletic performance in high-intensity, short-duration exercise, such as multiple sprints, jumping, and weight lifting; others indicate no effect; and some studies conducted with swimmers have found an adverse effect on performance, probably

due to increased body mass (Reents, 2000). In fact, the one consistent finding regarding creatine is that use is associated with weight gain, which is thought to occur via the retention of water in the muscles and which seems to contribute to a more muscular appearance (Kreider, 1999). As noted by Rubinstein and Federman (2000), evidence of creatine's efficacy as a performance enhancer is lacking: "Creatine may modestly enhance the performance of activities requiring short bursts of energy and thus may enable more rigorous weight lifting. Over time, increased muscle mass could result, although this has yet to be proved" (p. 111).

Despite the lack of evidence regarding the effectiveness of creatine supplementation, creatine supplements are widely used by athletes involved in sports demanding high power and speed (e.g., sprint runners), as well as by athletes and others interested in increasing body mass, such as bodybuilders and football players. Use of creatine seems to have trickled down from Olympic athletes to collegiate sports and most recently to high school and middle school students. More than 8% of male high school athletes surveyed by Mayo Clinic researchers admitted using this substance (Smith & Dahm, 2000). Most of the athletes who were taking creatine were football players, had heard about creatine's performance-enhancing powers from friends, had purchased creatine at a local health food store, and were not aware of appropriate dosages. In another study, 5.6% of middle school and high school athletes in a suburb of New York City admitted taking creatine (Metzl, Small, Levine, & Gershel, 2001). Students in every grade, from 6 to 12, reported using this substance.

Most recently, a study involving 674 athletes from 11 high schools found that 75% had knowledge about creatine supplements and 16% had used them (Ray et al., 2001).

Approximately 22% of participants reported that they had learned about creatine from the media—the second major source of information on creatine, after “friend” (43.3%).

Awareness of creatine also has been found to be high among non-athletes. Approximately one-fifth of young people ages 10-17 interviewed in the national telephone survey mentioned earlier reported currently using creatine or knowing someone who uses this supplement (BlueCross BlueShield, 2001). After steroids, creatine was the performance-enhancing drug with which young people were most familiar.

The short- and long-term risks associated with creatine use are unknown. However, there have been anecdotal reports of muscle cramping, dehydration, diarrhea, and nausea (Metzl, 1999; Sahelian & Tuttle, 1997). It also is believed that large doses could be harmful to the kidneys, particularly if used in conjunction with protein supplements, also popular among athletes (Reents, 2000).

Other performance-enhancing supplements that became highly popular in the 1990s and early 2000s among athletes and others interested in obtaining an energy boost and/or losing fat were supplements containing ephedra, or ma huang, an herb from a shrublike plant grown widely in Asia. Its active ingredient, ephedrine, is a central nervous system stimulant similar to amphetamine. Marketed under names such as Stacker 2, Ripped Fuel, Xenadrine, Hydroxycut, and Metabolife, ephedra containing supplements had become popular among males seeking to reshape their bodies through weight loss (Pope et al., 2000b).

In December 2003, following a series of adverse effect reports associated with ephedra use and the highly publicized deaths of several athletes, including Orioles pitching prospect Steve Bechler, the FDA announced that a ban on ephedra would be

forthcoming (Stolberg, 2003). Use of ephedra was officially banned on April 12, 2004, and was the first such ban on the sale of a dietary supplement (“Ephedra Ban Set,” 2004). Prior to media reports of potential health problems associated with the use of this substance, the sale of supplements containing ephedra had reached \$1.28 billion (Stolberg, 2003). According to industry estimates, 12 to 17 million Americans were consuming more than three billion doses of ephedra products each year (Pear & Grady, 2003).

Several manufacturers of products containing ephedra are now marketing a host of ephedra-free formulations. However, little is known about the safety of the ephedra substitutes included in these products. Among them is bitter orange, a featured ingredient in new ephedra-free energy boosters such as Stacker 2 Ephedra-Free and Twinlab’s Diet Fuel Ephedra Free (“Ephedra Heart Dangers in Disguise,” 2004). Its active ingredient, synephrine, mimics ephedra in chemical composition and function, and could cause similar problems such as arrhythmias, anxiety, high blood pressure, heart attack, and stroke, particularly when combined with caffeine (“Ephedra Heart Dangers in Disguise,” 2004).

Other performance enhancing supplements include androstenedione (andro) and dehydroepian-drosterone (DHEA), which can be converted in the body into testosterone or a similar compound. Of these two supplements, andro is the most well-known due to baseball player Mark McGwire's 1998 admission that he used it as a performance-enhancing substance. Sales of andro are said to have increased dramatically following McGwire's announcement (Horowitz, 1998). According to the Monitoring the Future

survey, the 2001 annual prevalence rate of andro use among male 12 graders was estimated at 5.3 percent (Johnston, O'Malley, & Bachman, 2002).

In small amounts (300 mg/day), androstenedione has been found to be ineffective in increasing lean body mass or muscle strength in men ages 19-29 (King et al., 1999). Evidence regarding whether or not andro supplementation at these low doses increases serum testosterone concentration among men is mixed (King et al., 1999; Leder et al., 2000). Rather, use of andro has been linked to an increase in serum concentrations of estrogens, which could contribute to adverse health consequences such as gynecomastia (growth of male breast tissue), cardiovascular disease, and aggressive behavior (King et al., 1999; Finkelstein et al., 1997; Leder et al., 2000). Little is known about the side effects of using large quantities of these steroidal supplements. However, if large quantities of these compounds substantially increase testosterone levels in the body, they may produce the same side effects as anabolic steroids (Leder et al., 2000; National Institute on Drug Abuse, n.d.). As a result, the FDA has recently warned companies to stop selling andro unless they can prove that it is not dangerous, announcing that a sales ban will be forthcoming ("FDA to Crack Down," 2004).

Butanediol is yet another dietary supplement currently marketed under names such as Thunder Nectar, InnerG, and Amino Flex as a natural and nontoxic way to build muscle and improve athletic performance. A precursor of the date-rape drug gamma-hydroxybutyrate (GHB), 1,4-Butanediol has been shown to have serious side effects, including addiction, agitation, vomiting, incontinence, loss of consciousness, amnesia, respiratory depression, and death (Zvosec et al., 2001). There is also anecdotal evidence

that young men may be taking human growth hormone (HGH), orally or via injection, to increase muscularity (Grogan, 1999).

Although the use of performance enhancing supplements is legal and has not been proven harmful, the long-term effects of these substances are unknown. It also has been suggested that the use of nutritional supplements may serve as a gateway to anabolic steroid use (Pope et al., 2000b). Despite these risks, sales of sports nutrition supplements totaled \$1.74 billion in 2001, up 9% from the 2000, according to the trade magazine *Nutrition Business Journal*, and it remains the fastest-growing segment of the \$17.7 billion supplements industry (Cyphers & O'Keeff, 2002).

### **Groups at a Higher Risk**

Research suggests that some men may be at a greater risk for body dissatisfaction, eating disorders, and other harmful weight control and muscle building behaviors. As noted earlier, homosexual males may be at a greater risk for developing eating disorders. Male athletes, particularly bodybuilders, gymnasts, football players, wrestlers, and runners may be at risk for engaging in harmful weight control and muscle building behaviors. The reasons for engaging in these behaviors may vary. For example, wrestlers may be concerned with achieving a particular weight in order to qualify for a competition. Other athletes, such as football players, may use performance-enhancing substances to become larger and more powerful and thereby be competitive in sports. Bodybuilders, on the other hand, may be primarily interested in achieving a muscular appearance.

Bodybuilders have been found to be at a greater risk of developing body image disturbances and engaging in steroid use than other athletes (Blouin & Goldfield, 1995; Pope, Katz, & Hudson, 1993). A study by Blouin and Goldfield (1995) compared body

image and steroid use among male bodybuilders, runners, and tae kwon do participants. Researchers found that bodybuilders were significantly more likely than other athletes to report body dissatisfaction, high drive for bulk, high drive for thinness, bulimic tendencies, perfectionism, ineffectiveness, and lower self-esteem. Use of anabolic steroids and favorable attitudes toward steroid use also were more common among bodybuilders, with steroid use occurring more frequently among competitive than recreational bodybuilders. Steroid users reported that the most significant reason for using steroids was to improve looks. The study concluded that male bodybuilders, particularly competitive bodybuilders, may be at risk for “developing high-risk behavioral practices (notably steroid use, bulimic, and anorexic behavior) with an apparent purpose of modifying their body in order to meet personal and/or societal expectations” (p. 164).

### **Role of the Media**

The possible relationship between exposure to the muscular male ideal and muscularity concerns among men is a new area of research that is only now beginning to be explored. However, research conducted with women suggests that media images of difficult-to-achieve body ideals can be viewed as a sociocultural factor promoting body dissatisfaction and unhealthy weight control behaviors (Fallon, 1990; Heinberg 1996). Although sociocultural pressures may be exerted by other actors, such as family and friends, it has been suggested that the media are the most powerful communicators of body ideals due to their accessibility, popularity, and pervasiveness (Heinberg, 1996; Mazur, 1986).

Before the development of electronic media, ideals of beauty had long been disseminated via art, music, and literature. However, as argued by Freedman (1986), the

impact of today's visual media is different than that of the visual arts of the past.

Historically, artistic depictions of human bodies were romanticized and perceived as unattainable. In today's media, however, the boundaries between fantasy and reality are blurred. Although images of models are endlessly manipulated and perfected via airbrushing, soft-focus cameras, and other techniques, they are presented as realistic and achievable representations of actual people. Moreover, television, magazines, and other media continuously disseminate information on how to achieve the idealized physiques. This suggests that the media today may have a more powerful influence on viewers' body image than the idealized artwork of the past.

Research conducted with women has found that those who internalize the thin beauty standard disseminated by the media are more likely to experience body dissatisfaction and engage in disordered eating behaviors (Heinberg & Thompson, 1995; Stice et al., 1994; Thompson et al., 1999). Studies are now suggesting that the media also may promote weight concerns among men.

A study of the relationship between media consumption and eating disorders, conducted with male and female undergraduate students, found that media exposure had a significant impact on men's endorsement of personal thinness and dieting (Harrison & Cantor, 1997). Another study explored the role of the media in promoting weight concerns among children ages 9 to 14. This national survey found that boys and girls who were making a considerable effort to look like same-sex figures in the media were more likely than their peers to develop weight concerns and become constant dieters (Field et al., 2001). Most recently, an experiment with male college students found that exposure to advertisements featuring muscular men increased the discrepancy between the

subjects' perceived level of muscularity and the level of muscularity that they would like to have (Leit et al., 2002).

Among the mass media, magazines may be particularly well suited to disseminating the male body ideal (via large, vivid images of muscular models) and providing information on ways to achieve it via editorial copy and advertisements on weight lifting, exercise, nutritional supplements, and other related topics. A content analysis of the 10 magazines most popular among young people ages 18-24 found that magazines read by men, unlike those read by women, were more likely to feature ads and articles on shape than on diet (Andersen & DiDomenico, 1992). This finding is particularly significant given that the study was conducted at a time when the myriad of health and fitness titles available today did not exist. The top 10 magazines read by young men then were *Sports Illustrated*, *Playboy*, *Newsweek*, *National Geographic*, *Rolling Stone*, *Penthouse*, *Life*, *Field and Stream*, *Jet*, and *Gentlemen's Quarterly*. The authors suggest that media advertising and the content of articles may be a major source for “persuading women to be primarily concerned with weight, and for men to be focused on shape change” (p. 286).

Another study, which analyzed the content of the men's magazines *GQ* and *Esquire* from 1960 to 1992, found an increasing emphasis on men becoming involved in health and fitness activities, such as aerobic exercising and weight training (Petrie et al., 1996). Although this study did not find a substantial change in the male body ideal featured in these magazines over this 32-year period, the authors acknowledged that they looked only at shoulder-to-waist and chest-to-waist ratios and did not consider levels of muscularity.

Levels of muscularity were taken into account in another content analysis of three magazines popular among men—*Rolling Stone*, *GQ*, and *Sports Illustrated*. The study used a scale featuring eight different levels of body fat and muscularity to examine changes in the male body ideal from 1967 to 1997 (Law & Labre, 2002). Researchers found that the frequency of highly muscular, very low fat body images for men increased significantly during that 30-year period.

The past 20 years have seen a tremendous increase in the number of men's magazines addressing fitness and bodybuilding. The specialized bodybuilding magazines of the 1930s and 1940s, such as *Ironman*, have been followed by numerous new titles, including *Muscular Development*, *Muscle Media*, *Flex*, and *Musclemag*. Many of these magazines are owned by supplement makers (*Muscular Development* is owned by Twinlab, *Ironman* by Muscletech, and *Muscle Media* by an EAS subsidiary) and are filled with supplement advertisements, including multi-page advertorials. In fact, the line between editorial copy and advertising in these magazines often seems blurred, as many of the articles recommend specific supplements and include images of particular brands.

Research on the possible role of bodybuilding and fitness magazines for men in promoting the muscular male body ideal is lacking. However, a study conducted with students at a Canadian university, found that, for men, the reading of fitness magazines (*Fitness*, *Men's Fitness*, *Muscle & Fitness*, *Men's Health*, and *Shape*) was associated with the internalization of societal physically fit male body ideal and to eating problems. In addition, the reading of these types of magazines predicted body shape dissatisfaction among men (Morry & Staska, 2001).

The top magazine in the health and fitness category is *Men's Health*, published by Rodale publications since 1988. *Men's Health* was the first men's magazine to focus not only on health and fitness but also on appearance. As noted by *Fortune* magazine, "It's not hard to notice the [*Men's Health*] magazine on the newsstand: Each month the cover sports a fabulous, rippling man with (a) no shirt, (b) a wet shirt, or (c) a shirt in the process of being removed" (Puri, 1998a). The articles and advertisements in this magazine feature attractive, muscular males who are as similar to the average American man as the models in women's magazines are to the average American woman.

From 1990 to 1997, the circulation of *Men's Health* increased from 250,000 to more than 1.5 million. It has since stabilized at 1.6 million (Cottle, 1998; Fine, 2002). Although in 1998 the magazine was second in revenue only to *Playboy* among magazines targeting male readers, in 2000 it lost the position to the men's magazine *Maxim* (Fine, 2002; "Top Magazines," 1999). It also faces competition from other men's titles such as *FHM* and *GQ*. In 2000, *Men's Health* tried to reach a younger market by launching a teenage spinoff, *MH-18*. However, the magazine, featuring young models with muscular bodies and rippled abdominals similar to those of their counterparts in *Men's Health*, was abandoned a year later (Fine, 2002).

The second most popular title in the *Men's Fitness* category is *Men's Fitness*, a magazine launched in 1987 by Weider Publications, publisher of similar titles such as *Muscle & Fitness* and *Flex*, which target primarily bodybuilders, and the women's fitness magazine, *Shape*. Weider Publications was created as a part of bodybuilding guru Joe Weider's fitness empire. Born in Canada, Weider helped popularize bodybuilding in the United States, founding the "Mr. Olympia" contest and discovering Austrian bodybuilder

Arnold Schwarzenegger (Moss, 1990). He went on to develop a multimillion-dollar fitness business that includes food supplements, vitamins, sports equipment, and bodybuilding and fitness publications. However, *Men's Fitness* is no longer a part of Weider's fitness empire. In 2002, Weider Publications was acquired by American Media Inc., publisher of the tabloids *The National Enquirer* and *The Star* ("Publisher buys Weider," 2002).

### **Supporting Theoretical Framework**

The theoretical framework supporting this dissertation is built on a combination of theories addressing the effects of the media and audience interpretation of texts. Regarding effects theories, *social comparison theory* and *social learning theory* were selected because they are the theories that have been most frequently used in the vast literature on the media and body image among women, and also are theories well-suited to the examination of the effects of fitness magazines. These two theories are particularly useful in exploring the mechanisms through which these types of magazines may influence the development of body image concerns and related behaviors among men.

As this dissertation also explored the reading of fitness magazines, theories and perspectives regarding audience reception and interpretation texts also were considered. The ones deemed particularly relevant and useful were *audience reception studies* and *schema theory*, which contribute to an understanding of how the contents of the media are filtered through several lenses, including individual characteristics, social categories (i.e., demographic characteristics), interpersonal relationships, and cultural background, thereby leading to different interpretations and effects.

## **Effects Theories**

The two major theories that have been used in research with women are Albert Bandura's social learning theory and Leon Festinger's social comparison theory, which are summarized below.

### **Social comparison theory**

Some researchers view social comparison as the most likely mechanism through which exposure to media images leads to the development of harmful weight control behaviors. Proposed by Festinger (1954), this theory suggests that humans have a drive to evaluate their opinions and abilities, and that, in the absence of an objective, non-social way to evaluate oneself, social comparisons are used to meet this drive. Social comparisons are usually made with people who are similar to oneself in opinions or abilities (Festinger, 1954).

As noted by Festinger (1954), "a person does not tend to evaluate his opinions or his abilities by comparison with others who are too divergent from himself" because that would make it impossible for the person to obtain an accurate evaluation of his or her opinions or abilities (p.120). For example, a novice at chess would not compare his or her abilities with those of a recognized master. Festinger suggested that this was true regarding comparisons to people having a higher level of opinion or abilities (upward comparisons) as well as to those having a lower level of these attributes (downward comparisons). However, comparisons to others who are very different may occur if the person is very attracted to the group and has no other comparison group for the particular opinion or ability.

According to Festinger (1954), the existence of a discrepancy in a group with respect to opinions or abilities will lead to action on the part of members of that group to

reduce the discrepancy. Regarding opinions, this will result in pressures toward uniformity. In the case of abilities, the action to reduce discrepancies interacts with the value that Western society places on doing better and better, resulting in a drive to improve one's abilities. In this case, if the person is unable to do so, he or she may experience failure and feelings of inadequacy regarding that ability.

Although Festinger focused primarily on interpersonal social comparisons, several researchers have used his theory to address comparisons with mass media images (Botta, 1999; Irving, 1990; Martin & Gentry, 1997; Pinhas, Toner, Ali, Garfinkel, & Stuckless, 1999; Stice et al., 1994; Stice & Shaw, 1994). In a study of women's exposure to media images of thin body shapes, Irving (1990) found that exposure to thin models was related to lower self-evaluations. Another study examining the effects of social comparison to idealized media images found that exposure to these images raised comparison standards for attractiveness and lowered satisfaction with one's own attractiveness (Richins, 1991). Exposure to idealized images of female beauty also has been found to have an immediate negative effect on women's moods and to produce depression, stress, guilt, shame, insecurity, and body dissatisfaction (Pinhas et al., 1999; Stice & Shaw, 1994).

Most studies on the effects of exposure to images of idealized body ideals have been conducted with women. However, a study conducted with college age men and found that body-esteem decreased significantly and to a similar degree for both groups following exposure to same-gender photographic models (Grogan et al., 1996). As noted by the authors, "participants of both genders seem to have compared their bodies unfavorably with those of the models and to have been affected to a similar degree" (p. 574). Most recently, an experiment with male college students found that exposure to

advertisements featuring muscular men increased the discrepancy between the subjects' perceived level of muscularity and the level of muscularity that they would like to have (Leit et al., 2002).

Women, and now increasingly men, are being exposed to a rapidly increasing number of images of idealized beauty via the mass media. Since the 1950s, when Festinger first posited his theory, media images have exploded in quantity and availability. According to Festinger, one can avoid comparing oneself to ideas or opinions that are different from one's own by rejecting the people in the group who hold those differing opinions, but this is possible only when a group has a range of opinions. However, if thinness for women and a lean and muscular body for men are the prevailing sociocultural standards of beauty and if the mass media portray only a narrow range of this cultural ideal, it may not be possible to reject these images. The repeated dissemination of these images, combined with individual risk factors such as pre-existing body dissatisfaction, may contribute to engagement in harmful weight control and/or muscle building behaviors designed to reduce the discrepancy between the societal beauty standard and one's perceived level of attractiveness.

Social comparison theory can help explain how the images of male and female beauty in fitness magazines may contribute to body dissatisfaction and behaviors designed to reduce the discrepancy between people's current physiques and perceived ideals. However, it does not address the possible role that these magazines may play in disseminating information on how to achieve the ideal body via weight control and muscle building behaviors. Social learning theory may be more useful in this regard.

### **Social learning theory**

Researchers exploring the link between media exposure and eating disorders among women have proposed that the social cognitive process of modeling may serve as “the underlying mechanism behind the media exposure-eating disorder relationship” (Harrison, 2000; Harrison & Cantor, 1997). Social learning theory suggests that human beings learn not only through personal experience but vicariously, by observing others and imitating their behaviors (Bandura, 1977, 1986, 1994). Social learning may occur deliberately or inadvertently through the observation of behaviors modeled via interpersonal or mass media channels. As noted by Bandura (1994), “a great deal of information about human values, thinking patterns, and behavior is gained from models portrayed symbolically through verbal or pictorial means” (p. 66).

According to Bandura (1994), observational learning requires four processes: attention, retention, production, and motivation. In order for a behavior to be learned, the viewer must: (1) see, read, or hear about the behavior (attentional processes); (2) retain the cognitive representation of the behavior (retention processes); (3) be able to replicate the behavior (production processes); and (4) be willing to do so (motivational processes). Two key concepts in social comparison theory are self-efficacy and behavioral rewards. In order to enact a modeled behavior, the person must have self-efficacy, or a belief that he or she is capable of doing so. In addition, Bandura suggests that if the modeled behavior is rewarded, it is more likely to be imitated.

Although social learning theory is applicable to many types of media, it may be particularly appropriate to magazines because readers who purchase a subscription or buy an issue at the newsstand are more likely to pay attention to their content than, for example, television viewers, who may be more likely to engage in passive media use.

Social learning theory suggests that fitness magazines may contribute to muscularity concerns and related behaviors by modeling beauty ideals, suggesting the importance of and benefits associated with achieving them, and providing instructions on how to do so (i.e., for women, information on diets; for men, information on muscle-building and fat loss promoting activities and products). The images and text included in these magazines can serve as powerful motivators of behavior by suggesting that increased muscularity and reduced fat will be associated with tangible rewards, such as attractiveness, strength, and popularity.

As noted by Perse (2001), social learning theory suggests that media content can serve as the basis for “(a) learning novel or new behaviors (change effects), (b) the facilitation or inhibition of already learned behaviors, or (c) the prompting of learned behaviors (both reinforcement effects)” (p. 192). Thus, the reading of fitness magazines may reinforce existing behaviors as well as encourage the modeling of new ones.

### **Audience-Based Theories**

The analysis of the qualitative component of this dissertation (the in-depth interviews) was informed by theories and perspectives related to audience interpretation of texts. Although the goal of this part of the dissertation was not to test theories, its development and conduct was informed by existing theory and research on audience use and interpretation of texts, both from a psychological perspective (schema theory) and from a cultural studies perspective (audience reception studies). Unlike early media research presuming powerful effects of the media on passive audiences, the theories within this framework conceive of the audience as active and of media effects as moderated by individual and social influences.

### **Audience reception studies**

Audience reception studies, conducted from a cultural studies perspective, have focused on the different ways in which audiences interpret texts. Cultural studies is a line of scholarly activity initiated by scholars at the University of Birmingham's Centre for Contemporary Cultural Studies in the 1960s and 1970s and focusing on the critical analysis of cultural artifacts (Kellner, 1995). Scholars in this tradition have built upon the work of Karl Marx and Antonio Gramsci regarding hegemony, or the political and economic domination of the masses by the elites via control of ideas in the cultural realm. This control of ideas by the elite leads the masses to perceive existing relationships of domination as natural or "common-sensical," thereby consenting to their own oppression (Kellner, 1995).

Cultural scholars are interested in the political and social context of communication. As a result, early on they rejected the uses and gratifications perspective, which they perceived as too individually focused and psychological in nature (Morley, 1992). Rather than exploring the functions the media may serve for audiences, they began to examine how audiences interpret media texts and how these interpretations are influenced by social and cultural factors.

Stuart Hall's essay on his encoding/decoding model (Hall, 1999), first presented in 1973 at a colloquium at the Centre for Mass Communications Research at the University of Leicester, was the seminal work that fostered the conduct of audience reception research from a cultural studies tradition (Alasuutari, 1999). In this work, which focused primarily on television, Hall described the production and consumption of cultural texts as being done within a social and political context composed of frameworks of knowledge, relations of production, and technical infrastructure. Hall argued that this

context affects both the production of media texts (encoding) and their reception (decoding) by audiences.

Also in this paper, Hall identified three hypothetical positions (drawn from the work of Frank Parkin, as described by Morley, 1992) from which text can be decoded. The first is the *dominant-hegemonic* position, in which the viewer decodes the message according to the intentions of its producers (conducts a *preferred* reading), thereby accepting the dominant ideology with which the message is encoded. The second is the *negotiated* position, “what most people do most of the time” (Hall, 1994, p. 265), where the viewer recognizes the embedded ideology but accepts it only partially. Lastly, the viewer may approach the program from an *oppositional* position, recognizing the dominant codes and decoding them in a contrary way, reconstituting the message using an alternative framework of reference.

Hall’s encoding/decoding model brought attention to the idea that the messages encoded by media producers and decoded by the audience are not necessarily the same. Moreover, Hall argued that because media content is polysemic, or open to interpretation, audiences may interpret texts very differently. As noted by Alasuutari (1999), the main contribution of Hall’s model was to move away “from a behaviouristic stimulus-response model to an interpretive framework, where all effects depend on an interpretation of media messages” (p. 3).

The publication of Hall’s model began what has been termed the first generation of reception studies, which focused on the audiences’ decoding of texts (Alasuutari, 1999). The first of these was David Morley’s *The Nationwide Audience* (1980), in which he interviewed families of different socio-economic levels regarding a BBC public affairs

program and analyzed responses according to the dominant, negotiated, and oppositional positions.

The next trend in audience reception studies was the use of audience ethnography, or the study of reception within a social context (Alasuutari, 1999). Studies conducted within this second generation of audience research included Morley's *Family Television* (1986), in which he interviewed family members in their homes while watching television and then analyzed what television use revealed about power and gender relationships in the family.

Other studies within this phase explored the reception of romantic serials, such as soap operas and the television show *Dallas*. Among these, the most well-known is Janice Radway's 1983 study of women's interpretation of romance novels. In this study, Radway found that the reading of romance novels provided middle-class women, encumbered with a myriad domestic chores and the constant demand to nurture others, with escape and relaxation (Radway, 1995). Romance reading was a restorative pastime that provided a break from daily activities and an opportunity for women to fantasize. In addition, identification with the heroine allowed women to vicariously satisfy psychological needs for nurturance and attention. As a result, female readers associated romance novels with contentment, pleasure, and positive feelings.

This type of work brought into attention the audience's ability to subvert intended oppressive meanings and derive pleasure from texts. John Fiske (1993, as described in Kellner, 1995), for example, found that homeless individuals watching the movie *Die Hard* engaged in oppositional readings, as evidenced by their cheering during scenes showing the destruction of police and authority figures. Findings from these types of

studies also emphasized the polysemic nature of texts, bringing into question whether or not a preferred (dominant) reading was even possible, particularly for fictional forms such as novels or movies.

The focus on audience pleasure and resistance in audience reception studies led to contentious debates among cultural studies scholars in the mid-1980s to mid-1990s. Research emphasizing the activity of audiences, which was referred to by some scholars as “active audience theory,” “new revisionism,” or “interpretivist” perspective, was criticized for affording the audience too much autonomy in the creation of meanings (Cobley, 1994; Morley, 1993; Seaman, 1992). Critics called for a return to a focus on the context of cultural production rather than on individual readings of texts, arguing that pleasure in the use of texts is not the same as power over the construction of media discourses (Cobley, 1994; Morley, 1992; Morley 1993).

Perhaps heeding these criticisms, the third generation of audience reception studies has shifted from exploring readings of particular programs to seeking a better understanding of contemporary media culture (Alasuutari, 1999). This approach reflects an acknowledgement that, although texts are polysemic and audiences active, the cultural environment plays an important role in both the construction and the interpretation of media texts.

As applied to the topic of this dissertation, audience analysis research suggests that different readers may interpret fitness magazines in varied ways. When faced with media messages promoting the lean and muscular ideal, some men may accept the ideal as a positive goal (preferred reading), others may find the ideal inappropriate or unrealistic

but still desire it (negotiated reading), and others may completely reject the ideal and its pursuit (oppositional reading), choosing to focus their attention on other goals.

However, the overall cultural environment sets up the parameters within which these types of messages are produced and consumed. For example, because men's fitness magazines are created within a market-driven society and partially financed through the sale of advertisements, their contents may be expected to promote the consumption of products targeting men. Similarly, although, in theory, an unlimited number of readings is possible, these readings will be conducted within the context of mainstream American culture, which promotes beauty, youth, and physical perfection.

### **Schema theory**

Schema theory, which focuses on the cognitive processes through which individuals process information, brings into attention the importance of stored, organized knowledge that has been abstracted from previous experiences, to the processing of new information (Graber, 1988). A schema is “a mental structure that represents knowledge about a concept” (Perse, 2001). As noted by Perse (2001), preexisting schemas influence what is learned because they affect categorization, perception, and retention. Schemas not only organize knowledge, but they direct *selective exposure*, or control over what is viewed in the media; *selective attention*, or control of over which elements of the media message one pays attention to; *selective perception*, or control over how messages are interpreted; and *selective recall*, or control over how and what was learned from the media (Perse, 2001). Moreover, the processing and learning of information are related to the schema that is primed at the time, or is at the top of the mind (Perse, 2001).

Although this theory is psychological in nature, the fact that stored knowledge is derived from previous experience brings into attention the importance of social factors,

such as interpersonal relationships and familial and cultural background. Schema theory suggests that the reader's existing knowledge, attitudes, and experience base serve as a filter through which the contents of fitness magazines will be processed.

As an example, my existing schematic framework regarding muscle-building exercises, which is derived from media information as well as personal experience and discussions with relatives and friends, is based on the idea that the most effective way to build muscle is to conduct very few repetitions, slowly, with very heavy weights. This belief is based on the rationale that muscle growth can only be achieved when the muscle fibers are torn down and must rebuild themselves. Therefore, exercising with light weights is not perceived as an effective way to build muscle. This cognitive framework regarding weightlifting affects my reading of media texts. When reading a fitness magazine, I disregard articles on exercising that feature photos of models lifting light weights (as is frequent in women's fitness magazines). Through selective attention, I choose not to process the information in these types of articles because I assume it will not be useful to me. Moreover, through selective perception (which controls interpretation), I will make a mental note to myself that this magazine does not provide useful information on muscle-building exercises.

The theoretical framework described above suggests that readers of men's fitness magazines may interpret these texts in very different ways, including ones that may not be anticipated by the publishers of these magazines. Different readers may be affected by muscularity-promoting media content in very different ways. Personal characteristics such as body size, existing body image preoccupation, personality, reasons for reading the magazines, ability to learn based on cognitive and skills, ability to replicate the

modeled activities, and other variables will affect the way in which muscularity-promoting images and messages are interpreted and acted upon. So will demographic variables such as age, ethnicity, socio-economic level, and education, which contribute to readers' repository of knowledge, experience, and beliefs.

Although social learning suggests that the media may serve as teachers and motivators of behaviors related to the pursuit of a lean and muscular body ideal, they are not the only or even the primary influences on individuals who may consider engaging in these types of activities. Other critical factors include group membership and interpersonal communication, which may provide motivation for pursuing a muscular body ideal and engaging in muscularity-promoting behaviors.

Males participating in body image studies often report the belief that the male body ideal preferred by women is larger than what they themselves consider to be the ideal (Fallon & Rozin, 1985; Lynch and Zellner, 1999; Jacobi & Cash, 1994; Pope et al. 2000b; Thompson & Tantleff, 1992). For heterosexual males, the desire to attract women may serve as a motivator for pursuing the lean and muscular ideal. For male adolescents, the desire to fit in with a group of student athletes or weight lifters, or perhaps to emulate a favorite sports hero, may provide the motivation for engaging in these types of behaviors. Fitness magazines may be used as a way to learn about behaviors, as well as to remain current on the latest products and techniques, and acquire topics for conversations with peers.

Because young men's uses and interpretations of fitness magazines may vary, the methodology for this study combined a content analysis with in-depth interviews with

male readers. The rationale for combining these two methods is discussed in greater detail in Chapter 3.

### **Limitations of Previous Research**

As discussed in this chapter, research suggests that the lean and muscular male body ideal has become more prevalent in the media in the past 20 years (Law & Labre, 2002; Leit et al., 2001; Spitzer et al., 1999) and that exposure to this ideal contributes to muscularity concerns, body dissatisfaction, and disordered eating behaviors among men (Grogan et al., 1996; Leit et al., 2002). The reading of fitness magazines, in particular, has been found to be associated with the internalization of societal physically fit male body ideal, body dissatisfaction, and eating problems among men (Morry & Staska, 2001). However, little is known about the contents of these magazines and how these may promote attitudes and behaviors related to achieving leanness and muscularity.

The contents of fitness magazines have not been explored through research. Existing content analyses that have focused on male body shape and weight have not included this genre of magazines, which began to be published in the late 1980s. Rather, research conducted to date has focused on other popular titles such as *GQ*, *Esquire*, and *Rolling Stone* (Andersen & DiDomenico, 1992; Law & Labre, 2002; Petrie et. al, 1996).

Research on men's perspectives regarding the male ideal and its achievement also is lacking. Existing studies suggest that college men desire a higher level of muscularity than they currently have, and that those who consider themselves overweight would like to lose weight (Lynch & Zellner, 1999; Raudenbush & Zellner, 1997; Vartanian et al., 2001). However, this data was obtained quantitatively, via surveys that used silhouette figures and did not request information regarding the reasons for men's muscularity and weight preferences.

The few existing qualitative studies on men's perspectives concerning the male body ideal have not addressed fitness magazines. These studies have found that men prefer a body that is V-shaped and muscular (Grogan, 1999; Grogan et al., 1996; Labre & Walsh-Childers, 2002). Findings suggest that although men would like to look like the ideal and believe it is achievable via exercise, they are not motivated to do so because it is not an important goal (Grogan, 1999; Labre & Walsh-Childers, 2002). As these studies did not inquire about the reading of fitness magazines, no information was available on the possible influence of these types of texts or on differences between readers and non-readers regarding body ideal preferences.

### **Contributions of This Study**

To the researcher's knowledge, this was the first study to categorize the contents—images, articles, and advertisements—of fitness magazines. As a result, the study contributes to a better understanding of the types of messages that are disseminated via these types of titles and their potential effects of readers. Future research can examine how these messages may have changed over the years and/or compare them with messages related to body image disseminated by other types of magazines.

This is also the first study to explore the perspectives of readers of men's fitness magazines and compare them to the perspectives of non-readers. As such, the study adds to the limited body of knowledge on men's perspectives regarding the male body ideal and its achievement. Moreover, because the interviews were conducted qualitatively, they revealed several patterns that may contribute to a better understanding of the relationships among body image concerns, exercising, the reading of fitness magazines, and other related behaviors.

Findings from the interviews and content analysis are presented separately in Chapter 4 and discussed jointly in Chapter 5 of this dissertation.

### CHAPTER 3 METHODOLOGY

As discussed in the previous two chapters, this dissertation addresses the following research question: **What is the relationship between the reading of fitness magazines and concerns related to leanness and muscularity among college men?** One way to address this question would be to analyze the contents of these magazines and draw inferences regarding how these may promote concerns related to attaining a lean and muscular physique. However, this approach, which focuses only on the text itself, would provide only a limited answer to the research question.

Because men's fitness magazines, like other media texts, are open to different interpretations and uses, it also is critical to explore readers' perspectives regarding these magazines and their contents. Therefore, this study used a triangulation of research methods, combining a quantitative content analysis with qualitative in-depth interviews to explore the contents of these magazines and their relationship with leanness and muscularity concerns.

As described by Lindlof (1995), “triangulation involves a comparative assessment of more than one form of evidence about an object of inquiry” (p. 239). The different types of triangulation include using multiple data sources, research methods, or investigators (Lincoln & Guba, 1985). Triangulation can be used in both quantitative and qualitative research and is a method-appropriate strategy for establishing the credibility of qualitative analyses. Data obtained through complementary methods can enrich, impose qualifications on, or help produce explanations for the phenomena being studied,

thereby also contributing to greater internal validity (Lindlof, 1995). In this study, the triangulation of research methods allowed the researcher to explore two interrelated aspects of the research question—text and audience—contributing to a fuller understanding of the phenomenon being explored.

For this study, a quantitative, rather than qualitative content analysis was conducted for several reasons. First, quantitative content analysis is a well-established method for categorizing the content of media texts (Neuendorf, 2002; Riffe, Lacy, & Fico, 1998). Exact procedures for conducting this type of analysis are available and have been tested extensively. Second, existing studies that have examined magazines targeting men (Nemeroff, Stein, Diehl, & Smilack, 1995; Petrie et al., 1996) provided a starting point for the development of content categories that could be measured quantitatively in this study. Existing research, based on social learning theory, also allowed for the development of hypotheses regarding the content of men's fitness magazines (Harrison, 2000; Harrison & Cantor, 1997).

Perhaps more importantly, the conduct of content analysis quantitatively allowed for half of the magazine contents to be coded by an independent coder who was blind to the hypotheses being tested, thereby contributing to greater objectivity. As suggested by naturalistic researchers, no research is value-free (Lincoln & Guba, 1985). This applies to both quantitative and qualitative studies. In developing hypotheses, constructing coding sheets and protocols, and even in interpreting statistical results, the researcher makes decisions that are reflective of his or her background, experience, education, knowledge, and ideology. However, in a qualitative content analysis, the researcher's involvement is even more substantial. In effect, the themes or categories that are identified via a

qualitative analysis emerge from the interaction between the researcher and the data. As described later in this chapter, the researcher's personal views and academic background on the topic of this dissertation could lead to a very unique interpretation of these texts, which may be very different from the interpretations made by male readers. Therefore, a quantitative analysis was deemed more appropriate.

Another advantage of conducting the content analysis quantitatively was that it makes it possible for the study to be replicated by other researchers. In order to ensure that an adequate level of intercoder reliability would be attained, highly detailed coding instruments were developed, which may be of use to other researchers.

The second component of this dissertation consisted of qualitative, in-depth interviews with college-age male readers and non-readers. A detailed explanation of the rationale for using this method is presented later in this chapter.

The interviews were conducted independently from the content analysis and took place simultaneously. The goal of the interviews was to gain an understanding of the perspectives of readers and non-readers regarding the male body ideal and its achievement. In addition, the interviews also explored how readers interpret and use men's fitness magazines; that is, participants' perspectives regarding these texts. Because the two components of this dissertation—content analysis and interviews—were conducted separately, findings are presented separately in Chapter 4. However, conclusions based on these findings are discussed jointly in Chapter 5 of this dissertation.

### **Content Analysis of *Men's Health* and *Men's Fitness* Magazines**

Content analysis, the “systematic, objective, quantitative analysis of message characteristics,” has been the fastest growing research technique in mass communication over the past 20 years (Neuendorf, 2002, p. 1). This method, which fits within the

positivist paradigm of social research, uses the scientific method to examine symbols of communication by assigning to them numeric values according to valid measurement rules and subsequently examining relationships involving those values using statistical procedures (Neuendorf, 2002).

Content analysis may be used to “describe the communication, draw inferences about its meaning, or infer from the communication to its context, both of production and consumption” (Riffe, Lacy, & Fico, 1998, p. 20). In this study, the content analysis research method was used to categorize the contents of men’s fitness magazines and draw inferences about their meaning. The consumption aspect, i.e., how the contents are interpreted and used by readers, was addressed via in-depth interviews.

### **Criteria for Evaluating Quantitative Content Analyses**

Quantitative content analysis shares many characteristics with other quantitative methods, including a concern with objectivity, an a priori design, reliability, validity, generalizability (external validity), replicability, and hypothesis testing (Neuendorf, 2002). These criteria, and the methods used to address them, are summarized next.

*Objectivity* addresses freedom from researcher bias. Its achievement in this study was supported by the use of an independent coder unfamiliar with the research hypotheses, who coded half of the contents included in the sample.

An *a priori design* is one in which decisions regarding variables, their measurement, and coding rules are made before observations begin. The hypotheses, codebook, and coding sheets for this content analysis all were developed prior to data collection. Final revisions to the coding instruments were made following the pilot test, before the actual data were collected.

*Reliability* addresses the extent to which a measure or procedure yields the same results on repeated trials (Babbie, 2001). It was addressed in this content analysis via the computation of intercoder reliability, which measured the level of agreement between the two coders on 10% of the coded materials.

*Validity* refers to the extent to which the content analysis measured what the researcher wanted to measure. As described by Stacks and Hocking (1992), “to the extent that the scales or questions measure what they are thought to measure, they are valid. To the extent that the scales or questions measure something else, or nothing at all, they are not valid” (p. 127). In determining the validity of the measurement techniques used in a content analysis, several types of validity may be considered. The most basic is *face validity*, or the extent to which a measurement technique is valid “on its face” (Babbie, 2001, p. 143). In this study, face validity was supported through a careful review of all content analysis variables and categories by the researcher and her faculty advisor.

*Content validity* refers to the extent to which a measure reflects the full range of aspects or meanings of the concept being measured (Babbie, 2001). Achievement of content validity was supported by the conduct of a thorough review of the existing literature on men’s magazines to identify existing content categories and scales that could be adapted for use in this study. In addition, several issues of men’s fitness magazines were reviewed prior to the development of the variable categories in order to ensure that all major categories would be included in the coding instruments. Moreover, findings from the pilot test were used to revise the coding sheets in order to ensure that the most appropriate categories were included under each variable.

*Construct validity* assesses the extent to which a measure used in the content analysis is related to other measures (or constructs) in a way consistent with hypotheses derived from theory (Neuendorf, 2002). The variables used in this study were conceptually derived from the application of social learning theory. Based on this theory, if fitness magazines contribute to the development of concerns related to leanness and muscularity, their contents should include images of the lean and muscular ideal, combined with information on its achievement. The variables included in this content analysis addressed both.

Finally, *criterion validity* refers to the extent to which a measure taps into an established criterion that is external to the measure (Babbie, 2001). The criterion validity may be concurrent (the external criterion exists at the same time as the measure) or predictive (the external criterion occurs after the measure). As noted by Stacks and Hocking (1992), this type of validity is often more useful in applied research (e.g., GRE scores as predictive of academic success) than in theoretical research. The measurement techniques used in this study were aimed at categorizing the contents of magazines, rather than measuring levels of variables such as self-esteem or body dissatisfaction. Therefore, this type of validity was not considered appropriate to this study.

*Generalizability*, also called *external validity*, addresses the extent to which findings from the studied sample are applicable to the study population. Its achievement was supported in this study through the use of systematic sampling procedures that allowed for a representative sample of the population of magazines to be selected for coding. Strategies also were used to prevent problems associated with periodicity, as discussed later in this chapter.

Finally, *replicability*, or the ability to repeat the study with different cases or in a different context, was addressed through the development of a detailed codebook that can be used by other researchers wishing to replicate this study.

These evaluation criteria and the methods used to address them in this content analysis are summarized in Table 3-1.

Table 3-1. Evaluation criteria for content analyses and how they were addressed

Criterion	Description	Methods used in this study
Objectivity	Freedom from researcher bias	Use of an independent coder unfamiliar with research
A priori design	Rules made before observations begin	Hypotheses, codebook, & coding sheets finalized prior to data collection
Reliability	Extent to which repeated measurements yield similar results	Intercoder reliability calculations (pilot test and final)
Validity	Does the study measure what it intends to measure?	Literature review Review of magazines Adaptation of existing instruments Revisions following pilot test
Generalizability	Extent to which findings are applicable to the larger population	Systematic sampling Strategies to address periodicity
Replicability	Extent to which study can be replicated with different cases or in a different context	Development of detailed codebook and coding sheets

### **Rationale and Hypotheses**

As discussed in Chapters 1 and 2 of this dissertation, the reading of men's fitness magazines has been found to be associated with the internalization of a societal physically fit male body ideal, body dissatisfaction, and eating problems among men (Morry & Staska, 2001). However, little is known about the contents of these magazines and how these may promote a concern with achieving leanness and muscularity.

This content analysis used social learning theory (Bandura, 1977, 1986, 1994) to examine the role men's fitness magazines may play in promoting positive attitudes and behaviors regarding the achievement of the lean and muscular male body ideal among

young college men. As described in Chapter 2, this theory suggests that men's fitness magazines may promote attainment of the lean and muscular ideal by providing depictions of the ideal, combined with information on how to increase leanness and muscularity.

Based on the existing literature and taking into account what social learning theory suggests regarding the learning of modeled behaviors, four hypotheses were proposed. The first two of these address the types of male images included in these magazines, while the other two address the expected contents of articles and advertisements.

### **Hypotheses concerning male images**

According to Bandura (1994), the first two steps in social learning are attention and retention. If fitness magazines play a role in promoting the lean and muscular male body ideal, it would be expected that images representing this ideal would be featured in these magazines.

Because the main stated focus of these magazines is health and fitness, it may seem obvious that these titles would feature images of physically fit men who conform to the lean and muscular ideal. A cursory look at covers of these magazines in the newsstands provides support for this idea. However, the type of body ideal featured in these types of magazines, and the extent to which it is prevalent in these types of periodicals, had not been examined by research.

For this content analysis, the following two hypotheses concerning male images were proposed:

*H1: The magazines will be more likely to include male images characterized by low body fat than by other levels of body fat.*

*H2: The magazines will be more likely to include male images characterized as very muscular than images characterized as having other levels of muscularity.*

### **Hypotheses regarding the contents of articles and advertisements**

According to Bandura (1994), the third step in social learning is production, or the ability to replicate the modeled behavior. Therefore, if men's magazines are to be seen as promoting attitudes and behaviors related to achieving leanness and muscularity, they would be expected to include information on how to achieve a lean and muscular body. Moreover, articles and advertisements would be expected to focus more on the achievement of a lean and muscular appearance than on other topics, such as fitness, sports, health, or sex/relationships. Therefore, the following two hypotheses were proposed:

*H3: The articles in these magazines will be more likely to have leanness and/or muscularity as a main topic than other issues.*

*H4: The advertisements in these magazines will be more likely to promote leanness and/or muscularity as a benefit than other types of benefits.*

### **Operational definitions**

The first two hypotheses concern the levels of fat and muscularity of the male images featured in *Men's Health* and *Men's Fitness* magazines.

*Images of men* were defined as photographs (not cartoons or drawings) of adolescent or adult males included in advertisements and articles in these magazines.

*Low body fat* was defined as looking very lean, having no visible signs of body fat. It was contrasted with two other levels of body fat: medium body fat, or having some body fat visible (e.g. love handles, stomach that is not flat); and high body fat, defined as looking obese, having a large amount of body fat visible (e.g., large stomach).

*Very muscular* was defined as exhibiting a large amount of muscle definition (e.g., bulging biceps, rippled abdominals). It was contrasted with: not muscular, or having no signs of muscle definition; somewhat muscular, or having some signs of muscle definition; and unnaturally muscular, or having an excessive level of muscularity that is characteristic of a professional bodybuilder.

The third and fourth hypotheses involved the type of contents included in the magazines. H3 proposed that the articles would be more likely to have leanness and/or muscularity as a main topic than other issues.

An *article* was defined as editorial copy, at least one page in length, featuring a headline and story line (e.g., a stand alone piece, rather than a collection of small blurbs).

*Having leanness and/or muscularity as its main topic* was defined as being primarily about leanness (decreasing weight or losing fat) or muscularity (obtaining a muscular appearance), or both.

*Other issues* were defined as other possible main topics of articles, and consisted of beauty or style, fitness or sports, health, sex/romantic relationships, financial/career, nutrition, and other.

H4 proposed that the advertisements in these magazines would be more likely to promote leanness and/or muscularity as a benefit than other types of benefits.

An *advertisement* was defined as a paid announcement, at least one page in length, promoting a product or service.

*Having leanness and/or muscularity as a benefit* was defined as suggesting via text and/or images that use of the advertised product would promote achievement of leanness (decreased weight or fat) and/or muscularity (a muscular appearance).

*Other benefits* were defined as other possible advantages suggested in the advertisements, such as improved beauty or style, mental or physical health, sex/romantic relationships, and fitness.

More information on these variables and categories are provided later in this chapter, under “Coding Instruments.”

### **The Sample**

This study sought to explore the relationship between the reading of fitness magazines and body image among college men. As these young men (who are mostly between the ages of 18 and 23) are more likely to have been exposed to recent issues of these magazines, issues of *Men’s Health* and *Men’s Fitness* magazines published in the five most recent years, from 1999 to 2003, were identified as the study population.

These two magazines were selected for this study because they are the two most popular magazines in the men's health and fitness category. Published by Rodale, *Men’s Health*, which has a circulation of 1.7 million, is the third most popular magazine among men, after *Playboy* and *Maxim* (Fine, 2002; Fine, 2003; "Top Magazines,"1999). *Men’s Fitness*, the second most popular men's fitness title, has an estimated circulation of more than 630,000 (Fine, 2003).

The units of sampling for this study were the individual magazines. From 1999 to 2003, *Men’s Fitness* published 60 issues (one per month), while *Men’s Health* published 50 issues (the January/February and July/August issues were combined each year). A sample consisting of 15 issues of each magazine (25% of the population of *Men’s Fitness* and 30% of the population of *Men’s Health* issues published in that time period) was used. Because the contents of magazines may, to some extent, reflect the time of year (for example, summer issues may be more likely to focus on improving physical appearance

to look good at the beach), the sampling method was selected to ensure that particular months would not be over-represented.

For magazines published from 1999 to 2002, a constructed year was created. The 48 issues were listed chronologically and numbered sequentially. A starting number (11, corresponding to November of 1999) was randomly picked from a table of numbers. To form the constructed year, the next issues selected were December 2000, January 2001, February 2002, March 1999, April 2000, and so on. Three additional issues were selected from 2003. In order to ensure that these issues would represent different seasons, the first issue was picked at random (53, which corresponded to May 2003), and then every fourth issue was sampled systematically (January and September 2003). The final list of issues included in the sample is provided in Table 3-2. For the two magazines (*Men's Health* and *Men's Fitness*), issues corresponding to the same month and year were used.

Table 3-2. Issues included in sample

Year	Month
1999	March, July, November
2000	April, August, December
2001	January, May, September
2002	February, June, October
2003	January, May, September

The units of data collection were articles and advertisements at least 1 page in length. In order to be selected for coding, articles had to stand alone and not be a part of a section containing a compilation of small pieces addressing different topics.

The inclusion of all stand-alone articles 1 page or longer resulted in a sample size of 515 articles. Because the magazines in the sample contained approximately three times as many advertisements as articles, systematic sampling was used to obtain an advertisement sample of a similar size. Every third advertisement in each magazine was selected for inclusion. To prevent problems related to periodicity (e.g., in case similar ads

were placed in the same location in different issues of a magazine), a different starting point, ranging from the first ad to the third ad, was used (i.e., for the first issue, the first ad was selected, then the fourth, seventh, and so on; for the next issue, the second ad was selected, then the fifth, eighth, and so on).

### **Coding Instruments**

The contents of the articles and advertisements were coded using categories adapted from previous research (Nemeroff et al., 1995; Petrie et al., 1996) and augmented based on the literature review conducted for this study. Although it originally had been proposed that the same coding sheet would be used for ads and advertisements, in practice this was not feasible because of differences between the two types of texts. For example, articles usually have a *main topic* (e.g., sports performance, sex/romantic relationships), while advertisements are usually about a *type of product* (e.g., automotive, food). Therefore, the same coding sheet could not be used for both ads and articles.

Two coding sheets—one for advertisements and one for articles—were developed, along with a detailed codebook providing instructions on how to use them (see Appendix A). The categories initially developed for coding each variable were revised based on the results of a pilot test and discussions with the independent coder.

In addition to the variables required for testing the proposed hypotheses (level of body fat of images, level of muscularity of images, main topic of articles, and major benefits in advertisements), the coding sheets also obtained information regarding other variables that might be useful in understanding the contents of these magazines. For articles, these were: major benefits of following the advice provided in the article, and main methods for achieving these benefits. For advertisements, it was type of product advertised.

A detailed description of the variables and categories included in the two coding sheets is provided below.

### **Identification information**

Both coding sheets began with a section collecting the following data regarding the ad or article: article or ad ID, coder ID, magazine, year, month, length, and type (for advertisements, the types were “advertisement” or “advertorial”; for articles, they were “story,” or “product”—a category for coding articles that consisted of lists of products). In addition, the coding sheet for articles also asked the coder to indicate whether or not the article was referenced on the cover of the magazine.

### **Contents of articles**

For *articles*, information was collected regarding three variables: main topic, major benefits, and main methods. *Main topic* was defined as what the article was about. Coders were instructed to pick only one response, unless it was impossible to do so. If so, a maximum of two categories could be selected. The following categories were provided:

- *Leanness/Weight-loss*: Content related to decreasing weight or losing fat.
- *Muscularity*: Content related to obtaining a muscular appearance.
- *Beauty*: Content related to other aspects of physical appearance (e.g., via hair styling, perfumes, lotions, etc).
- *Fitness or sports*: Content related to improving physical fitness (e.g., aerobic fitness, strength, performance, endurance, flexibility, speed, energy level) or sports performance.
- *Style*: Content related to improving style, coolness, appeal.
- *Sex/Romantic Relationships*: Content related to sex or romantic relationships.
- *Health*: Content related to physical or mental health.
- *Financial/Career*: Content related to finances, career, legal issues.

- *Nutrition*: Content related to food and beverages.
- *Other*: Other type of content not listed above.

The variable *major benefits* was defined as the main advantages to the reader of following the advice provided in the article, and was coded using the following categories (Coders were instructed to select all that applied):

- *Leanness/Weight-loss*: Losing weight or fat.
- *Muscularity*: Achieving a more muscular appearance.
- *Beauty*: Improving other aspects of physical appearance or attractiveness (e.g., smooth skin, conditioned hair, white teeth, fresh breath).
- *Fitness/Sports performance*: Improving performance in a competitive sport and /or improving aerobic fitness, strength, performance, endurance, flexibility, speed, and/or energy level.
- *Style*: Improving style, coolness, appeal (e.g., via apparel, fashion, cars, designer sunglasses).
- *Health*: Improving physical or mental health.
- *Sex or relationships*: Improving sexual or romantic relationships.
- *Financial/Career*: Improving financial situation or career status.
- *No benefits*: No benefits listed or implied.
- *Other*: Cues suggesting that following the advice in the article will lead to other major benefits not referenced above. Coders were instructed to list these benefits.

The variable *main methods* was defined as the activities suggested in the article for achieving the listed benefits, and was coded using the following categories (Coders were instructed to check all that applied):

- *Dieting*: Reducing consumption of foods; avoiding some types of foods, such as junk food or foods high in fat, carbohydrates, or sugars.
- *Nutrition*: Eating healthy foods, such as fruit and vegetables, drinking plenty of water. Eating more soy, protein, etc., getting vitamins or minerals from food

- *Performance-enhancing supplements*: Using (or not using—separate spaces were provided in coding sheet for indicating use or no use) creatine, protein powders, protein bars, fat loss or energy pills or other performance-enhancing supplements.
- *Other nutritional supplements*: Using (or not using) vitamins, minerals, herbs, etc. other than the ones listed above.
- *Medications*: Using (or not using) over-the-counter or prescription drugs.
- *Therapy/treatment*: Seeing a doctor, chiropractor, or acupuncturist, getting a massage, having surgery.
- *Mental/spiritual*: Focusing on internal (mental/spiritual) qualities, rather than physical ones.
- *Anaerobic exercise/weight training*: Engaging in weight lifting or other types exercises that tone or increase muscle mass.
- *Aerobic exercise or sports participation*: Running on the treadmill, stationary bike, jogging, etc. Participating in football, basketball, soccer or other sport.
- *Stretching*: Doing exercises to increase flexibility, such as yoga.
- *Grooming or style*: Using perfumes, lotions, shampoos, deodorants, hair removers, etc., Wearing fashionable clothes or accessories (e.g., watch, sunglasses)
- *No methods*
- *Other methods*: Other methods not listed above. Please describe.

### **Contents of advertisements**

For advertisements, information was collected on two variables: type of product, and main benefits. Regarding *type of product*, the following categories were used, with coders being instructed to select only one):

- *Automotive*: Cars, motorcycles, oil, tires
- *Performance-enhancing supplement*: Products containing protein, creatine, or ephedra, carnitine, chromium, glutamine, or other performance-enhancing supplements. Usually are advertised as increasing muscles, decreasing fat, and/or increasing energy levels.

- *Other nutritional supplement*: Using (or not using) vitamins, minerals, herbs, etc. other than the ones listed above. Includes supplements to increase testosterone, penis size, or otherwise enhance sexual function
- *Clothes/shoes/accessories*: Designer wear, sports clothes, athletic shoes, socks, as well as accessories, such as sunglasses and belts
- *Grooming products*: Perfumes, lotions, deodorant, toothpaste, mouthwash, hair color, hair removal, breath mints.
- *Food or beverages*: Cereals, microwave dinners, water, alcoholic beverages, meal replacement bars that are primarily advertised as foods, not supplements.
- *Medical*: Prescription and non-prescription drugs such as Claritin, Viagra, Testro Gel; Andro Gel, Rogaine, Tylenol; heat packs, medical supplies.
- *Media/communications*: Cable, TV show, magazines, newspapers, books, videos, telephone company, cell phone, Bose equipment, music, car stereo, TV, head phones, sound equipment, web sites (e.g., expedia.com, ESPN.com), videogame, car stereo.
- *Exercise equipment*: Treadmill, weight training equipment.
- *Financial/career*: Banks, mutual funds, credit cards, insurance.
- *Other*: Other type of content not listed above. Please describe.

Regarding *main benefits*, the same categories were used as for articles.

*Main methods* were not coded for advertisements because the main method for achieving the benefits promoted in the ad was usually to purchase the advertised product.

### **Levels of body fat and muscularity of images**

For each article or advertisement, the coders counted and indicated the total number of images of men, defined as photographs (not cartoons or drawings) of adolescent or adult males. If an image appeared more than once (was repeated), each occurrence was counted separately. If the same man was shown in several pictures, each was counted separately, too. Images that did not allow the coder to distinguish between a man or a woman (e.g., the image of a foot in tennis shoes) were not counted.

After indicating the number of images of men, the coders categorized each image in the advertisement or article by level of fat and muscularity, starting at the top left of the page and moving clockwise. If a photograph spanned two pages, the coders were instructed to start at the top left of the first page and move clockwise around the entire image.

The coding of levels of fat and muscularity was done using two separate scales adapted from an existing instrument, the male scale (Law & Labre, 2002). Unlike the male scale, which combines levels of body fat and muscularity into eight categories (low body fat, not muscular; low body fat, moderately muscular, low body fat, very muscular; medium body fat, not muscular, medium body fat, moderately muscular, medium body fat, very muscular; high body fat, not muscular, and high body fat, moderately muscular), the scales used in this study allowed coders to code the levels of body fat and muscularity separately.

This adaptation was made because the pilot test, which used the male scale, resulted in a very small number of images being considered codable. In many cases, this occurred because the coders could tell either the level of body fat or of muscularity of an image, but not both. For example, there were several cases in which the man in the photograph was very muscular but had on a shirt that made it difficult to select between the “very muscular, low body fat” and the “very muscular, medium body fat” categories. By allowing coders to measure body fat and muscularity separately, more images could be coded. Moreover, coders found it easier to focus on one variable (body fat or muscularity) at a time, rather than doing so jointly as had been done using the male scale.

The *body fat scale* used in this study contained the following four categories, along with photographic examples of each:

- *Low body fat*: no visible signs of body fat.
- *Medium body fat*: some body fat visible (e.g., love handles, stomach is not flat).
- *High body fat*: large amount of body fat, obese (e.g., large, protruding stomach).
- *Can't tell*: Unable to determine the level of body fat.

The *muscularity scale* contained the following five categories, along with photographic examples of each:

- *Not muscular*: no signs of muscle definition.
- *Somewhat muscular*: some muscle definition.
- *Very muscular*: exhibiting a lot of muscle definition (e.g., rippled abdominals).
- *Unnaturally muscular*: an excessive level of muscularity, like a professional bodybuilder or anabolic steroid user.
- *Can't tell*: unable to determine level of muscularity.

For each image, the coders also indicated whether or not the depiction represented a *negative portrayal*. The following examples of negative portrayals were provided in the codebook:

- The image is a “before” shot in a weight-loss advertisement where the person is shown as overweight before the treatment and thin after the treatment.
- The image of an obese person is used to illustrate an article about losing fat.
- The image of an extremely thin person is used in an article about the dangers of anorexia.

The negative portrayal category was included because a review of issues not included in the sample found that these types of portrayals were featured in the magazines, particularly in advertisements for weight-loss or muscle-building supplements.

### **Coding Process**

It had been originally proposed that three independent coders—two female graduate students and a male undergraduate student—conduct all of the coding. However, two of the coders, who had volunteered their time, were unable to complete the coding by the required deadline. As a result, the plan was changed, with half of the contents being coded by the researcher and half by the undergraduate male student. As noted below, the coding instruments were refined with input from the three original coders. As a result, a very detailed codebook was developed which allowed for a high level of intercoder reliability to be attained. The researcher believes that findings would not have been different if the three coders had coded the materials, as had been originally planned.

### **Training of coders**

A training session with the original three coders was held in October 2003. In this session, the codebook and coding sheets were reviewed and a few articles and advertisements taken from the study population but not from the study sample were coded. After each advertisement or article was coded separately by the three coders, a joint discussion was held to identify differences of opinion and how they should be addressed.

### **Pilot test**

At the conclusion of the training session, the three coders were provided with copies of the ads and articles included in one issue of *Men's Health* and one issue of *Men's Fitness*, along with blank coding sheets. Again, the selected issues were from the study population but were not included in the sample.

Data from the completed coding sheets were entered into SPSS Statistical Package 11.5. Reliability calculations were conducted separately for the ads and articles, using Holsti's method (1969). For advertisements, a reliability greater than .80 was obtained for 28 of 32 variables; for articles, the same was true regarding 39 of 47 variables.

Following the pilot test, the coding sheets that had been completed by the three coders were reviewed to identify specific areas where there were differences of opinion. Discussions also were held with the coders to identify difficulties. Findings were used to revise the codebook and coding sheets to ensure that a reliability higher than .80 would be achieved for all variables (Riffe, Lacy, & Fico, 1998). These revisions included the addition of new categories (e.g., "nutrition" was added as a main topic in the articles coding sheet), combination of categories (e.g., "fitness" and "sports performance" were combined into one category, under benefits, for both advertisements and articles), and deletion of categories (e.g., under *product type* in the advertisement coding sheet, "military" was deleted, with coders being instructed to categorize those types of ads as "other"). A second training session was held with the three coders after the pilot test, in December, to discuss these revisions and clarify any areas of disagreement.

### **Coding and final reliability**

After the pilot test, each of the three coders began independently to code a third of the magazines included in the sample. However, as noted earlier, due to time constraints, it was decided that the contents be coded only by the researcher and the undergraduate student. Each coded half of the 30 issues in the sample, with three issues (10%) being coded by both coders so that reliability could be established. This number was chosen taking into account Wimmer and Dominick's (1997) suggestion that 10-20% of content

be tested, as well as Kaid and Wadsworth's (1989) recommendation that between 5% and 7% of the total content is adequate.

Reliability tests were conducted separately for the 56 advertisements and 59 articles included in the three issues. For both advertisements and articles, the intercoder reliability for all variables was greater than 0.90 (see Table 3-3 and Table 3-4).

Table 3-3. Level of intercoder agreement of variables in advertisements

Variable	Rel.	Variable	Rel.	Variable	Rel.
Type of Ad		<i>Major Benefits</i>		<i>Body Fat</i>	
Auto	1.00	Leanness	0.98	Low body	0.98
PES	1.00	Muscularity	0.96	Medium	1.00
Other Supp.	1.00	Beauty	0.98	High	1.00
Clothing.	1.00	Fitness/Sports	0.93	Can't tell	0.98
Grooming	1.00	Style	0.93		
Food	1.00	Health	0.96	<i>Muscularity</i>	
Medical	1.00	Sex/Relationships	1.00	Not muscular	1.00
Media.	0.98	Financial/Career	1.00	Somewhat	0.98
Ex. Equip.	1.00	No Benefits	0.93	Very	0.98
Finance.	1.00	Other Benefits	0.91	Unnaturally	1.00
Other	0.98			Can't Tell	0.96

Note: Holsti's method was used to calculate intercoder reliability.

## Analysis

The coding sheet data was entered into SPSS to allow for the computation of descriptive statistics and conduct of chi-square tests for hypothesis-testing. Results are presented in Chapter 4.

## In-Depth Interviews

The content analysis described above allowed the researcher to categorize the contents of men's fitness magazines in order to make inferences regarding how these may promote concerns regarding the achievement of the lean and muscular male physique. However, it could not provide insight into how young men perceive the ideal or the importance of its achievement or identify any differences between readers and non-

Table 3-4. Level of intercoder agreement for variables in articles

Variable	Rel.	Variable	Rel.	Variable	Rel.
<i>Main Topic</i>		<i>Main Methods</i>		<i>Body Fat</i>	
Leanness	1.00	Dieting	0.92	Low body	0.95
Muscularity	0.98	Nutrition	0.98	Medium	1.00
Beauty	0.98	PES Use	1.00	High	0.98
Fitness	1.00	PES No	1.00	Can't tell	0.97
Style	1.00	Other Sup. Use	0.98		
Health	0.98	Other Sup. No	1.00	<i>Muscularity</i>	
Sex	0.97	Medication Use	1.00	Not muscular	0.98
Finance	1.00	Medication No	1.00	Somewhat	0.98
Nutrition	0.97	Therapy/Treat.	0.97	Very	0.95
Other	0.98	Mental/Spiritual	0.97	Unnaturally	0.98
<i>Major Benefits</i>		Weights/Anaerob.	1.00	Can't Tell	0.95
Leanness	0.98	Aerobic/Sports	1.00		
Muscularity	1.00	Stretching	1.00		
Beauty	0.98	Grooming	0.92		
Fitness	0.95	None	0.97		
Style	1.00	Other	0.93		
Health	0.95				
Sex	1.00				
Finance	1.00				
None	0.98				
Other	0.98				

\*Note: Holsti's method was used to calculate intercoder reliability.

readers of these titles. To gain a better understanding of young men's perspectives, in-depth interviews were conducted.

In-depth interviews (also called "depth" or "long" interviews) are a type of qualitative research methodology that aims at obtaining a better understanding of how individuals see and experience the world as expressed in their own words (McCracken, 1988). Like other qualitative (or "naturalistic") forms of inquiry, this method is based on the view that reality is socially constructed and situational (Lincoln & Guba, 1985). Therefore, the role of the researcher is not to uncover the "truth" but rather to gain an understanding of how social actors construct meaning in their lives.

In-depth interviews are particularly well suited to exploring how individuals interact with cultural artifacts such as magazines, which contain visual and textual cues

that may be interpreted in multiple ways. Readers may not even be aware of how and why they use these types of text, which would make it very difficult to explore this topic via quantitative methods such as a survey. As noted by McCracken (1988), “when the questions for which data are sought are likely to cause the respondent greater difficulty and imprecision, the broader, more flexible net provided by qualitative techniques is appropriate” (p. 17).

Unlike the quantitative survey, which uses pre-defined questions and categories to examine sharply delineated relationships among a limited set of variables, the in-depth interview uses open-ended questions and searches for patterns of interrelationship among emerging categories of data (McCracken, 1988). Compared to surveys, in-depth interviews therefore sacrifice precision in exchange for capturing the complexity of lived experience. The goal is not generalizability, but rather to “gain access to the cultural categories and assumptions” according to which individuals construe their worlds” (McCracken, 1988, p. 17).

In-depth interviews make use of an emerging, rather than an a priori design. As noted by Rubin and Rubin (1995), “qualitative interviewing design is flexible, iterative, and continuous, rather than prepared in advance and locked in stone” (p. 43). Insights evoked from initial interviews are used to shape questions for the subsequent ones. Likewise, analytic categories are not defined prior to the beginning of the research but rather are developed and modified throughout the research process.

The role of the researcher in this type of inquiry is not that of an objective observer but of a co-creator (Lincoln & Guba, 1985). He or she is an instrument in the collection and analysis of data, using his or her own knowledge, intellect, imagination, and

experience to interact with the participants and analyze the data in unique ways (McCracken, 1988).

The selection of participants for in-depth interviews also differs from the sampling strategies used in quantitative research. As noted by MacDougall and Fudge (2001), qualitative samples are purposive rather than random and aim not at generalizability but at selecting cases that will provide rich data. Participants are selected rather than sampled, and the rationale used to select participants may evolve as the study develops, based on the analysis of data and developing understandings. Estimates of the number of participants required are based on the goal of achieving saturation, the point at which no new information is being encountered.

### **Criteria for Evaluating Qualitative In-Depth Interviews**

Because qualitative research is not based on the positivist idea of a single reality that can be uncovered via objective observation, the criteria used to evaluate quantitative research (i.e., internal validity, external validity, reliability, and objectivity) are not deemed appropriate for this type of inquiry (Lincoln & Guba, 1985; Wolcott, 1990). However, there has been considerable debate among qualitative researchers regarding which criteria should be applied (Chamberlain, 2000).

Lincoln and Guba (1985) propose four criteria for evaluating qualitative inquiry that are equivalent to those used in quantitative methods. The first is *credibility* or *trustworthiness* (rather than internal validity), which refers to establishing the “truth value” of the study. In place of external validity, they suggest *transferability*, or the detailed description of the setting and participants so that others may use it as a source of comparison. The next criterion, *dependability*, which stands for reliability, examines whether the results of the study truly represent the values, beliefs, and the norms of

participants. Finally, *confirmability*, which replaces objectivity, examines whether conclusions drawn were based on and supported by gathered data.

These four criteria have been criticized as being “foundational,” that is, resting in assumptions that had been developed for research built on a positivist foundation (Lincoln, 1995). New criteria have been suggested, including positionality (or standpoint epistemology, which states that knowledge is situated—there is no “view from nowhere”), voice (who speaks, for whom, to whom, for what purposes), reflexivity (critical subjectivity, or critical self-reflection), and reciprocity with the research participants (Lincoln, 1995). However, Lincoln (1995) notes that these criteria may not apply for all types of naturalistic inquiry. In fact, these newer criteria seem most applicable to research that seeks social change by giving voice to disenfranchised groups (which is not the goal of this study). In naturalistic inquiry, it is therefore incumbent upon the researcher to review existing criteria and identify the ones most appropriate to his or her study.

Given the goals of the in-depth interviews, which sought to understand how readers and non-readers perceive the male body ideal and its achievement, the four original criteria proposed by Lincoln and Guba (1985) were addressed. In addition, three other criteria were identified as relevant: *authenticity*, or coming clear about the position of the author; reflexivity (critical self-reflection); and *transparency*, or providing detailed, accurate, and specific descriptions and documentation of the procedures used (Gaskell & Bauer, 1994; Lincoln, 1995).

Several strategies were used to meet these criteria. Among these was the inclusion of a detailed description of the study’s rationale and procedures, which addressed

credibility, transferability, and transparency. The use of negative case analysis, or the analysis of disconfirming evidence, addressed the criteria of credibility, confirmability, and reflexivity. This study also used thick description (described by Lincoln & Guba, 1985, as a detailed description that specifies everything that a reader may need to know in order to understand the study findings) which addressed credibility, transferability, and transparency. Member checks, conducted with two interview participants, provided support to the credibility and dependability of the study. Finally, the review of cultural categories and assumptions, provided in this section, addresses the criteria of authenticity and reflexivity. The evaluation criteria and methods used to address them in this study are summarized in Table 3-5: Qualitative evaluation criteria and methods used to address them.

### **Review of Cultural Categories and Assumptions**

As noted above, in qualitative research the researcher is viewed as an instrument or co-creator of the research data and findings (Lincoln & Guba, 1985). Therefore, it is suggested that the researcher consider and make explicit his or her experience and beliefs concerning the research topic (McCracken, 1988).

My interest in this topic originated from my work on an eating disorders prevention project funded by the Office of Women's Health. In developing materials for this project, I became aware of the growing body of literature associating the mediated female body ideal with eating disorders and other problems. Upon beginning my doctoral program at the University of Florida, I familiarized myself with this literature. At the same time, I became aware of new studies linking the mediated male body ideal with men's concerns with muscularity, a topic I became interested in pursuing.

Table 3-5. Qualitative evaluation criteria and methods used to address them

Criterion	Description	Methods used in this study
Credibility	Examines the “truth value” of the study.	Detailed description of procedures Triangulation of researchers Negative case analysis Thick description Member checks
Transferability	Examines whether a detailed description of the setting and participants is provided so that others may use it as a source of comparison.	Detailed description of procedures Thick description
Dependability	Examines whether the results of the study truly represent the values, beliefs, and the norms of participants.	Member checks
Confirmability	Examines whether conclusions drawn were based on and supported by gathered data.	Negative case analysis Triangulation of researchers
Authenticity	Examines whether the study comes clear about the position of the author	Review of cultural categories
Reflexivity	Examines whether the author uses critical self-reflection	Negative case analysis Review of cultural categories
Transparency	Examines whether detailed, accurate, and specific descriptions and documentation of the procedures used are provided.	Detailed description of procedures

As a woman, I am keenly aware of societal pressures regarding appearance. During my years as an undergraduate student at an American university, I often engaged in disordered eating behaviors in an effort to achieve appearance goals. I also have overexercised to the point of injury and have been obsessed with perceived body imperfections. Most recently, I have been experiencing increasing concerns related to the fear of looking old.

As noted in the literature review, my experience with body image concerns is by no means atypical. Body dissatisfaction has been found to be so prevalent among women in Western society as to constitute a normative discontent (Rodin et al., 1985). However, not all women who experience body dissatisfaction engage in harmful behaviors. As a

result, many researchers have been trying to identify the individual characteristics that may predispose individuals to body image disturbances.

In my view, although this approach may be useful in identifying vulnerable groups, it also has the unintended effect of pathologizing the individual while overlooking the influence of the cultural environment. Although individuals have choices regarding their appearance and health, the range of choices available to them is limited and shaped by a number of environmental factors, including income, education, socialization, and sociocultural environment—in our case, one that places a premium on physical appearance and glorifies hard-to-achieve body ideals. As Billy Crystal used to say on *Saturday Night Live*, “It is better to *look* good than to *feel* good.” To me, it is not pathological to attempt to mold your body to meet societal ideals—it is a logical way to survive and thrive in an appearance-centered environment.

### **Research Questions**

The in-depth interviews sought to explore college men’s perspectives regarding the male body ideal and its achievement. In addition, the interviews were aimed at identifying differences between readers and non-readers of fitness magazines and to explore how readers of fitness magazines interact with these texts. The following four questions were examined:

*RQ 1: How do male undergraduates describe the ideal male body?*

*RQ 2: How important is it for male undergraduates to achieve the ideal physique?*

*RQ 3: What are the differences between readers and non-readers of men’s fitness magazines regarding the ideal and its achievement?*

*RQ 4: What are other differences between readers and non-readers?*

To answer these questions, a series of in-depth interviews were conducted with undergraduate male students. This group was selected based on the literature review, which indicated that college men identify the ideal male body as the one featured on the cover of these magazines and would like to be more muscular themselves (Labre & Walsh-Childers, 2002; Lynch & Zellner, 1999). Moreover, exposure to advertisements featuring muscular men has been found to increase the discrepancy between the college-age males' perceived level of muscularity and the level of muscularity they would like to have (Leit et al., 2002). Finally, the reading of fitness magazines has been found to predict body shape dissatisfaction among this population (Morry & Staska, 2001).

### **Selection of Participants**

The selection of participants aimed at identifying both readers and non-readers of health and fitness magazines in order to investigate any existing differences regarding body image preferences between the two groups. In addition, attention also was given to selecting individuals who had different levels of physical activity, as their perceptions regarding body image, exercise, and fitness magazines might differ.

Participants were identified via recommendations from faculty and graduate students in the College of Journalism and Communications who were teaching classes that included undergraduate male students. An announcement of the study, listing the topics that would be addressed (body image, exercise, and the media) and the name of the researcher who would be conducting the interviews (Maggie Labre), was made to students. Those interested in participating responded via e-mail and the interviews were scheduled. Individuals invited to participate in the interview also were told that it would take approximately 1 ½ hours. Regarding incentives for participating, each was offered \$20 for his time.

Snowballing techniques also were used initially, with participants providing the researcher with the names of people they knew who might be interested in participating. However, the researcher found through some of the initial interviews identified via these techniques that interviews with members of the same peer group tended to yield similar responses. As people tend to associate with others who are similar to themselves in regard to certain characteristics and values, the use of snowballing techniques may limit the scope of opinions elicited via interviews. In order to obtain a wider variety of perspectives, the researcher subsequently did not ask participants to refer other students as potential study participants.

Eight respondents often are deemed sufficient for a study using in-depth interviews (McCracken, 1988). As this study sought to examine the perspectives of readers and non-readers of health and fitness magazines, it had been proposed that interviews be conducted with 16 students: 8 readers and 8 non-readers. However, by the conclusion of the ninth interview, *information redundancy*, or the emergence of clear patterns in participants' constructions regarding the ideal and its achievement (Taylor, Hoy, & Haley, 1996), had occurred. Nevertheless, because the study sought to identify other potential differences between readers and non-readers, four more interviews were conducted. By the conclusion of 13 interviews, it was determined that saturation (the point at which no new information is being encountered) had been achieved.

### **Interview Content and Question Guide**

Two question guides (one for readers and the other for non-readers) were prepared and submitted for IRB approval. As recommended by McCracken (1988), the guides began with a set of biographical questions, followed by "grand tour" questions (questions that allow the participant to share familiar knowledge of an activity or event) and planned

prompts designed to give structure to the interview. As the interviews also addressed the interpretation of men's fitness magazines, the auto driving technique was also used, with participants being shown recent issues of the two magazines in order to aid them in sharing their perspectives (McCracken, 1988).

As the interviews were conducted qualitatively, questions were not asked in the same order, and participants were allowed to expand on areas of particular interest to them. The question guide was consulted mainly at the conclusion of the interview, as a check to ensure that all topics of interest to the researcher had been covered. The researcher also found it more useful to begin the interview with, “tell me a little bit about yourself,” rather than asking the biographical questions listed in the question guide. This type of open-ended question allowed participants to begin the interview by sharing whatever they wanted to share with the interviewer, thereby acquiring a certain level of comfort with the interview situation.

Based on the results of the initial interviews, which were shorter in length than had been anticipated, the guide was extended to address nutrition, other media use, and grooming. The researcher also found that it was only necessary to use one version of the interview guide—the one for readers. When interviewing non-readers, the questions that were not applicable to non-readers were simply omitted. A copy of the final question guide is provided in Appendix B.

### **Conduct of the Interviews**

The interviews were conducted by the lead researcher in the office of her faculty advisor and in the conference room of a local gym (because this was the most convenient location for the three participants who worked there). Scheduling of the interviews was done by e-mail and phone conversations. The interviews were conducted between

September 17, 2003, and January 27, 2004. The average duration of the interviews was 55 minutes, with interview times ranging from 30 to 75 minutes. Interview duration was found to be contingent upon the interviewee's level of interest in the topic and ability to express themselves, with some participants limiting themselves to short responses and others making extensive comments with very little prompting.

The interviews were recorded with a digital recorder, transferred to a computer, and transcribed by the researcher. A sample transcript is provided in Appendix C.

### **Data Analysis**

Qualitative data analysis uses induction, with categories, themes, and patterns emerging from the data. In this type of analysis, the researcher notices relevant phenomena, collects examples, and analyzes them to find commonalities, themes, and patterns, as well as differences, contrasts, and paradoxes (Coffey, & Atkinson, 1996). Attention is paid to key phrases and statements, including metaphors, that speak directly to the phenomenon in question (Janesick, 2000).

This type of analysis is based on analytic induction and comparative analysis (Glaser & Strauss, 1967). The method combines open coding, when data are separated into "chunks," or discrete instances that are self-contained, with axial coding, when chunks of related data are combined. As noted by Miles and Huberman (1994), codes can be attached to chunks "of varying sizes-words, phrases, sentences, or whole paragraphs, connected or unconnected to a specific setting" (p. 56).

Rules for inclusion into or exclusion from categories or themes are developed via the analysis of initial data and modified based on the analysis of subsequent cases. Throughout the review process, the researcher engages in negative case analysis, looking for disconfirming data and revising the themes and categories accordingly (Lincoln &

Guba, 1985). This includes looking for cases in which individual interviewees held viewpoints that differed from those of the majority of participants.

In qualitative research, the analysis of data is conducted throughout the data collection process. At two points in time while the interviews were being conducted, the researcher took down notes regarding emerging patterns and themes. After the last interview, all transcripts were reviewed, with sections addressing the research questions and indicating emerging patterns being highlighted. Key words and themes were noted on the margins of the transcripts. The transcripts were then re-read, with notations being added and revised based on insights obtained from the first reading of all transcripts.

As the analysis involved a large amount of data, it was often difficult to keep track of the number of transcripts in which a particular theme had been evident. To assist in the analysis of the data and provide the researcher with a better idea of the prevalence of particular beliefs or themes, a FileMaker Pro 5.0 database was used.

Using the information from the marked-up transcripts, the researcher created a database record for each participant, which summarized the transcript information and noted page numbers of relevant sections and quotes. For each participant, the following information was recorded: name, alias, age, duration of interview, race/ethnicity, school major, athleticism, readership of fitness magazines, reasons for exercising, high school sports involvement, body ideal, importance of achieving ideal, opinion regarding six-pack abs, opinion regarding fitness magazines, opinion regarding images in fitness magazines, influence of friends, nutrition, use of performance-enhancing supplements, media use, social comparison, body hair removal, other grooming, and main themes. The

information was entered not as key words, but rather in full sentences and paragraphs, so that context could be taken into account (see sample database printouts in Appendix D).

The use of the database allowed the researcher to generate summary reports that made it easier to determine how many participants shared a particular belief, as well as to identify dissenting opinions. It also allowed for the generation of lists comparing, for example, level of readership of magazines with frequency of exercising. These lists were critical in attempting to identify similarities and differences between readers and non-readers. In addition, this method also facilitated the conduct of thick description, or detailed description using direct quotes and narrative vignettes, because the relevant page numbers were referenced in the database.

The triangulation of researchers also was used in the analysis of the data, contributing to greater credibility and confirmability. All transcripts were reviewed by the researcher's faculty advisor, who conducted her own analysis of the data. A discussion then was held to review the findings that had been made separately by each researcher and come to an agreement regarding major findings.

Member checks were conducted with two participants to ensure that the researcher's reconstructions were adequate representations of the interviewees' perspectives, correct any errors of fact, and provide an opportunity for interviewees to volunteer any additional information (Lincoln & Guba, 1985). These two participants were selected because one was a frequent reader, the other a non-reader, and both had helped identify other interviewees and were therefore somewhat familiar with their opinions. Both indicated that their viewpoints had been accurately captured.

### **Strengths and Weaknesses of Methodology**

This study combined two methods—a quantitative content analysis and qualitative in-depth interviews. The strengths and weaknesses of the study’s methodology are discussed below.

#### **Content Analysis**

Babbie (2001) summarizes some of the main advantages of quantitative content analysis, as compared to other quantitative methods, as its economy in terms of time and money, and its ability to be redone, should the researcher encounter difficulties or problems. Another major advantage of content analysis is that it poses no risk to the subject being studied.

As mentioned earlier, an advantage of quantitative content analysis over its qualitative counterpart is that the use of an independent coder allowed for a more objective identification of the contents of the fitness magazines, particularly given the researcher’s knowledge of and experience with this topic. It also made it necessary to develop very detailed coding instruments, leading to greater replicability.

Regarding weaknesses, as the content analysis was conducted quantitatively, a certain degree of validity had to be sacrificed in exchange for greater reliability. In order for the accepted level of intercoder reliability to be reached, the content analysis had to focus more on content that was physically present and countable, or *manifest* content, than on *latent* content, or the deeper meaning of texts.

Another weakness of content analysis, as compared to other quantitative methods such as an experiment, is that it “does not and cannot assess the effects of communication messages” (Stacks & Hocking, 1992, p. 269). The content analysis of texts only allows the researcher to describe their contents and make inferences regarding possible effects.

For this reason, Neuendorf (2002) suggests that researchers conducting content analyses be encouraged to add receiver data collection to their studies whenever possible. In this study, this was addressed through the conduct of in-depth interviews.

### **In-Depth Interviews**

The major strength of this method is that it allowed for an exploration of the perspectives of readers and non-readers of men's fitness magazines in an in-depth way. This type of research method allows the researcher to gain deep understanding of each person's experiences and opinions and to observe body language. It provides insight into the distinctive language used by participants—vocabularies, idioms, jargon, forms of speech (Lindlof, 1995). It is more efficient than participant observation in collecting data. Compared to focus groups, it is more private, allowing participants to air views that they might be reluctant to share in a group setting. It also allows for flexibility in following up thoughts and issues that emerge during the interview.

Regarding weaknesses, because the interviews were not conducted with a representative sample of the population, findings are not generalizable to the larger audience of undergraduate males. Given that the study was exploratory and that little research has been done on men's perspectives regarding the male body ideal and fitness magazines, this method was deemed appropriate. Although findings are not generalizable to a wider population, they still may be of value to researchers studying similar groups in comparable situations, as is suggested by Lincoln and Guba (1985) in their discussion of transferability criteria.

The use of a female interviewee also could be viewed as a weakness, as some male interviewees might have been reluctant to discuss openly their thoughts regarding body image with a member of the opposite sex. However, it also could be viewed as a strength.

Although some interviewees might not be as comfortable discussing body image concerns with a female researcher, others might be more willing to disclose these types of concerns to a woman than to another man. This potential problem was addressed in the selection process, by informing potential participants of the topics that would be addressed in the interview and of the fact that the researcher would be conducting the interviews herself. In addition, two initial interviews were used to ensure that interviewees were comfortable with the process and that it was not necessary to use a male interviewer.

The combination a quantitative content analysis with qualitative interviews allowed the researcher to explore both text and audience, thereby contributing to a better understanding of the relationship between the reading men's fitness magazines and concerns related to leanness and muscularity.

Findings are presented in Chapter 4.

## CHAPTER 4 FINDINGS

This chapter presents the results of the data analysis conducted for this dissertation. Findings regarding its two components—the content analysis of men’s fitness magazines and the interviews with college men—are presented separately. The implications of these findings are addressed in Chapter 5.

### **Content Analysis of Magazines**

A total of 496 advertisements and 515 articles from 15 issues of *Men’s Health* and 15 issues of *Men’s Fitness*, published from 1999 to 2003, were analyzed. As the issues of *Men’s Health* have more pages than those of *Men’s Fitness*, the sample included a slightly larger amount of content from the former. Of the 1,011 articles and advertisements coded, 544 (54%) were from *Men’s Health* and 467 (46%) from *Men’s Fitness*. Regarding advertisements, 283 (57%) were from *Men’s Health* and 213 (43%) from *Men’s Fitness*. Regarding articles, 261 (51%) were from *Men’s Health* and 254 (49%) from *Men’s Fitness*.

Within the sample of 1,011 articles and advertisements, a total of 3,432 images of men were identified. As mentioned in Chapter 3, these were photographic images (not cartoons or drawings) of males of adolescent age or older. As depicted in Table 4-1, a slightly larger number of images was identified in *Men’s Fitness* (1,799) than in *Men’s Health* (1,633). The majority of images were featured in articles (2,732), rather than advertisements (700). This may have occurred because some of the articles in these magazines featured a series of photographs of a model demonstrating a set of exercises.

Each photograph was counted individually, resulting in a large number of coded images for articles than advertisements.

Table 4-1. Number of images coded by magazine

	Men's Health	Men's Fitness	Total
In Advertisements	384	316	700
In Articles	1,249	1,483	2,732
Total	1,633	1,799	3,432

Findings regarding the four hypotheses are provided next.

**H1: The Magazines Will Be More Likely to Include Male Images Characterized by Low Body Fat than by Other Levels of Body Fat**

The first hypothesis predicted that the male images depicted in the magazines would be more likely to be characterized by a low level of body fat than other levels of body fat (medium or high). This hypothesis was supported.

Of the 3,432 images of men identified in the two magazines, levels of body fat were coded for 2,074 images. Regarding the other 1,358 images, the coders selected the category “can’t tell” for level of body fat. This category was used when coders were unable to determine the level of body fat of an image. This often occurred because the man in the photograph was wearing clothes that were not form-fitting, such as a loose shirt or a business suit, or because the body parts included in the photograph did not allow for body fat to be determined (e.g., only the head was pictured).

The three levels of body fat—low, medium, and high—were coded using the body fat scale included in the codebook (see Appendix A). As described in Chapter 3, low body fat was defined as looking very lean, having no visible signs of body fat; medium body fat was defined as having some body fat visible (e.g. love handles, stomach that is not flat); and high body fat was defined as looking obese, having a large amount of body fat visible (e.g., large stomach). Findings are summarized in Table 4-2.

Table 4-2. Levels of body fat of male images

Level of body fat	Images coded for body fat	
Low	2,334	(96.2%)
Medium	59	(2.4%)
High	33	(1.4%)
Total	2,426	(100.0%)

Note:  $\chi^2=4317$ , d.f.=2,  $p<.000$ .

The percentage of images characterized by low body fat (96%) was significantly higher than the percentages of images with medium body fat (2%) and high body fat (1%), according to the chi-square goodness of fit test,  $\chi^2 (2, N = 2426) = 4317$ ,  $p<.000$ .

Next, possible differences between the two magazines regarding the levels of body fat of male images were examined. Findings are presented below.

Table 4-3. Comparison of percentage of images by level of body fat and magazine

Level of body fat	Magazine	
	Men's Health n = 954	Men's Fitness n = 1,472
Low	95.3	96.8
Medium	2.7	2.2
High	2.0	1.0
Total	100.0	100.0

As shown in Table 4-3, the levels of body fat of images featured in the two magazines were very similar. Almost 97% of images in *Men's Fitness* and more than 95% of images in *Men's Health* were categorized as low in body fat. The percentages of medium and high body fat images also were similar for both magazines, with all of them being less than 3% each. The lack of significant differences between the two magazines regarding the level of body fat of male images was confirmed by a chi-square test of independence,  $\chi^2 (2, N = 2426) = 6.0$ ,  $p = .07$ .

Next, possible differences in levels of body fat featured in articles and advertisements were examined. As depicted in Table 4-4, images characterized by low body fat were more common in articles than in advertisements, while images

characterized by medium or high body fat were more common in advertisements than in articles. A chi-square test of independence was performed, with results suggesting that low body fat images were indeed more prevalent in articles (97%) than in advertisements (89%),  $\chi^2 (2, N = 2426) = 55.4, p < .000$ .

Table 4-4. Comparison of percentage of images by body fat content type

Level of body fat	Type of content	
	Advertisements n = 352	Articles n = 2074
Low	89.2	97.4
Medium	6.8	1.7
High	4.0	.9
Total	100.0	100.0

Note:  $\chi^2 = 55.4, d.f.=2, p < .000$ .

Part of the reason why medium and high body fat images were more common in advertisements than in articles could be due to the use of “before and after” photos in advertisements for weight-loss supplements. Of the 352 images coded in advertisements, 33 images (9%), featured in 12 advertisements, were identified as representing a negative portrayal. Of these, only 1 was characterized as low in body fat, while 19 (5%) were medium body fat and 13 (4%) were high body fat images. Nine of the twelve advertisements that included negative portrayals were for weight-loss and muscle building supplements, with three of these being for Hydroxycut and two for Xenadrine—two products with advertisements that often make use of before and after photos.

Negative portrayals were much less frequent in articles. Of the 2,074 coded images in articles, only 21 images (1%), included in 15 articles, were characterized as negative portrayals.

**H2: The Magazines Will Be More Likely to Include Male Images Characterized as Very Muscular than Images Characterized by Other Levels of Muscularity**

Hypothesis 2 predicted that the images of men depicted in the magazines would be more likely to be characterized by a very muscular physique than a not muscular, somewhat muscular, or unnaturally muscular body type. As described in Chapter 3, very muscular was defined as exhibiting a large amount of muscle definition (e.g., bulging biceps, rippled abdominals). It was contrasted with not muscular, or having no signs of muscle definition; somewhat muscular, or having some signs of muscle definition; and unnaturally muscular, or having an excessive level of muscularity that is characteristic of a professional bodybuilder. The data also supported this hypothesis.

Of the 3,432 images of men identified in the two magazines, levels of muscularity were coded for 2,306 images. For the other 1,126 images, the coders selected the category “can’t tell” for level of muscularity. This category was used when coders were unable to determine the level of muscularity of an image. This often occurred for some of the same reasons why level of body fat could not be determined (e.g., loose clothing, not enough body parts depicted to distinguish between different levels of muscularity).

Of the 2,306 images for which level of muscularity was coded, 1,993 were featured in articles and 313 in advertisements. As depicted in Table 4-5, the percentage of images characterized as very muscular (82%) was significantly greater than the percentages of images in the not muscular (3%), somewhat muscular (12%), and unnaturally muscular (3%) categories, according to the chi-square goodness of fit test,  $\chi^2 (2, N = 2306) = 4,068, p < .000$ .

Table 4-5. Levels of muscularity of male images

Level of muscularity	Images coded for muscularity n = 2,306	
	Not muscular	71
Somewhat muscular	272	(11.8%)
Very muscular	1,895	(82.2%)
Unnaturally muscular	68	(2.9%)
Total	2,306	(100.0%)

Note:  $\chi^2=4,068$ , d.f.=3,  $p<.000$

To examine possible differences between the two magazines regarding the level of muscularity of male images, a chi-square test of independence was conducted. Findings, presented in Table 4-6, suggest that the very muscular images were more prevalent in *Men's Fitness* (85%) than in *Men's Health* (78%). Images characterized as not muscular or somewhat muscular were more common in *Men's Health* (17%) than in *Men's Fitness* (11%),  $\chi^2$  (3,  $N = 2,306$ ) = 68.7,  $p<.000$ ).

Table 4-6. Comparison of percentages of images by muscularity and magazine

Level of muscularity	Magazine	
	Men's Health n = 855	Men's Fitness n = 1451
Not muscular	5	1.9
Somewhat muscular	16.5	9.0
Very muscular	77.8	84.7
Unnaturally muscular	.7	4.3
Total	100.0	100.0

Note:  $\chi^2=68.7$ , d.f.=3,  $p<.000$ .

Possible differences regarding the level of muscularity of images featured in articles and advertisements also were examined. Results are presented in Table 4-7.

As shown in Table 4-7, the majority images in both advertisements and articles were characterized by high levels of muscularity. However, images characterized as very muscular were more common in articles (86%) than in advertisements (59%), while those characterized as unnaturally muscular were more common in advertisements (17%) than

in articles (1%). Images characterized as not muscular or somewhat muscular also were more common in advertisements (23%) than articles (14%).

Table 4-7. Comparison of percentages of images by muscularity and content type

Level of muscularity	Type of content	
	Advertisements n = 313	Articles n = 1,993
Not muscular	6.7	2.5
Somewhat muscular	16.6	11.0
Very muscular	59.4	85.8
Unnaturally muscular	17.3	0.7
Total	100.0	100.0

Note:  $\chi^2=176.5$ , d.f.=3,  $p<.000$ .

Part of the reason why the not muscular and somewhat muscular categories were more frequent in advertisements than in articles could, again, be the use of “before and after” photos in advertisements for weight-loss and/or bodybuilding supplements. As mentioned earlier, 9 of the 12 advertisements that included negative portrayals were for these types of supplements. Of the 33 negative portrayals in these advertisements, 20 were characterized as not muscular and 13 as somewhat muscular. None of the negative portrayals were categorized as very muscular or unnaturally muscular.

However, this fails to explain the higher frequency of the unnaturally muscular body type in advertisements than articles. A review of the articles and advertisements featuring this type of body type provides the answer. These types of body types were found in 54 images in 16 advertisements, compared to 14 images in 3 articles in the sample. Of the 16 advertisements featuring unnaturally muscular physiques, 7 were for Joe Weider videotapes, books, or magazines. As Joe Weider is associated with bodybuilding, it is not surprising that advertisements for his products would feature images representing the professional bodybuilder body type. Moreover, all of these advertisements were included in *Men’s Fitness*, which was owned by Weider at that time.

Four of the other advertisements were for the performance-enhancing supplements Xenadrine and Cell-Tech; three were for publications related fitness, muscle building, and performance-enhancing supplements; one was for a fitness challenge event, and the last one was for a “max muscle tank top.”

### **H3: The Articles in These Magazines Will Be More Likely to Have Leanness and/or Muscularity as a Main Topic than Other Issues**

This hypothesis proposed that the articles included in the magazines would be more likely to have leanness and/or muscularity as a major topic than other issues such as fitness or sports, sex/romantic relationships, health, beauty, or style. The data supported H3, but this finding held only for one of the magazines; leanness and/or muscularity was more likely to be the main topic of articles in *Men’s Fitness*, but not in *Men’s Health* magazine.

A total of 538 main topics were identified in the sample of 515 articles (some articles were identified as having two main topics). Table 4-8 lists the frequencies of main topics of the articles in the sample.

Table 4-8. Frequency of main topics of articles

Main topic	Frequency	
	N = 538	
Muscularity <sup>a</sup>	82	15.2%
Health	96	17.8%
Fitness or sports	78	14.5%
Sex/Relationships	62	11.5%
Leanness <sup>a</sup>	54	10.0%
Nutrition	50	9.3%
Beauty and/or style	37	6.9%
Financial/Career	11	2.0%
Other	68	12.6%
Total	538	100.0%

Note:  $\chi^2=149.8$ , d.f.=7,  $p<.000$ .

<sup>a</sup>Leanness and muscularity were combined for the chi-square test.

Although leanness/weight-loss and muscularity were listed as separate topics in the coding sheet, when combined, they were the main topic of more than a quarter of the articles in the sample. The next most frequent topics were mental or physical health (18%), fitness or sports (15%), sex/romantic relationships (12%), nutrition (9%), beauty and/or style (also were coded separately but combined for the analysis, 7%), and financial/career (2%). Topics listed under the “other main topic” category, which accounted for 13% of the sample, included product descriptions, lists of facts or statistics, topics related to family relationships, and other miscellaneous topics such as travel, landscaping, and winter driving. None of these topics, separately, occurred with a frequency greater than six.

Possible differences regarding the two magazines also were examined. Results appear in Table 4-9.

Table 4-9. Comparison of percentage of main topics of articles by magazine

Main topic	Magazine	
	Men's Health n = 270	Men's Fitness n = 268
Leanness/Muscularity	15.9	34.7
Health	21.9	13.8
Fitness/Sports	9.3	19.8
Sex/Relationships	17.0	6.0
Nutrition	4.8	13.8
Beauty/Style	10.0	3.7
Other <sup>a</sup>	21.1	8.2
Total	100.0	100.0

Note:  $\chi^2=82.8$ , d.f.=6,  $p<.000$ .

<sup>a</sup>Financial/Career was included under “other.”

As described above, significant differences were found between the two magazines regarding the main topics of articles. While the two main topics in *Men's Fitness* were leanness and/or muscularity (35%), followed by fitness/sports (20%), in *Men's Health*, they were mental or physical health (22%), followed by and sex/romantic relationships

(17%). Muscularity and/or leanness (16%) came in third place in *Men's Health*. Style or beauty as a main topic was more frequent in *Men's Health* (10%) than *Men's Fitness* (4%), while nutrition was more common in *Men's Fitness* (14%) than in *Men's Health* (5%).

#### **H4: The Advertisements in These Magazines Will Be More Likely to Promote Leanness and/or Muscularity as a Benefit than Other Benefits**

Hypothesis 4 was concerned with the contents of advertisements included in men's fitness magazines. It proposed that these advertisements would be more likely to promote leanness and muscularity than other benefits such as fitness/sports performance, sex/romantic relationships, or health. For the overall sample, this hypothesis was supported; however, the results held only for advertisements in *Men's Fitness*, not for those in *Men's Health*.

In the sample of 496 advertisements, a total of 710 major benefits were identified. (For 14 of the advertisements, no benefits were identified, while for many of the other ads, more than one benefit was identified.) Table 4-10 lists the major benefits promoted in the advertisements in the sample.

**Table 4-10. Frequency of major benefits promoted in advertisements**

Major benefit	Frequency	
	n = 710	
Leanness/Muscularity	165	23.2
Beauty/Style	157	22.1
Fitness	88	12.4
Health	75	10.6
Sex/Relationships	64	9.0
Taste <sup>a</sup>	30	4.2
Financial	24	3.4
Comfort/Convenience <sup>a</sup>	18	2.5
Entertainment <sup>a</sup>	17	2.4
Other benefits	72	10.1
Total	710	100.0

Note:  $\chi^2=369.04$ , d.f.=9,  $p<.000$ .

<sup>a</sup>New categories derived from descriptions under "other benefits."

As noted above, leanness and muscularity (23%) were the types of benefits most frequently promoted in advertisements, according to the chi-square goodness of fit test,  $\chi^2$  (9,  $N = 710$ ) = 369.04,  $p < .000$ . Beauty and style (22%) came in second, followed by benefits related to fitness (12%), health (10%), and sex or romantic relationships (9%). Other benefits included taste (4%), financial (3%), comfort or convenience (3%), entertainment (2%), and other miscellaneous types of benefits (10%).

Of the 710 advertisements, 392 were in *Men's Health* and 318 in *Men's Fitness*. Possible differences regarding the two magazines were examined. Results are presented in Table 4-11.

Table 4-11. Comparison of percentages of major benefits of ads by magazine

Major benefits	Magazine	
	Men's Health n = 392	Men's Fitness n = 318
Leanness/Muscularity	11.0	38.4
Beauty/Style	29.8	12.6
Fitness	8.9	16.7
Health	10.7	10.4
Sex/Relationships	11.0	6.6
Taste <sup>a</sup>	2.8	6.0
Financial <sup>a</sup>	4.3	2.2
Comfort/Convenience <sup>a</sup>	3.8	0.9
Entertainment <sup>a</sup>	4.1	0.3
Other benefits	13.5	6.0
Total	100.0	100.0

Note:  $\chi^2 = 106.0$ , d.f. = 5,  $p < .000$ .

<sup>a</sup>Included under "other benefits" for the chi-square test.

As depicted above, significant differences were found between the two magazines regarding the benefits promoted in advertisements. Only *Men's Fitness* was found to have a majority of ads featuring muscularity and/or leanness as a benefit (38%). For *Men's Health*, ads promoting benefits related to beauty/style (30%) were more common than those related to leanness and/or muscularity (11%). The prevalence of benefits

related to health was similar in ads included in the two magazines (10-11%). Fitness-related benefits were more common in the ads in *Men's Fitness* (17%, compared to 9%) and sex and romantic relationship benefits were more common in *Men's Health* (11%, compared to 7%).

These differences in the benefits most frequently promoted may be partly explained by differences in the types of advertisements included in the two magazines. A comparison of the types of products advertised by magazine is provided in Table 4-12.

Table 4-12. Comparison of types of products advertised by magazine

Type of product	Men's Health n = 293	Men's Fitness n = 203	Combined n = 496
Media/Communications	18.4	14.3	16.7
Clothes/Shoes/Accessories	23.9	6.4	16.7
PES	3.4	35.0	16.3
Automotive	18.4	9.4	14.7
Grooming	13.7	10.3	12.3
Food	6.1	6.4	6.3
Medical	5.5	4.9	5.2
Other supplements <sup>a</sup>	1.0	4.9	2.6
Financial <sup>a</sup>	2.0	1.0	1.6
Exercise equipment <sup>a</sup>	0.3	2.0	1.0
Other topic	7.2	5.4	6.5
Total	100.0	100.0	100.0

Note:  $\chi^2=58.7$ , d.f.=7,  $p<.000$ .

<sup>a</sup>Included under "other topic" for chi-square test.

As depicted above, in general, the types of ads most frequently included in the sample were for products related to media and communications (17%), clothes and accessories (17%), performance-enhancing supplements (16%), automotive (15%), and grooming (12%). However, when the types of products advertised in the two magazines were compared, significant differences were found;  $\chi^2 (7, N = 496) = 58.7$ ,  $p<.000$ . For *Men's Fitness*, the majority of advertisements (35%) were for performance-enhancing supplements (PES), which only accounted for 3% of advertisements in *Men's Health*. These types of supplements often are marketed as promoting muscle growth and fat-loss,

which may help explain why benefits related to muscularity and/or leanness were more common in *Men's Fitness* than in *Men's Health*.

For *Men's Health*, clothes/shoes/accessories was the top category, accounting for almost 24% of all advertisements (compared to 6% in *Men's Fitness*). In addition, advertisements in the automotive category also were more common in *Men's Health* (18%) than in *Men's Fitness* (9%). Many of these advertisements suggest style (i.e., increased coolness or appeal via association with expensive vehicles) as a benefit. The fact that advertisements for clothing and cars were more common in *Men's Health* than in *Men's Fitness* may help explain why ads in the former were more likely to promote benefits related to beauty/style than muscularity or leanness.

### **Other Findings Concerning Articles**

In addition to data on the main topic of the articles included in the sample, the coding sheet for articles also obtained information on the *benefits* of following the advice provided in the article and on the *methods* proposed in the article for achieving these benefits. Although these variables were not included in the hypotheses, findings are provided below, as they may contribute to a better understanding of the contents of men's fitness magazines.

### **Benefits of following advice in articles**

Of the sample of 515 articles, 56 (11%) were identified as not suggesting any benefits. Of these, 40 (8%) were in *Men's Health* and 16 (3%) were in *Men's Fitness*. The types of articles categorized as having no benefits were often Q&As with celebrities, lists of statistics or other facts or curiosities, funny stories, and other articles that did not provide any type of advice to readers.

A total of 659 major benefits were identified in the remaining 459 articles. Table 4-13 provides a comparison of the major benefits included in articles in the two magazines.

Table 4-13. Comparison of percentage of major benefits in articles by magazine

Major benefits	Men's Health n = 306	Men's Fitness n = 353	Combined n = 659
Muscularity/Leanness	25.5	42.2	34.4
Health	25.2	23.8	24.4
Fitness/Sports performance	10.8	20.1	15.8
Sex/Relationships	18.0	5.9	11.5
Style/Beauty	9.2	5.4	7.1
Financial/Career	4.6	0.0	2.1
Other benefits	6.9	2.5	4.6
Total	100.0	100.0	100.0

Note:  $\chi^2=69.1$ , d.f.=6,  $p<.000$ .

As depicted in Table 4-13, muscularity and/or leanness were suggested as major benefits in the majority articles (34%) in the combined sample, followed by health (24%). However, again, differences were found between the two magazines. The articles in *Men's Fitness* were more likely than those in *Men's Health* to include benefits related to muscularity/leanness. In *Men's Health*, there was almost no difference in the percentage of benefits related to muscularity/leanness (25.5%) and benefits related to health (25.2%). Benefits related to fitness/sports performance were more common in *Men's Fitness* (20%, compared to 11%), while those related to sex/relationships were more common in *Men's Health* (18%, compared to 6%).

#### Methods for achieving benefits

Of the sample of 515 articles, 64 (12%) were identified as not including any main methods for achieving benefits. Of these, 47 (9%) were in *Men's Health* and 17 (3%) were in *Men's Fitness*. The types of articles categorized as having no methods were often the same ones that did not include any benefits (e.g., Q&As with celebrities, funny stories, statistics).

A total of 662 main methods were identified in the remaining 451 articles. Table 4-14 provides a comparison of the main methods included in articles in the two magazines.

Table 4-14. Comparison of percentage of methods in articles by magazine

Main methods	Men's Health n = 360	Men's Fitness n = 417	Combined n = 777
Anaerobic/Weights	16.9	19.4	18.3
Nutrition	12.8	16.5	14.8
Aerobic/Sports	10.8	14.6	12.9
Dieting	8.9	10.8	8.9
Product purchase <sup>a</sup>	6.7	6.0	7.3
Mental/Spiritual	6.1	5.8	5.4
Therapy/Treatment	5.0	4.8	4.4
Take other supplements <sup>b</sup>	4.4	4.3	4.0
Take medications <sup>b</sup>	3.3	3.4	3.7
Stretching <sup>b</sup>	3.1	3.1	3.3
Take PES <sup>b</sup>	3.1	2.9	2.6
Sex/Relationship tips <sup>ab</sup>	2.5	1.4	2.2
Grooming/Style <sup>b</sup>	0.6	1.0	1.7
No PES <sup>b</sup>	0.3	0.2	0.1
No medications <sup>b</sup>	0.0	0.0	0.1
No other supplements <sup>b</sup>	0.0	0.0	0.0
Other methods	15.6	5.8	10.3
Total	100.0	100.0	100.0

<sup>a</sup>New category created from descriptions of "other methods" in coding sheets.

<sup>b</sup>Included under "other methods" for the chi-square test.

No significant differences were found between the two magazines regarding methods;  $\chi^2 (8, N = 777) = 15.1, p = .06$ . The types of methods most frequently included in articles in both magazines were anaerobic/weights, followed by nutrition, aerobics/sports, dieting, product purchase, mental/spiritual methods, therapy/treatment, and taking other (non-PES) supplements. Methods included in less than 5% of articles included taking medications, taking PES, sex-relationship tips, grooming/style, not taking PES, not taking medications, and not taking other supplements. Methods not falling within any of the categories above made up 16% of the methods in *Men's Health* and 6% of methods in *Men's Fitness*. These methods included a variety of miscellaneous

activities, such as off-road motorcycling, sleep tips, CPR training, ways to avoid injuries, insurance tips, driving tips, tips to improve training, and sun protection.

### **Summary of Content Analysis Findings**

As discussed above, all four hypotheses were supported. The men's fitness magazines were more likely to feature male mages characterized as low in body fat and as very muscular than by other levels of fat and muscularity. The main topics of the articles featured in these magazines, particularly *Men's Fitness*, were more likely to be muscularity and/or leanness than other topics, such as health, fitness and sports performance, or nutrition. The same was true regarding the benefits promoted in advertisements featured in these titles.

### **In-Depth Interviews**

In-depth interviews were conducted with 13 undergraduate male students ages 19-28. Of these, 11 were Caucasian, 1 Hispanic, and 1 Black. Three participants were born outside of the U.S.—in Haiti, Guatemala, and Russia—but had moved to Florida as children or preadolescents (5-, 1-, and 12-year(s)-old, respectively). Only one participant was born and raised outside of Florida: in California. The others were either born in Florida or moved to Florida as children and attended high schools in West Palm, Mayo, Fort Myers, Hollywood, Keystone Heights, Tampa, Leesburg, Fort Lauderdale, Orlando, and Miami.

Regarding college majors, 3 participants were in advertising, 2 in journalism, and 2 in political science (with double majors in history and in public relations). The others were majoring in psychology and international relations, sociology, microbiology, nutritional science, and computers and economics. One participant was at a local

community college completing the pre-requisites for admission into the athletic training program.

Of the 13 participants, 6 were heavy readers of fitness magazines (had a subscription in the past or had thoroughly read at least six issues in the past year), 3 were moderate readers (were not regular readers but had looked over at least 3 issues in the past year), 3 read these types of magazines infrequently or never, and 1 did not read fitness magazines but read bodybuilding magazines occasionally.

Regarding levels of participation in bodybuilding, sports, or other types of physical activity, 6 were frequent exercisers (8 hours per week or more), 4 exercised in moderation (2-5 hours per week), and 3 did very little or no exercising at all (1 hour or less per week). Although the heights and levels of muscularity of participants varied, none of them was visibly overweight.

The interviews addressed the following four research questions:

RQ 1: How do male undergraduates describe the ideal male body?

RQ 2: How important is it for male undergraduates to achieve the ideal physique?

RQ 3: What are the differences between readers and non-readers of men's fitness magazines regarding the ideal and its achievement?

RQ 4: What are other differences between readers and non-readers?

Findings are provided next, along with other information gleaned from the interviews that may contribute to a better understanding of the relationships among body image concerns, exercise, and the reading of fitness magazines. (Note: To protect participants' confidentiality, all names have been changed.)

## **RQ 1: How Do Male Undergraduates Describe the Ideal Male Body?**

### **Toned and defined but not too big**

When asked to describe what most people in our society consider the ideal male body, all participants listed aspects of appearance related to muscularity, such as being big, “cut,” “ripped,” “toned,” “in shape,” and/or having a V-shaped body, defined muscles, and broad shoulders. Most described the ideal as characterized by a moderate level of muscularity—a “toned” or “defined” look, as opposed to the “bulky” or extremely muscular look of a bodybuilder. Nine specifically noted that the ideal was “not too big.” Of these, 3 suggested that girls found the toned look more appealing than an extremely muscular physique:

*Dennis:* The girls I know, anyway, think that guys who are toned are more attractive than big huge guys that can barely move ‘cause their muscles are so big... You can see them [the muscles] but they’re not bulging out all over the place. Like this guy on the cover [of *Men’s Health*], he looks toned. Not huge like a bodybuilder is huge. He’s way more bulky and huge than he’s toned. Like a basketball player or something. They look toned. You can see their biceps. From talking to the girls that I know, that’s what they think. And I’d much rather look like that than bulky.

*Tony:* I really don’t think most people like the *Flex* [bodybuilding magazine] covers with the huge guys. Most women I’ve talked to think that that looks a little disgusting. I think the general population just wants that [points to *Men’s Health* model] or a little bit bigger. Just sort of toned. Like that [points to cover of *Men’s Fitness*]. I even think that’s on the higher end of normal. I think that’s Tiki Barber. He’s a pro-football player. Toned, muscles being defined, but definitely I don’t think like huge muscles. I think that [the *Men’s Health* model] would be ideal right there.

Ten participants noted that they personally desired to be toned or moderately muscular, but not too big, huge, or enormous. One of them described guys who did a lot of weightlifting as “beefnecks” and said that he associated that type of look with low intelligence. Another noted that he did not want to be “muscle-bound” or have his physical activity limited by an excessive amount of muscularity. Most participants

described their own ideal as in shape, fit, strong, functional, and athletic. Examples cited included models featured in men's fitness magazines and men's underwear commercials, basketball players, soap opera stars, rock stars, and actors such Brad Pitt and Edward Norton.

Although Arnold Schwarzenegger was named by 4 participants, in 3 cases he was cited as an example of someone who was too big. Only one participant listed Schwarzenegger as representing society's ideal. However, this participant noted that, personally, he preferred a somewhat smaller physique: "a hybrid of the *Men's Health* look and a bodybuilder...someone in between."

Two participants noted a difference between society's ideal—a moderately muscular look—and their own ideal, which was a larger, bulkier size. The first of these was a former high school football player and wrestler who has been doing weight lifting since ninth grade:

*Arnold:* The ideal male physique would probably be someone like Tiki Barber [on cover of *Men's Fitness*] right there. Slimmer, and just really cut up, muscles, somebody who looks like the all-around athlete. Not as big as a football player, not as big as me even. Probably just more cut up... Ideally, for me, it would be a jacked up, extra 20 pounds of muscle. But that would not be ideal for anybody else. I'd probably look like a freak. But for me that would be ideal.

The other participant started weightlifting at age 13 and sometimes reads bodybuilding magazines but not fitness titles. He described society's ideal as a "trendy look" characterized by a "28-inch waist, rippling abs, and a V-shaped body with small shoulders, tiny neck, slender arms and slender neck." However, he noted that he and his friends were not working toward a slender look but rather wanted a larger and bulkier physique:

*David:* Most of my friends are either bulk or in between. Everyone is aspiring to get that bulk look, not trying to get that trendy look that everybody's going for.

Researcher: What's the difference?

*David:* A bulk look is like what I was talking about: the strong legs, the broad shoulders, the V-cut, not necessarily abs. They just want to be big all around. Society wants the slender look. You can see the biceps coming through the skin, the abdominals coming through the skin, the chest has to be perfectly rounded, doesn't have the bulk you get from constantly lifting. It has that nice flat look.

The quote above also describes another aspect of appearance frequently cited by participants as a characteristic of the male body ideal: leanness.

### **Lean but not skinny**

When asked to describe the ideal male body and/or their own personal goals regarding their bodies, all participants listed aspects related to leanness, such as being trim, lean, slim, slender, or cut up; not being overweight; and not having any fat on your stomach. One participant suggested that society is placing a growing emphasis on leanness for men:

*Tony:* I think, applying to both males and females, you look on any (magazine) cover, fat is a no-no. If you have excess fat, you should get rid of it. And I don't know how true that should be, but I think in our society it's very true. It's surprising, in the past 5 or 8 years, that's always been a very big deal with women, body image, like on Cosmo [*Cosmopolitan* magazine] and stuff. But it's really getting to be a very big deal for men, too. And I don't really think it was like that before. So I think, definitely, get rid of your fat.

One participant noted that he had gone through a stage in fifth or sixth grade when he had become a little chubby and that he still had concerns about gaining weight:

*David:* Yeah, I guess I do [worry about gaining weight]. Because I'm not as involved as I used to be. I used to spend so much time working out and running. And I had all this free time. And now with work and classes...I want to be like I used to be, when I had all the free time. And I'm scared that something bad is going to happen and I'm going to become overweight.

However, participants did not want to be "skinny" either. Rather than being associated with a lack of body fat, being skinny was perceived as being small and non-muscular. Three participants noted that they had been very skinny as children and

adolescents and felt better about themselves now that they had gained some weight. Here are two examples:

*Keith:* I was not comfortable with being as thin as I was, being as tall as I was. I was 6'6", and I weigh basically 180 pounds. I probably weighed 150, 160 in high school. Even when I graduated high school, I was like 175, 180 pounds. I was just too skinny. I didn't want to be skinny...I'm comfortable with myself now. It's not something I'm ashamed of. Before I would wear like two shirts, even though they are only a millimeter thick. I would feel bigger if I'd wear two T-shirts all the time. Now I don't really think about it.

*Researcher:* Did you ever think you were too small?

*Doug:* Yeah, when I came to UF my freshman year, I'm 6'2" and I weighed about 160 pounds. Now I weigh 195. So when I came here, I was really scrawny, and I felt like a little scrawny kid, like, walking by football players here on campus and the upper classmen. So it was really my freshman year when I started working out and getting eventually into the shape, to the point where I am right now.

Although both of these participants stated that they were comfortable with their bodies now, they still have concerns related to specific body parts. For one, it is his neck: "I wish my neck weren't so skinny. I hate it. I can never get more built up in my traps and stuff like that. I could never get it." For the other, it is his legs:

*Derek:* My biggest thing is my legs. My legs are not up to par, to say the least. Granted, I work them out. It's hard, it's very hard to put muscle mass on your legs. I'd probably add a couple more pounds to my legs. It's just skinny legs. It runs in the family. We all have skinny legs. My dad has pretty good legs, actually. It's my grandfather who has skinny legs.

As described below, concerns regarding another body part—the stomach—were brought up by several participants.

### **I dream of a six-pack**

All participants expressed the belief that six-pack abs (a lean and muscular stomach with contours that resemble a six-pack of beer; also called "washboard abs") were an attractive feature. Eight noted that they would like to have a six-pack, with one stating that it was the one thing his girlfriend thought was really sexy. As another noted,

“If I had abs like that, I’d never put on a shirt.” Two participants had been able to achieve the look and were working toward maintaining it:

*Derek:* I’ve been obsessed with that [the six-pack look] since I can remember, with the whole six-pack thing. But, the one good thing about that is I was very skinny when I was younger, and I played a lot of basketball. You see it in my family. My little brother is like a stick, just like I was. He’s in the ninth grade now. He’s a stick like I was back then. But we always had a stomach that was good looking. But that’s something that, thank God, and I hope I’m not jinxing myself, but I’ve been able to keep up. It’s a nice thing to have. It complements everything else pretty well.

*Doug:* [I got a six-pack] probably this past year, when I really started again. After basic training, the guy I worked with in Special Forces showed me his routine and it’s pretty rigorous. I’ve been following it up to today. I wake up pretty early, I should tell you. I wake up at like 5 or 6 in the morning to work out, which a lot of people don’t do. I guess the military kind of instilled that. So I’m able to work out two hours in the morning and do these hard workouts and see results I like... Yes [it was a goal]. Now I’m just maintaining it. Not drinking too many beers, and things like that.

Another participant noted that he had been able to get a six-pack but was having a hard time maintaining it because he liked to indulge in flavored coffee drinks: “It comes and goes pretty quick. Last week I had it and this week I drank two coffee drinks so I’m not having it this week.” Another one said he did not want to give up drinking beer in order to achieve and/or maintain a six-pack.

Six participants thought the six-pack look was too hard to achieve. They stated that they did not want to put in the time and effort required to achieve that look, noting that in order to get a six-pack, it was necessary not only to build the abdominal muscles but also to lose all body fat in the stomach area. Otherwise, the muscles would not show. These participants did not want to work that hard. Although they would like to have a six-pack, not having it was not a major concern to them:

*Dennis:* I mean, I’d like to have a six-pack, but it doesn’t bother me that I don’t really. If I could have one—if I could snap my fingers and I’d get one, then I’d be

like, oh yeah, OK. But I'm not going to go to the gym 6 hours a day, 7 days a week to try to get one. I don't want it that bad.

*Mark:* I wish there was an easier way. You would just take a pill and all of the sudden you have rock hard abs. That's like my dream. But why I don't? One, personally I feel like I don't have the time. But if I wanted to, could I probably make the time? Yeah, sure. And also I'm lazy. When I get free time, I want to sit there. That's really all I want to do. I don't want to be like, OK, I've got to go to the gym now.

One participant said he didn't worry about getting a six-pack because he didn't walk around with his shirt off all the time. Another stated, "It would be nice to have one, but my stomach doesn't stick out of my shirt or hang over my belt so I'm not really that worried about it."

Although none of the interviewees appeared to be overweight, three mentioned that they would like to lose stomach fat. One said he would like to lose 5-7 pounds around his midsection. Another noted that he would lose the stomach fat when he had more time. The third stated that he would like to lose a little fat on his stomach, adding, "Well, it's not really fat. It's just that the muscles aren't showing."

### **Other characteristics of the ideal**

Another characteristic of the male body ideal mentioned by four participants was having a tan. One of them noted that it was important not to look like you had spent all day at the computer. Three mentioned being tall as a component of the ideal. However, another participant stated that he thought that being tall was not as important today as it had been in the past: "Now I don't think guys have to be as tall. But definitely have those washboard abs and everything, big biceps, and big pecs and everything."

### **RQ 2: How Important Is it for Male Undergraduates to Achieve the Ideal Physique?**

Participants expressed different views regarding the importance of looking lean and muscular. Although none thought it was not at all important do so, only 4 stated that it

was very important, with the others indicating that it was a somewhat important but not a very important goal.

One of the participants who thought it was very important to be lean and fit cited health-related reasons:

*Nick:* Every single person in my family is obese, has heart disease, diabetes, something like that. So I got into sports when I was really young, and I noticed a change in my body that didn't follow the path of McDonald's and Burger King. And I started to eat healthier. And I'm the only one in my family to ever not be obese or have health problems yet...It's very important. Like I said, if you don't look lean, for one thing, it would be unhealthy. Because if you're not lean and toned it probably means, for me, I know that that's gonna send a big alarm off in my head saying, "Oh, I'm starting to get out of shape." My father has heart disease and he's had open-heart surgery, so I'm not trying to go down that road. So it's really important for me to be lean and toned.

This participant, as well as the others who thought it was very important to be lean and muscular, also cited reasons related to the social benefits of looking like the ideal.

They noted that people who look fit are treated better by others, are more likely to be hired, and are more likely to be successful in their careers:

*Doug:* I think you get noticed in public, with the people who deal with you. You get treated a certain way—a little bit better than if you were out of shape and scrawny or overweight. You can get more favorable treatment in that respect. It's important for public image.

*David:* If I walk into an office and I'm going for a job interview, any job. And I'm physically fit. And it looks like I am strong. And there's another guy applying. And he doesn't look like he's done anything all day, just played video games, whatever. He has no dedication, no perseverance for anything. He doesn't have something that he has to do every day. If you walk in my office and I saw I guy who I knew that he was paying attention to something, that he was controlling things and the other guy wasn't. He could be the smartest guy in the world. But visualization is everything. Perception is reality.

*Nick:* In society, if you look at the majority of successful people, they usually look successful. The ideal successful person is usually not overweight. I guess if you're a senator that's not really true but. If you look at the majority of people who have the things that people want—the nice cars, the nice houses, and this and that—they're usually in shape. Because personally I believe that it goes back to if you're in shape, you probably exercise, you probably have a high level of discipline or a

medium level of discipline. So you know how to set goals and accomplish them. You set a goal with your body and accomplish it. So you probably set goals in other areas of your life and accomplish them.

The other 9 participants indicated that it was at least somewhat important to look in shape but not very important to do so. Several noted that they had other priorities in their lives, particularly academics, and/or did not have time to spend on improving their physiques. For example, one stated that he was more concerned with political issues than with perfecting his physique:

*Alan:* The people that I know who are very, very fit, that's their primary interest. And my primary interest is in politics. So no matter how much I like to be active, I'm never going to get there because that's not my main focus. On the other hand, the organization I'm in, we just stopped a road from being built and destroying a natural area on campus....I might be a pound heavier because I was drinking a lot of coffee and eating a pastry, but it's the costs and the benefits of the action you're taking a part in. If I'd been to the gym, I might have some more definition in the abs, but I don't know. This is the trade-off, I guess.

Two participants noted that they were not opposed to approximating the ideal. They would like to do so eventually, when they had more time. However, it was not currently a priority for them.

Three participants noted that attaining the ideal was not that important to them because it was not necessary to do so in order to attract a romantic partner. One, a regular weightlifter who looked very muscular, noted that as long as he was able to attract women, he wouldn't worry about his physique. Another, a non-exerciser, said that appearance was not very important to the girls with whom he socialized (although it was important to other girls). Another participant who did not exercise said he was not worried about achieving the ideal because he would find someone who loved him anyway.

None of the participants indicated that they were strongly concerned with their own appearance. However, three noted that they had close friends who had serious concerns related to appearance:

*Nick:* A couple of them [have concerns about their appearance], yes... They can just be 5% body fat, washboard abs, biceps 20 inches around, and say, "Man, I'm getting fat." I have a friend who's my roommate and he's in great shape. And he'll eat like a cookie. And we'll all go out for dinner or go out to a club and dance or something like that. And he won't have a drink, he won't eat anything, because he had a couple of cookies and he's afraid he's gonna get fat. And he has a phobia because he used to be really big in high school. He was obese and now he's gotten down to a desirable weight. He's in great shape... He doesn't drive his car to school. He either jogs or rides his bike, which is good. But too much cardio and you're burning muscle and fat and everything else. He just does it obsessively and that just turns into a disorder. It's not good.

*Tony:* My best friend here in Gainesville is my roommate... If we're gonna be talking about *Men's Health*, about stuff like that, he's very, very much into working out. He was a very small guy. And he was sort of a real, real skinny guy in high school. And he one time just decided to start working out. He's been doing it for five years. Just between you and me, I think he's a little too into it. He's a little obsessed with it.

*Ted:* One of my best friends, he goes to another university. He goes to the gym like three times a week, at least, three to four times a week. He's always there. He's on the volleyball team. So part of it is so he does better in volleyball. And then he is big on appearance and stuff, with muscles, always asking "Do I look bigger?" I don't know.

These quotes suggest that some college men, particularly those who had body image concerns when they were younger, may continue to experience these concerns in college and may engage in eating disordered behaviors and overexercising in order to achieve and/or maintain a lean and muscular physique.

None of the interviewees indicated that they themselves had serious concerns with their appearance, nor did they report behaviors suggestive of a body image disorder. However, concerns regarding the achievement of a lean and/or muscular physique did have an effect on participants' behaviors. All participants who exercised moderately or

frequently cited appearance as one of the main reasons for doing so. As noted by one of the frequent exercisers, "I like to look at the physique of my body, you know, being able to go to the pool and take off my shirt and feel confident about the way I look."

Several participants engaged in a substantial amount of exercising each week, with 3 working out more than 12 hours a week, doing a combination of weightlifting and cardiovascular work. One of them, who had achieved six-pack abs, got up at 5 or 6 a.m. every morning to do 2 hours of exercises and had switched to low-carbohydrate beer in order to maintain his six-pack. Another participant spent 6-8 hours weightlifting every week and played basketball for hours every weekend. He noted that although strength and fitness were important to him, appearance goals were his main motivators.

*Derek:* My goals when I first started, and I don't think they've changed that much, is to put on good size, have good weight, and be pretty cut. And I think the third part of that would be to just stay healthy. And they do go in importance in the same order. It should be the other way around but, realistically, the thing I worry about the most, most of the time, is having a good physique or what not.

Concerns related to achieving a lean and muscular appearance also affected other behaviors, particularly those related to nutrition. The three participants who did not exercise attempted to control their weight by focusing on their nutritional habits, such as by eating home-cooked meals and avoiding fast food.

Two participants stated that they monitored their level of body fat. Eight noted that they limited the amount of fat and/or carbohydrates in their diets in order to control their weight. Two tried to limit sugar in their diet because of concerns with gaining fat, with one noting that he had a complex about being overweight:

*Mark:* The only thing with sweets is I'm a big cookie fan, so if you put a chocolate chip cookie in my face I'll definitely eat it. That's my one bad thing. And I get my chocolate moods and I'll buy like M&Ms a lot. I don't really think about it, though... I have this whole complex about being fat even though clearly I'm not. I was never really overweight where it was an issue—maybe a couple of pounds... I

definitely worry about it. But instead of exercising, I just eat less. Which I don't know if that's good for you but it's what I do.

Three of the frequent exercisers reported eating a high-protein diet. They noted that they ate a lot of chicken—one ate it every day. Another had ground beef and eggs almost daily. Another participant noted that he limited his intake of sodium because it retains water and “you don't want a buffer between your skin and your muscles because of muscle definition.”

Although participants talked about limiting certain types of foods to prevent weight gain or increase muscularity, none of them stated that they had ever dieted. If they thought they were putting on weight, they might address that by exercising more or eating less, but not by dieting.

Two participants reported that they sometimes binged. One noted that he planned these binges for Saturdays, his day off, and that he did not feel bad about it because he knew he would work out hard all week. The other, a non-exerciser, noted that he sometimes binged when he was bored: “Sometimes I notice myself eating more and more and more. If I have nothing to do, I'll just go and eat, and I just can't catch myself and stop...Like we'll get a pizza and I'll just eat the whole thing. And I feel like puking but I don't.”

Concerns about muscularity also had an impact on the use of performance-enhancing supplements, particularly muscle-building substances such as whey protein and creatine. Six participants, all of whom were moderate or frequent exercisers, had tried creatine. Of these, two were current users. They noted that they took creatine before each weightlifting session in order to increase their endurance and ability to lift weights. As noted by one of them, “If you take creatine, it's not gonna help you get bigger, but

you get to your fifth and sixth set, you still have the energy you had in your third or fourth. So you can just work out longer and harder. It only makes you stronger 'cause you can work out more and that makes you stronger.”

Regarding whey protein, 8 participants had tried it and 5 currently used it, with 3 taking it regularly. Protein use was viewed primarily as a way to increase muscle mass. However, all who had tried it thought it had a horrible taste. Participants felt that they needed to take protein in order to gain muscle, despite thinking that it tasted “nasty,” “disgusting,” and made them “gag.” It was a necessary evil. As noted by one occasional user, “I’ve never been a big protein user because I started in high school, I tried to. And I made myself do it for a little bit. But protein is horrible in taste. It is so disgusting. You have to make yourself do it and you have to be diligent.” Another continued to use it daily despite the fact that it gave him heartburn. Three participants who did not use protein associated protein use with weightlifting. One noted that he didn’t think he needed to take protein because he didn’t lift weights. Another stated, “I don’t like the beefneck person type who works out and eats protein.”

Regarding other supplements, two participants reported having used ephedra-containing supplements. (Note: The interviews were conducted before the FDA’s announcement of its intention to ban ephedra-containing products.) One continued to do so occasionally for energy but had cut back because it had made him “antsy.” Another said he had friends who used energy pills, although he did not. Two noted that they took caffeine before working out—one of them by drinking coffee and the other by taking a caffeine pill.

None of the participants reported taking andro (androstenedione), a supplement advertised as increasing the body's production of testosterone. However, one noted that he had tried a supplement similar to andro, which he had seen advertised in a fitness magazine. He stopped using it because it did not improve his workout and affected his heartbeat.

This same participant was the only one who said he had used anabolic steroids. He had tried two cycles in order to increase muscularity and had experienced great results: "I got the shot and in a couple of weeks I became like, BAM! People noticed it." He believed that the dangers associated with steroid use had been exaggerated and that there was a safe way to use these substances. However, he did not continue using them because they were expensive and illegal.

Other participants noted that they did not use steroids because they were not natural, would create an unproportional body, would cause mood changes, and/or would lead to health problems. Another participant who was very muscular already, however, said that the only reason he did not take steroids was that he was afraid he would never be able to stop: "If I got really jacked up, I'd never want to be small again."

### **RQ 3: What Are the Differences Between Readers and Non-Readers of Men's Fitness Magazines Regarding the Ideal and Its Achievement?**

No clear differences were found between readers and non-readers of fitness magazines regarding the male body ideal and its achievement. Both readers and non-readers described the male body ideal as lean and moderately muscular, with the exception of the three mentioned earlier who preferred a larger, more muscular body size. Of these three, one was a heavy reader, one a non-reader, and the other did not read fitness magazines but was a moderate reader of bodybuilding magazines.

The importance of attaining the ideal also did not appear to be related to whether or not the person was a reader of fitness magazines. For example, of the 4 participants who thought it was very important to look lean and muscular, 2 were heavy readers of fitness magazines and 2 were not. All participants—readers and non-readers—stated that they were pretty comfortable with their bodies. Of the 3 participants who had achieved six-pack abs, 2 were heavy readers of fitness magazines, while 1 did not read them at all—although he had looked at them in the past. It also should be noted; however, that the only 2 participants who thought that achieving six-pack abs was not very difficult were heavy readers who had themselves achieved that goal.

A possible explanation for the lack of differences regarding readers and non-readers is selective attention to the contents of the magazines. Of the nine participants who read fitness magazines occasionally or frequently, only two usually read the magazines in their entirety. The others would read only the sections or articles of interest to them. The type of content most frequently read by participants was nutrition (mentioned by 6), followed by exercising/workouts and sex (mentioned by 5 each).

Several participants said that they would read the content that they thought was relevant to them but would not spend much time with information that they felt was not relevant or interesting to them. For example, three participants noted that some of the contents of fitness magazines, such as health articles, tended to address issues of interest to older men, rather than people their age. One of these was the occasional reader of bodybuilding magazines:

*David:* I don't look at *Men's Fitness* much. *Men's Fitness* seems to be for the older man, 30, 40-years old. And as a teenager, it was not directed towards me, it seemed like it was directed to someone else. So I never picked one up.

*Researcher:* What about *Men's Health*?

*David: Men's Health*, another one. It seems like it's directed towards the older person or older man. And I'm not saying that *Muscle & Fitness* isn't. It's just I had my basics and I just stuck with my basics.

While one of these participants noted that he would completely skip articles that he thought were targeting older men, another said he would look at them but would not spend as much time with this type of content:

*Tony:* In a lot of *Men's Health*, they have a whole lot of not nutrition but health features that I guess, since I'm 23, I'm not really worried about heart disease or heart attack at this point. A lot of the health-related things in *Men's Health* are definitely geared more towards the older man. When I say older, I mean late 20s and 30s. Not older, just older than I am. So usually I might read through those but those definitely aren't priorities either because I feel they don't really pertain to me yet. I usually put them secondary as well because those really aren't the health issues that I have yet.

Two participants noted that they skipped the articles on weight-loss because they were not interested in losing weight. Another said that he would read the nutrition information sometimes, if he felt it pertained to him. One occasional reader noted that he had read an article about what to do about a sore throat because he had recently had one and was looking for ideas on what to do the next time this happened. Another occasional reader had gone through a stack of *Men's Health* magazine over the summer break, but had read them purely for entertainment. This participant had read only the articles that sounded interesting, like the ones on sex and health, and overlooked the ones on workouts and nutrition.

Three readers and one non-reader noted that the workouts in the magazines were very repetitive. They said that because the magazines have to sell, they are continually coming up with different workout ideas and presenting them as new and improved. Two of these participants worked at a local gym, and one mentioned discussing this issue at work:

*David:* We got told a story when I was hired. There was a man who was into fitness and he was a foreigner. And he had a great body, very strong, very lean. And he was asked to an interview. And he agreed to it. And they interviewed him and asked him what all he did. And he said I do these five simple things. The article came out. It had everything he said. When it came to the workout, it had 20 different exercises. Well, the thing is, the media and magazines, they can't sell if they don't have something different. If they have the same workout that's working, they could only put it out once. And if I buy something and it's the same thing twice, I won't buy it again. So I think that the media have to hype everything up, especially the magazines.

Another of these participants, a heavy reader and frequent exerciser, noted that he did not find the information on workouts appealing because he already had a fixed routine that was having results. Rather, information on sex was more appealing to him:

*Arnold:* I've read probably 4-5 *Men's Health* this semester. *Men's Fitness*, if one of my friends has it, I'll read it. But normally when I'm out at the store, if I'm picking up a magazine specifically, I'll just look for the one that looks the most interesting. Like if it's got a story I think looks good, I'll pick it up. The name doesn't mean all that much. Like if I had these two in the store right now, and I wanted to pick up a magazine to read, I'd probably pick this one 'cause it has the "more and better sex" thing. It seems a little more interesting than abs of stone. 'Cause I know how to get abs of stone. I don't know how to get the better sex yet.

However, some of the other participants who were frequent weightlifters said that that, despite having their own routines, they did look at the workouts in the magazines for ideas.

While 3 participants read fitness magazines primarily for information, 3 did so purely for entertainment. Two did so for both purposes, although one of them noted that at first he had read them only for entertainment. Another participant, a non-reader, reported purchasing two issues of fitness magazine in the previous year for information purposes—to improve his body in preparation for going on a cruise. He tried the workouts but did not see results and had not purchased another fitness magazine since.

**RQ 4: What Are Other Differences Between Readers and Non-Readers?**

As noted above, perspectives regarding the male body ideal and its achievement did not vary by level of readership of fitness magazines. However, differences were found regarding past and current levels of exercising, with heavy readers being more likely than other participants to have competed in high school sports and to be frequent exercisers today.

Of the 6 heavy readers, 5 had competed in high school sports. In comparison, among the 7 moderate or non-readers, 4 participated in sports in high school and 3 had not. Heavy readers also were more likely to be frequent exercisers than other participants. Among the 6 heavy readers of fitness magazines, 4 were frequent exercisers (8 or more hours per week). The other 2 were moderate exercisers (2-4 hours per week). Among the 7 moderate readers and 3 non-readers, only 2 were frequent exercisers. One of these was the occasional reader of bodybuilding magazines. The other was a participant who had read fitness magazines in the past but no longer found them useful or interesting.

Further analysis revealed that the participants who were involved in high school sports were also the ones who are frequent exercisers today. All 6 who are frequent exercisers today were involved in high school sports. Among the 4 who exercise moderately now, 3 participated in high school sports. None of the 3 participants who do not currently exercise were involved in high school sports.

Other differences based on level of readership of fitness magazines were not apparent. However, a number of patterns such as the one described above were found, which may contribute to a better understanding of the relationships among body image concerns, participation in sports and other exercise, and readership of fitness magazines among men.

## Other Findings

### Body image concerns were salient in high school and college

As suggested by some of the quotes that have already have been presented in this analysis, body image concerns often surfaced when participants were younger, particularly in high school. While 3 participants had been concerned about being too skinny, 4 had been concerned with being “chubby.”

Concerns with being too skinny were related to appearance as well as to sports performance. A participant, whose nickname had been “Stick,” said he had tried to gain weight all the time when he was in high school, especially when he played football in ninth grade. He noted that he was very self-conscious and was always trying to “bulk up.” Another participant who had been in the high school basketball team had been encouraged by his coaches to lift weights:

*Keith:* All the coaches were always like, you gotta do it, you gotta do it, everybody’s gotta do it. I took weight-lifting class and I just wouldn’t do it. It hurt. I didn’t want to be sore. I didn’t want to put that much time into it. I didn’t really feel like I needed it. I was one of the best players in my county without it. I didn’t want to put any extra time into it. No one was telling me I *had* to put the extra time into it. They said I *should* put the extra time into it. So I never did.

Some of the participants who had been overweight as children or adolescents had addressed these concerns by becoming involved in sports and/or weightlifting. One had become involved in football, wrestling, and weightlifting in high school and currently keeps his fat level in check by lifting weights. Another who had gone through a stage where he was a little overweight became involved in several high school sports and weightlifting and also continues to exercise today.

However, not all participants who had experienced weight concerns in high school had addressed these concerns by engaging in exercise. One participant, who had gained

weight in high school but did not enjoy participating in sports, addressed his weight concerns by changing his diet, particularly by limiting fast food.

A focus on appearance also was evident when participants started college. Two noted that they had gained weight during their first year, with one noting that he had gained the “Freshman 20.” Another participant indicated that he felt small (non-muscular) when he first came to the university. Another always had felt skinny but did not feel motivated to address this concern until he was in college, when he saw the muscle gains made by his roommate, who also had been skinny in high school. This participant noted that appearance concerns become heightened in college because of competition for the attention of potential partners:

*Keith:* I mean girls, typically, and if you’re gay, guys too, physical attraction is just the first thing someone’s gonna see, someone’s gonna think about. So there’s a big pressure to look physically attractive. And with the Greek system, with all those things, that’s all those people are predicated on, I think, how you look. So with that big of a population worried exclusively about how they look, the normal person doesn’t really have much chance as far as attaining that initial attraction. Consequently, even if it’s someone who is comfortable with their body, when they come here, they realize it’s not OK just to look like a normal person. I’ve gotta go and get a six-pack stomach, make my arms bigger, go get tanned, for anyone to even give you the chance to make a good impression. And they do it.

One participant suggested that the location of the university in Florida, with its year-round warm weather and numerous beaches, also might make appearance more important. He noted that he had never seen as many people who were physically active and resembled the ideal as he did in Gainesville:

*Tony:* [Regarding] the six packs, I might have a skewed view because I really get the feeling that the University of Florida, and Gainesville in general, is a very, very physically active place. That’s pushed a whole lot. Six packs are pretty common around here. I think that’s sort of skewing my view ‘cause I don’t think that’s how it is all over the place. I don’t know for a fact, but I don’t think it is. So, I mean, I don’t have six packs, but I know a lot of people do, so maybe that’s sort of skewing my view...I’ve been to other places. I’ve never seen so many, I don’t care what time it is, you ride around there will be someone jogging on the side road and the

gym will have some people in it. I don't know what it is about UF and Gainesville. It's just sort of the culture, I guess. I guess Florida, and there are so many beaches, people want to look good in bathing suits. I don't know, but it's definitely very, very prevalent here.

Four participants had tried to become involved in weightlifting when they started college in order to improve their physiques but did not continue to do so because it was not something they enjoyed. One noted that he would like to do Pilates instead but that only girls took those types of classes at the campus gym. There was a lot of pressure to engage in physical activities that were considered gender-appropriate:

*Alan:* My girlfriend and her friends were going and they asked me to go. And I even did it a few times when they didn't go because I enjoyed it. It was a really good workout... But at the same time, I have to coax myself to go. All these girls are going to be there looking at me to see if I'm doing it right. And I know they're going to look at me 'cause I'm the only guy there. I don't know if they're gonna think I'm gay or straight or whatever. I'm the only guy, with all these girls. That's definitely not so much a fear but a constant in the back of your head. And you have your guy friends, too. "Why are you going to Pilates? Why don't you come do weights?" I don't like doing weights.

As noted above, body image concerns often became salient in high school and again in college. The same was true regarding fitness magazines.

### **Interest in exercising or physique change preceded reading of fitness magazines**

Interest in exercise, sports, or in physique change usually preceded the reading of fitness magazines. Six participants noted that they first had begun to read fitness magazines when they were in high school, with 4 of them having done so to improve performance in high school sports or weightlifting. Two did so for other reasons. One began to read *Men's Health* because his girlfriend's father had a subscription and had dared him to try out a workout with him. The other, a non-exerciser and non-reader, said he started to look at these magazines in high school because "that's when body image starts to matter."

For some participants, college was also a time when interest in fitness magazines emerged or increased. One reader noted that he became a subscriber of *Men's Health* during his second year in college because he had started to work out:

*Doug:* [I subscribed because] I had gotten into working out in my first year in college. The big thing is like the cover. You can see a picture of the guy who has the perfect body. And then you have all these headlines. You go to Wal-Mart or whatever, and see all these magazines, and you're like, "Wow, these are really appealing to me." You got the offers inside. And it's not too expensive. It's the stuff I'm interested in. So I'll go ahead and subscribe to it. A lot of the topics were interesting. So I went ahead and subscribed to it. Not only me, but all my roommates took a look at it, too.

Another participant started reading *Men's Health* in college because he was trying to start a healthier lifestyle. And, as mentioned earlier, a non-reader purchased two issues of fitness magazines in college because he was trying to improve his body in preparation for a cruise.

### **Friends are very influential**

Another pattern that was very clear in the interviews was the importance of friends in relationship to body image, exercise, and the reading of fitness magazines. When asked to describe their friends, the common sentiment expressed by participants was: "they are just like me." (See examples in Table 4-15.)

Several participants noted that their friends were similar to them not only regarding interests, but also regarding appearance and fitness levels. The 3 participants who worked at the local gym noted that all their friends worked out and were fit. Here is an example:

*Nick:* Yeah, [most of my friends look like the ideal], mostly because my social group is pretty much, like I said, the gym. I hang out with people who have the similar likes and dislikes. And they all like fitness. I don't really hang out with, I can't think of one person I hang out with who doesn't exercise.

Another participant who did not work at the gym but was a bouncer at a local club noted that most of his friends were interested in weightlifting like him: "They all lift, too.

Most of them aren't as strong as me, but lifting is the topic of conversation a lot of the time.”

Table 4-15. Sample quotes about friends being similar

Participant	Quote
<i>Arnold</i>	My best friends [in high school] were all the football players and wrestlers. It was kind of like a clique. [My friends now:] We're all pretty much the same...
<i>Doug</i>	My friends, they're mostly 5 <sup>th</sup> or 6 <sup>th</sup> year seniors. Basically, I kept in touch with them. I met them in my Freshman year. They all like the same things I do—to go out to the clubs and bars and play sports—all the same things.
<i>Keith</i>	You meet people all the time. They're acquaintances, not people I keep in contact with. Usually if it's people I keep in contact with, it's someone who fits right into the group and likes the same things, and then they're part of the group. They were never not there.
<i>Mark</i>	I usually hang out with... people who are generally nice. I don't like people who are mean... Also, I tend to hang out with people who are funny, because I'm funny and I hate people who don't have a sense of humor. So all my friends are generally funny. They're a lot like me.
<i>Alan</i>	[My friends are] a lot of people with similar interests—people in the political science and history departments, people I play soccer with, that sort of people.
<i>Derek</i>	The people I consider my friends, and I think this is from a cultural standpoint... would be my immediate family ... Talking to my brother is like talking to me. Talking to my cousin is like talking to me. We think very much alike. More or less the same. We're very much alike. Our standpoints and views are almost identical. It's sickening.

Five participants who did not consider themselves to be close to the ideal noted that their friends did not look like that either. Rather, most of their friends looked average, like them—not overweight but not muscular either. A few mentioned roommates who were overweight or skinny. In one case, a participant who did not exercise noted that his roommates did a lot of weightlifting and resembled the ideal. However, he did not consider them close friends:

*Researcher:* What about your friends? What do they look like?

*Greg:* Like me.

*Researcher:* Although you said some of your friends, they work out a lot.

*Greg:* Yeah, my roommates. They work out every day. But my friends friends [sic] don't work out. 'Cause we share the same interests.

The time when participants' current friendships had originated varied. Some had continued friendships developed in high school and even earlier. One participant, whose family had moved to Florida from Haiti when he was a child, only considered as close friends his brother and cousin in West Palm Beach. Two participants had met their girlfriends in high school and were now attending university with them.

One of the participants had developed a "tight" group of friends who had followed him to Colorado after high school graduation to work at a ski resort with him. Most had remained there after he decided to come back to Florida to finish his degree. He now continued his friendship with them via phone calls. Another of his high school friends, who had stayed at school and is now getting his doctoral degree, is his roommate.

Other participants had a mixture of old friends from high school who were now attending universities in Florida or elsewhere, along with new friendships developed in college, particularly with roommates or students who had the same major. Participants who worked at the local gym had developed friendships with co-workers. One participant noted that all his friends were from college—he had not kept in touch with anyone from high school.

Regardless of when the friendships had originated, they seemed to exert a tremendous influence on participants regarding body image and exercise. Two had started weightlifting in high school under the influence of their cousins. Three began weightlifting in college because of the influence of roommates. Of these, two had also changed their nutritional habits to match those of their roommates:

*Keith:* It was just what Chris was doing. 'Cause when he started working out, he put on his weight, and this is what he did. I basically did the same thing that he did. I took the three protein shakes a day, with creatine once a day, all my vitamins, and I worked out five days a week. I put on 15 pounds, which was nice. So I kept doing

that for a while, and then once I ran out of the creatine, I just kind of stop taking it. I also read that it was not good to keep taking it. It's not good for your liver and your kidneys, which is why I took the cranberry.

The other student drank protein shakes occasionally with his roommate but would not buy protein supplements himself. Another participant had tried taking protein because a friend had convinced him that that was how “you bulked up and [it] was cool.” Another had tried creatine in high school because a friend who was a wrestler had used it and gained muscle mass. The participant mentioned earlier who had used steroids did so because his brother had told him about it and they decided to try it together.

Friendships also were found to influence the reading of fitness magazines. One participant noted that he began to read these types of magazines because of his roommate. Another got a subscription to *Men's Health* and tried the workouts with his roommates. Another participant, a heavy reader of fitness magazines who worked at the local gym, noted that all his friends read these types of titles:

*Nick:* Yeah, I think pretty much everybody I hang out with [reads these types of magazines]. I mean, being in the gym over 20 hours a week and working here, your social group becomes gym people. And gym people usually are in the gym because they want to be gym people. So they pretty much read all the same literature. They pretty much stay in the same group that's wanting to read fitness stuff or personal training stuff.

### **Magazine images: Motivational or discouraging?**

When asked about the images featured in fitness magazines, participants expressed a mix of opinions, with some having a positive perspective regarding these images and others viewing them as problematic. Six noted that the images were appropriate, effective, and motivational—they provided readers with a goal to work toward. As one noted, “When I first started buying them, they would have a person with the body that I would dream about having, so I'm going to go ahead and check it out.” The magazines

have the “right scheme going,” said another participant. He added, “Why would you put an average man in there?”

Eight participants, 2 of whom thought the images were motivational, expressed the belief that the images were unrealistic, with some stating that it was an unfair portrayal. Only athletes, models, or others whose lives revolved around fitness and appearance could spend the time and effort required to achieve and maintain that physique. These participants noted that the average person who had a regular job could not look like that:

*Tony:* I think it’s unrealistic to a certain extent. He’s [Tiki Barber] a professional athlete so he needs to look like that. The average person is not going to be looking like that. I think they’re unrealistic. I definitely don’t think it’s to the point like the skinny models on Cosmo and that sort of thing. I definitely don’t think it’s that drastic. I think for women, it’s like, “there’s nothing wrong with this woman, you should be like that.” I don’t think it’s nearly as drastic, like an unfair representation, for men. But it is unfair to a certain extent. I mean, for the 20-, 25-year-old who wants to look like that, it’s not that hard. Well, that might even be unrealistic, for a 20-, 25-year-old wanting to look like that.

Another commented that although he knew many people, he knew only one person who “remotely looks like that.” One called the images “fake” and unrealistic, saying that the people who got to that point had to work out all the time.

Two noted that the magazines used techniques such as airbrushing to make the models look perfect. As one stated, “You can never really trust that that’s the body they really have.” Another noted that, subconsciously, he thought that the images represented healthy-looking men, but he knew that in reality they did not. Another participant stated that it was an artificial look—the actors or models featured in photographs and movies did not maintain that physique year-round.

*Derek:* I mean, when you see these guys at a competition or you see them on a movie, they’re all ripped. They went through a lot to get there and, I mean, there is no way, whatsoever, they keep that body image for the year around. Usually Schwarznegger, for his movies, he’s built and nicely cut. But you see this guy on vacation, he’s like an old man, pot belly and all, sagging, and everything. They do

it for that time period, but they're not insane. The people watching are insane if they think they keep that going all year. It's not possible.

Two participants also raised the idea that genetics may prevent some men from reaching the ideal. One had tried to gain muscle but had been unsuccessful, leading him to believe that it was impossible to do so with his body type. The other noted that only a tiny percentage of the population could have that physique.

Other participants expressed still more negative views regarding the images featured in these magazines. One, who mentioned that his best friend was gay, noted that the images lacked diversity:

*Mark:* It's only one type of person. It's only the guy with muscles or the really overweight man that wants to be muscular. And there's the people in the middle, like me, and they don't portray it. Like everything in here also talks about how to meet the girl of your dreams. What if you're gay? I'm a guy, but what if that doesn't interest me? I'd still want to read the magazine, but I don't want to be finding out how to meet the girl....And also I don't see as many different ethnicities. You only see the stereotypical white male.

Two stated that the images could be discouraging, rather than motivational to some people, particularly those were too distant from the ideal and knew that they would never achieve it. One noted that this might be particularly true for people who are obese:

*Ted:* I think the fact that this nation has such an obesity problem, placing such an emphasis on image is not going to make those people work any better. They're just going to feel worse about themselves. If we placed the emphasis on health, then I think image would come hand in hand with that and we'd have a lot less obese people. Because I think what you see in the media, what you see in these magazines, a lot of times you see this ideal that many people feel is unreal or unachievable... I think it just makes them feel bad about themselves 'cause they know they'll never be this supernatural ideal. I think health should be more emphasized in our society than image.

Another participant agreed that the magazines should focus more on health than appearance, noting that people may engage in unhealthy behaviors in pursuit of a perfect

physique. He suggested that the magazines should use models representing natural-looking, healthy bodies:

*Nick:* ...a small proportion of the population can naturally look like that. You're not born and eat right and exercise normally without overexercising or changing your eating habits. You don't just grow up to look like that. For instance, if you get muscles that big, you have to start taking extra protein, and extra supplements, and this and that. So now you're taxing your kidneys, you're taxing your liver, which can cause kidney diseases and liver diseases, and you die young. This is a chain reaction of bad things that happen. If they had people there who progressed through life and had a natural-looking body, doing natural exercises, I think that would change the entire way that the world looks at exercising and stuff. It's like, "Oh, so that's what we can look like. And it's OK to look like that, because that's what I already look like. And I don't have to try to lose 10 pounds on this part of my body and reduce this spot."

When asked if they compared themselves to the images in the magazines, 9 participants noted that they did. However, 2 said they only did so subconsciously, and 1 said he only did so with images he considered attainable.

Nine participants said that they compared themselves to people around them. Of these, 6 also compared themselves to the media images. Two participants who engaged in both types of comparisons noted that they thought interpersonal comparisons were more influential. One said he did not compare himself to others in terms of appearance but did so regarding strength: "I don't really care what they look like. I'm not trying to compete with them. Strength-wise, I am. I'd like to beat them." As another participant noted, "No one wants to watch a guy lifting 225 pounds if the guy next to him is lifting 275. No one's going to look at the 275 guy if the guy next to him is squatting 400." Although this participant said he did not compare himself to others around him, he described a situation that suggested that he and his friends did engage in interpersonal comparisons:

*David:* No, I don't think so [that I compare myself to others]. I mean, we sat around before, the guys I used to live with and we started playing around like, if we had Mike's neck and Brian's legs and Brad's arms and Andrew's abs, and we put them all together, we'd have one unique specimen.

One participant noted that he did not compare himself to others, but rather to his own personal ideal—what he could look like if he exercised more. Another said he did not engage in comparisons with others or with the media because it would hurt his confidence: “I don’t go to gym because there are guys in there that are so huge. And you’re like, ‘Man, I’m a wimp.’” This participant preferred working out at home so that he would not be negatively affected by these types of comparisons.

### **Findings regarding grooming**

The male body ideal shown in men’s magazines and other media often is characterized not only by muscularity but also smooth, hairless skin. When asked about body hair removal, nine participants responded that they removed body hair from body parts such as chest (4 participants), arms (3), genitals (2), arm pits (1) legs (1) and back (1). Six noted that body hair removal was common among their friends, with one stating, “every single friend that I know, that I can think of anyways, at least shave their backs, their upper arms, or something like that.” Another one said he had a couple of friends who shaved themselves from head to toe.

The methods used for hair removal were primarily shaving (arms, arm pits, legs, chest, nipples, pubic hair), plucking (chest hair), and trimming (arms, legs, pubic hair). Unlike had been anticipated, participants did not remove hair to increase the appearance of muscularity. Rather, they did so to have smooth skin and be more attractive. Four participants stated that girls today do not like body hair, with one suggesting that it was a generational preference:

*David:* Today it seems that people do not want body hair over the body. Like my mom’s generation and stuff. I shave my chest personally. But I don’t shave anything else. I just get rid of the chest hair. My mom’s generation, when they heard I was shaving my chest, they were like, “Why are you doing that?” Well, that’s the way it just seems that everybody wants it today. It seems like it’s popular

to be bare. And she said, in my generation it was popular to have hair. If you had hair you were more like the higher power. I don't know. It just seems like people don't want it today.

Of the 4 who did not remove body hair, 2 mentioned their family's cultural backgrounds, from Greece and Haiti, as reasons. As noted by one, "I'm from Haiti and that stuff is looked down upon. A guy does not remove one strand from his body hair. It's just looked at as very feminine. If I were to go home and have my legs shaved, man, I'd be on for a whole lot of questions." Another said his friends made fun of him because his chest looked like Austin Powers', but that he was comfortable with the way he looked because he knew that some girls didn't mind it. The last participant, a heavy weightlifter, said he didn't worry about it because he wasn't very hairy.

When asked about other types of grooming, nine participants noted that they used hair products such as hair color, mousse, conditioner, wax, and/or gel. One of the participant, a 22-year-old, stated that he also used a moisturizer and a cream to reduce fine lines. Another said knew a lot of guys who used moisturizers, noting that this was becoming mainstream. Only one participant stated that he was opposed to the use of these types of male grooming products. He said he did not like "pretty boys...with their hair done up all nice." "It's sad," he said, "the feminization of America—men with their beauty products."

### **Summary of Interview Findings**

As noted above, the in-depth interviews found that the preference for a lean and muscular ideal was prevalent among both readers and non-readers of fitness magazines. Although most did not think it was very important to do achieve the ideal, all thought it was at least somewhat important to do so. Moreover, several were engaging in behaviors related to increasing leanness and muscularity, such as exercising (particularly with

weights), limiting intake of carbohydrates and/or fats, increasing intake of protein, and taking performance-enhancing nutritional supplements, particularly whey protein and creatine.

No clear differences were found between readers and non-readers of fitness magazines regarding the male body ideal and its achievement. However, heavy readers being more likely than other participants to have competed in high school sports and to be frequent exercisers today. Friendships were found to be extremely influential in regard to the development of body shape concerns and pursuit of body shape change activities.

The implications of these findings are discussed in Chapter 5.

## CHAPTER 5 DISCUSSION

This chapter discusses the implications of the findings described in Chapter 4. It also addresses the limitations of this study and suggests areas for future research.

The purpose of this dissertation was to explore the relationship between the reading of men's fitness magazines and the development of concerns related to leanness and muscularity. Previous research had found an association between the reading of these magazines and internationalization of the fit ideal, body dissatisfaction, and eating disordered attitudes among college men (Morry & Staska, 2001). However, little was known about the nature of this relationship.

The dissertation combined two methods: a quantitative content analysis of men's fitness magazines and qualitative, in-depth interviews with undergraduate males. The content analysis conducted for this study allowed for contents of fitness magazines to be categorized so that inferences could be made regarding their possible effects on body image. In-depth interviews with 13 college males provided insight into college men's attitudes and behaviors related to the male body ideal and identified factors that may influence the relationship between fitness magazine reading and body image concerns. Although these interview findings apply only to this particular group of men and it cannot be assumed that interviews with college men from another university or even other UF students would have produced the same findings, as noted later in this chapter, the findings are consistent with those of other existing qualitative studies (Grogan, 1999; Walsh-Childers & Labre, 2002). This type of triangulation of findings builds

confidence that the findings obtained via the interviews conducted for this dissertation are not unique to these 13 men.

### **Implications of Findings**

The implications of findings from the content analysis and interviews conducted for this study are described next.

#### **Images Construct Male Ideal as Lean and Muscular**

As discussed in Chapter 4, the four hypotheses proposed in regard to the content analysis of *Men's Health* and *Men's Fitness* magazines published from 1999 to 2003 were supported. The majority of images featured in advertisements and articles in *Men's Health* and *Men's Fitness* magazines were characterized as low in body fat (96%) and very muscular (82%). Although no differences were found between the two magazines regarding the level of body fat of images, the very muscular images were found to be more prevalent in *Men's Fitness* (85%) than in *Men's Health* (78%). Images characterized as unnaturally muscular also were more prevalent in *Men's Fitness* (4 %, compared to 1% in *Men's Health*), mostly because of advertisements for Joe Weider bodybuilding products, which were included only in *Men's Fitness*. As almost 90% of male images in *Men's Fitness* were categorized as either very muscular or unnaturally muscular, readers of this magazine are overwhelmingly exposed to a level of muscularity that may be difficult for them to achieve through regular eating and exercise habits.

Social comparison theory suggests that young men interested in improving their appearance may engage in upward comparisons with individuals or media images representing the ideal male body. If a discrepancy is perceived, the person making the comparison may try to eliminate it by engaging in behaviors designed to approximate the ideal. Based on the finding that the lean and muscular physique is the one most frequently

featured in men's fitness magazines, it can be inferred that exposure to this type of media may increase the desire for leanness and muscularity among this population. Research has found that exposure to images of muscular models increases muscularity concerns among college men (Leit et al., 2002). However, more research is needed to test whether, how and among which groups of men, if any, exposure to fitness magazines may increase body dissatisfaction.

At the societal level, men's fitness magazines may contribute to the perception that there is only one male body shape that is healthy and attractive: the lean and muscular physique. As found through the content analysis of fitness magazines, the vast majority of male images included in these magazines are characterized as low in body fat and very muscular. Because these magazines purport to represent men's health and fitness, they may help contribute to the perception—among both readers and non-readers who are exposed to their cover shots of lean and muscular men—that this is what a healthy man should look like.

When images representing medium or high body fat and low muscularity were included in these magazines, it was usually in a negative way. These types of photos were common in advertisements for weight-loss and/or muscle-building supplements, such as Hydroxycut and Xenadrine, which included photos of people before and after taking the supplements. While the “before” photos were characterized by medium or high body fat and low muscularity, the “after” photos were characterized by low body fat and high muscularity—again reinforcing the perception that there is only one body type that is healthy and attractive for men. Moreover, these types of negative portrayals may

contribute to body dissatisfaction by suggesting that having even a moderate amount of body fat is unacceptable.

Results from the content analysis suggest that the majority of the male images in fitness represent one type of man: the lean, cut, fitness model. Because of genetics, not all men can achieve this physique. Moreover, although exercising to build muscle mass, reduce fat, and build cardiovascular fitness is healthy, the types of activities required to attain this extreme look are not necessarily healthy. There is no question that an excessive amount of body fat is associated with serious health problems, such as diabetes and heart disease (Willett, 2001). However, the ideal look displayed in these magazines is not just low in body fat; it is *extremely* low in body fat, low enough that six-pack abs can be seen.

[COJAC1]

This type of physique does not result from following a balanced diet and exercising in moderation—it is a constructed look that requires a strict fitness and nutrition regimen designed to build muscle and keep body fat at minimum levels. The magazine models themselves, despite having a genetic makeup that makes it possible for them to attain the ideal look, must follow a grueling exercise and nutritional program to attain the cut physique. As an example, here is how an article in *Men's Health* describes cover model Owen McKibbin's workout:

His favorite workout is a grueling series of climbs on a 350-foot staircase that goes from the beach up the Palisade in Santa Monica, California. He runs the stairs two at a time, stops at the top to do 40 pushups, walks down (one step at a time, to put less stress on his knees), does 15 pullups, then runs up again...He alternates between running the stairs on his toes—which develops the quadriceps and calves—and climbing them flat-footed, which puts more emphasis on the hamstrings and gluteals. He does this 10 times per workout, two workouts a week...McKibbin also trains in the gym 2 or 3 days a week, spending much of his time on shoulder work. (Schuler, 2000, p. 112)

Another cover model reported that he always engaged in diet cycling: alternating between being on a diet for 2 weeks and being off the diet for 2-3 days, or being on a diet for a month and being off for a week. “The cycling keeps you from getting so tired of the diet that you completely abandon it,” he noted (Gregg Avedon, quoted in Schuler, 2000, p. 113). In the same article, cover model Rick Dietz notes that he cannot maintain his shape year-round, but that he “settles for staying close to cover-model shape most of the year” (p. 114).

As demonstrated by these examples, achieving and maintaining a fitness magazine cover model look is not a simple task. The pursuit of this extreme appearance-related goal could lead to body image preoccupation, disordered eating behaviors, the use of steroids and performance-enhancing supplements, overexercising, and other harmful behaviors among men.

### **Contents of Articles and Advertisements Emphasize Appearance Over Health**

The content analysis also found that the contents of fitness magazines emphasize appearance-related goals over health or physical performance. Achieving a lean and/or muscular appearance—rather than improving health, physical fitness, or sports performance—was the main topic of more than a quarter of the articles in the sample. Moreover, articles often described methods for becoming more lean and muscular. The types of methods most frequently addressed in articles in both magazines were anaerobic exercise/weight-lifting (18%), followed by aerobics/sports (15%), nutrition (13%), and dieting (9%).

Advertisements included in these magazines were found to be more likely to promote benefits related to leanness and/or muscularity (23%) than benefits related to fitness (12%) or health (10%) – or even to fitness and health combined (22%). Moreover,

22% of the benefits promoted in advertisements were related to beauty/style, which also are more associated with appearance than health or fitness. For *Men's Fitness*, benefits related to leanness/muscularity were the most frequently included (38%), while for *Men's Health*, benefits related to beauty/style (30%) came first.

These differences may be explained by the types of advertisements that were included in the two magazines. While most of the advertisements (35%) in *Men's Fitness* were for performance-enhancing supplements (PES), clothes/shoes/accessories was the top category (24%) in *Men's Health*. In addition, advertisements in the automotive category, which often promote benefits such as increased coolness or style, also were more common in *Men's Health* than in *Men's Fitness*.

As described above, the content analysis found that fitness magazines not only provide vivid depictions of the lean and muscular ideal, but also include a majority of contents that emphasize appearance over health or physical fitness. Moreover, articles and advertisements describe how to achieve the ideal via exercise, nutrition, dieting, use of PES, and other means. As proposed by social learning theory, the contents of these magazines may contribute to the learning of behaviors related to achieving the lean and muscular ideal.

For college-age males interested in improving their appearance, fitness magazines describe the ideal they should aspire to as lean and muscular, reinforce the importance of achieving this ideal, provide instructions on how to do so, and may serve as motivators for engaging in these types of behaviors. For readers who read these magazines for information on shape change and who are able to reproduce the described behaviors,

these titles may serve as important avenues for social learning. However, as described next, there are several factors that may mediate the effects of these magazines on readers.

### **Audience-Related Factors May Influence Impact of Magazines**

Although fitness magazines may influence readers in the ways described above, it also is critical to note that this influence may be mediated by many factors, including personal characteristics, demographic variables, and social relationships. As noted by Perse (2001), these audience factors may serve as barriers to the effects of these magazines or as a lens to enhance the influence of these titles. Findings from the in-depth interviews suggest several ways in which audience-related factors may mediate the potential impact of men's fitness magazines on college males.

The first requirement for social learning to occur is attention—readers must actively interact with the contents of these magazines. However, among the interviewees for this study, few participants who were frequent readers reported reading the entire contents of the magazines. Most noted that they focused primarily on information of relevance or interest to them, overlooking other contents. Most of the participants who might have been expected to be interested in the fitness plans because of their high involvement in exercising were found to bypass this type of information because they already had established workouts and did not want to change them. One occasional reader had read an entire stack of *Men's Health* over the summer, focusing primarily on contents related to sex. These findings suggest that the influence of the contents of fitness magazines may be mediated by selective attention. If readers choose not to pay attention to particular types of contents, learning cannot occur.

Findings from the interviews also suggest that, for some readers, social learning may be impeded due to lack of ability to reproduce the modeled behaviors or lack of

motivation to do so because initial attempts fail to produce the modeled benefits. One non-reader reported purchasing two fitness magazines and trying the workouts in an attempt to change his body shape in preparation for a cruise. However, after two months, he had not seen any improvements in his physique, which made him believe he could not achieve the ideal because of his body type. As a result, he stopped doing the workouts and had not purchased another fitness magazine since.

These findings highlight the complexity of attempting to determine the influence of these magazines, despite the consistency of the focus on muscularity, leanness and other appearance concerns, as demonstrated through the content analysis. Individual readers may interact with these titles in very different ways, with some responding to the magazines by being more motivated to exercise for health AND appearance, some responding only with increased concern for appearance and others ignoring the messages about health and appearance entirely and simply reading the magazines for entertainment purposes.

Moreover, media influence does not take place in a vacuum and cannot be neatly separated from interpersonal influences. As the interviews demonstrated, friendships had a tremendous influence on the desire for body shape change as well as on involvement in related activities, such as weightlifting and eating for muscle development. Although this suggests that friends may have a greater influence on body image than the media, it also raises questions about where participants' friends obtained their ideas regarding the ideal male body and its achievement.

Most interview participants acknowledged that they engaged in interpersonal and social comparisons regarding their physiques, with some noting that they thought the

interpersonal comparisons were more influential than the types of social comparison that would occur in regard to media images. For those who surrounded themselves with people who did not look like the ideal, interpersonal comparisons might have had a protective effect by contributing to the perception that the media ideal is unrealistic and unattainable. After all, if you don't know a single person who looks like the ideal, how realistic can it be? For young men whose friends approximate the ideal, on the other hand, the interpersonal and media comparisons may work together to reinforce the perception that the ideal is both healthy and attainable.

However, the interviews also suggested that many other variables may affect these relationships. Not all participants who read fitness magazines, exercised frequently, and had athletic friends viewed the ideal as realistic or positive. For example, a participant whose family members had health problems related to obesity thought that the images in fitness magazines were unrealistic and could lead to unhealthy behaviors. Perhaps because of his family history, health was a more salient concern to him than appearance. As he was employed part-time at the fitness club, he had witnessed situations in which people had engaged in unhealthy behaviors in their quest for a perfect appearance. This combination of factors may have contributed to his perspective on these magazines. Despite being a frequent reader, he thought that their images were harmful and should be changed.

This participant was not alone in his level of sophistication regarding fitness magazines and their contents. As noted by audience reception theorists, the audience is not a blank recipient of cultural messages. Only two students—one heavy reader and one moderate reader—seemed not to have any problems with the images featured in the

magazines. They seemed to accept the images as appropriate and realistic goals, suggesting what Stuart Hall's encoding/decoding model described as a preferred reading. As noted by the first, "Good for them [the models]. If they look like that, they should show it off. If I had abs like that, I'd never put a shirt on." The other noted that he would like to eventually achieve the depicted physique.

Most readers seemed to interact with these texts from a negotiated position. They were aware that the magazines were designed to sell, that the workouts were repetitive, and that images were unrealistic. Some also expressed the awareness that pursuit of a perfect body could lead to very unhealthy behaviors. And yet all expressed the desire to look like the ideal because they knew that approximating the ideal brought real social benefits.

Although all participants would like to look like the ideal, this desire did not always lead to behavioral changes related to achieving the ideal. Several participants noted that achieving the ideal, particularly six-pack abs, was a difficult task. These participants said they did not want to work that hard and had other priorities in their lives. This finding does not differ from that of other studies that have examined men's perceptions regarding the ideal and its achievement, which found that men were unwilling to expend significant effort on trying to change their appearance to conform to the ideal (Grogan, 1999; Labre & Walsh-Childers, 2002).

Although most participants did not believe that achieving the ideal was a very important goal, several were engaging in behaviors related to increasing leanness and muscularity, particularly through exercise and nutrition. Six engaged in a substantial amount of exercising each week (up to 15-20 hours a week), with all six citing

appearance as one of their main motivators for doing so. Although none reported “dieting” (which still may be considered a “female” behavior), several tried to limit fat and/or carbohydrates and/or increase the amount of protein in their diet to control their weight and increase muscle mass. One also reported that he limited intake of sodium in order to increase the appearance of muscle definition.

Although exercising and reducing intake of carbohydrates and fats may be viewed as health-promoting behaviors, when done to an extreme, both can be harmful. Excessive exercise may lead to fatigue, immune system suppression, injuries, and future joint problems. One participant, a heavy weightlifter, noted that he often hurt himself with the weights, for example, by dropping them on his fingers, but that he didn’t waste time going to the doctor—he just dealt with the pain. Although high-protein diets may not be harmful for a short period of time, research on their long-term efficacy and safety is lacking (St. Jeor et al., 2001). The food types consumed in meat-heavy, high-protein diets have been linked to heart disease, kidney disease, and bone and liver abnormalities. And, as noted next, the fact that performance-enhancing supplements often are used to facilitate body shape change also is problematic.

Use of performance-enhancing supplements, particularly whey protein, was common among participants who were trying to gain muscle mass. Participants also used PES supplements such as creatine and energy-boosting substances containing ephedra or caffeine. As noted in Chapter 2, the use of these types of supplements has not been proven effective and may lead to serious health consequences.

For one participant, the desire for increased muscularity had led to experimentation with anabolic steroids. This participant did not discontinue use due to health concerns but

rather because steroid use was expensive and illegal. He did not believe that steroid use was harmful if done correctly and was very pleased with the muscle gains he had accomplished via steroid use. For another participant, the only reason not to use steroids was fear of becoming addicted to the muscle gains and not being able to discontinue use of these substances.

Although none of the participants exhibited attitudes suggestive of a body image disturbance, three described close friends who seemed to be experiencing body image problems, such as muscle dysmorphia, disordered eating behaviors, and overexercising. More research is needed to investigate the prevalence of these types of concerns and behaviors among college men and to further tease out the circumstances, if any exist, under which men's fitness magazines play any role in the development of these concerns and behaviors.

### **Influence of the Socio-Historical Context**

The finding that college men may desire to look like the ideal even though they believe that it is unrealistic and may lead to unhealthy behaviors brings into attention the influence of the socio-historical context in which the messages in fitness magazines are produced and consumed. As noted in Chapter 2, the third generation of audience reception scholars have acknowledged that, although texts are polysemic and audiences active, the cultural environment plays an important role in both the construction and the interpretation of media texts (Alasuutari, 1999).

For instance, the cultural environment in the U.S. right now is extremely competitive and generally seems to favor extremes—i.e., extreme sports, extreme diets, unnecessarily fast cars, career competitiveness, etc.—over moderation. It is not considered unusual for people to spend 150-200% of the “normal” 40-hour work week

(i.e., 60-80 hours) on their careers. Thus, it may be that men's fitness magazines may simply be reflecting and fitting into this emphasis on "perfection."

As noted earlier, findings from the content analysis conducted for this dissertation suggest that men's fitness magazines contribute to the social construction of health and fitness in a way that emphasizes goals related to appearance (i.e., leanness, muscularity) rather than physical performance or health (i.e., aerobic fitness, strength, endurance, flexibility, speed, energy level). Although physical attractiveness is a trait that traditionally has been more important for women than for men, there is evidence that appearance has become more important to men over the years, particularly after women joined the workforce and became capable of financial independence. As noted in Lynne Luciano's (2001) review of male body image in modern America, one of the most significant changes in the 1960s was that "in the dating marketplace, single women were as likely to be doing the choosing—and rejecting—as men, elevating the importance of male looks to a whole new level" (p. 6). The growing importance of male attractiveness was reflected in the interviews, with several students noting that looking like the ideal made it easier to attract girls.

Luciano (2001) notes that appearance became even more important to men in the 1990s because of foreign competition, inflation, declining corporate profits, and unemployment. To maintain an edge in the marketplace, it became increasingly important for men to be not only qualified for a job but to look dynamic, successful, and young. This relationship between appearance and success also was evident in the in-depth interviews, particularly among participants who thought that looking lean and muscular

was very important. All of these students associated a fit physique with professional success.

As of this writing, it seems that appearance continues to grow in importance for both men and women. As suggested by the interviews, the removal of body hair and use of hair color and other grooming products may be becoming common among young men. Cosmetic procedures such as liposuction and use of Botox for wrinkle removal also is becoming more common among older men (Farnham, 1996; Noonan & Adler, 2002). Current trends suggest that the focus on muscularity eventually could give way to an emphasis on grooming and style—as reflected by the growing popularity of the term “metrosexual,” coined by British journalist Mark Simpson in 1994 (McFedries, 2004). As defined in *The Washington Post*, the metrosexual is:

...a straight man who styles his hair using three different products (and actually calls them ‘products’), loves clothes and the very act of shopping for them, and describes himself as sensitive and romantic. In other words, he is a man who seems stereotypically gay except when it comes to sexual orientation. (Hackbarth, 2003, p. C10)

The growing popularity of male grooming products was evidenced in the interviews, with the majority of participants reporting that they removed body hair and used hair coloring and styling products. This finding seems to signal a generational shift toward increasing concern with grooming among men. A possible benefit of this trend is that a focus on grooming and style could provide men with different ways of increasing attractiveness without expending the strenuous effort required for achieving chiseled muscles. However, it also could generate a whole new set of body image concerns related to attaining flawless, hairless, wrinkleless skin; dyed, salon-coifed hair, Hollywood White teeth (the new standard in tooth color, “Tooth Whitening,” 2004), and expensive designer

fashions. At this historical moment, Western men are increasingly being encouraged to do both.

### **Limitations of This Study**

The purpose of this study was exploratory. The study sought to gain a better understanding of the nature of the relationship between the reading of fitness magazines and body image concerns. It did not seek to prove that the reading of fitness magazines causes body image concerns or vice-versa. Other methods, such as experiments or longitudinal surveys, would be more appropriate in this regard.

The in-depth interviews described in this study were conducted qualitatively, with participants being selected, not sampled. As noted by MacDougall and Fudge (2001), qualitative samples are purposive rather than random and aim not at generalizability but at selecting cases that will provide rich data. Therefore, findings cannot be generalized to the larger population of male college students, or even to the population of UF male undergraduates. However, as noted in this chapter, findings regarding the male body ideal and its achievement did not differ from those of other existing studies. These findings provide insights that can be used in future research using quantitative methods to yield data that can be generalized to a larger population.

The fact that the researcher is female and the participants were male also could be viewed as a limitation, as some male interviewees might have been reluctant to discuss openly their thoughts regarding body image with a member of the opposite sex. On the other hand, it also could be perceived as an advantage. As a woman, the researcher may have been able to perceive issues that might not have been as salient to a male researcher—because she is an outsider to male culture and because as a woman she has been socialized to place a premium on body appearance.

Although some interviewees might not be as comfortable discussing body image concerns with a female researcher, others might be more willing to disclose these types of concerns to a woman than to another man. This issue was addressed in the interviewee selection process. Although some participants were more interested in the topic and more talkative than others in their interviews, none appeared to be uncomfortable during the interviews. Moreover, some of the information they shared with the researcher (e.g., removal of pubic hair) suggests that participants were being forthcoming in sharing their perspectives.

It also is interesting to note that for one participant, the fact that, like him, the researcher was not born in the United States seemed to allow him to share his thoughts more openly. This student preceded one of his remarks with, “You’re not technically American, so I can say this.” The fact that the 38-year-old researcher was not in the same age group as the interviewees also may have been beneficial. Participants might have been more reluctant to discuss body image concerns with someone their age who could have been perceived as a potential romantic partner.

As noted in Chapter 4, none of the interviewees were visibly overweight or reported extreme body image concerns, despite having friends who did. Another potential limitation of this study is that it may have excluded students who had body image disturbances. Because participants self-selected themselves for the interviews and were aware that questions related to body image would be included, students with serious body image concerns may have opted not to participate. As suggested in the following section, future research should be conducted with college students who have attitudes and/or behaviors suggestive of a body image disorder.

### **Areas for Future Research**

This study examined concerns related to leanness and muscularity among college men. Although participants did not exhibit signs of body image disorder, three described close friends who exhibited more extreme behaviors related to achieving a lean and muscular physique. It is interesting that although participants were very influenced by their friends in matters related to body image, they identified these types of extreme behaviors as problematic and did not follow these types of examples. What factors made their friends more vulnerable to becoming obsessive about the perfection of their bodies? And what factors protected participants from developing more obsessive body image-related attitudes themselves? In-depth interviews with college males who exhibit these types of more extreme concerns and behaviors might contribute to a better understanding of these factors.

More research also is needed on the internalization of the lean and muscular ideal by other groups of men, such as adolescents, college-age men who do not attend college, and older men. Achievement of the ideal may be particularly difficult for older men, who may have less time available for exercising and more difficulty maintaining an extremely low body fat level—including six-pack abs. At the same time, these men may be more likely than younger men to have the financial resources needed for constructing a perfect physique. As a result, they may be more likely to resort to cosmetic surgery—such as liposuction and/or implants—to reduce body fat and increase the appearance of muscularity. Older men also may be more likely to experiment with expensive nutritional supplements in an effort to increase lean muscle mass, which could be even more problematic than the use of these supplements by younger men because older men are more likely to be taking medications with which the supplements could interact.

Conversely, older men may have less reason to experience intense concern about their physical appearance. First, they may be married already, reducing the likelihood that they are significantly concerned about how their appearance affects their ability to attract potential romantic partners. Second, those who are not married may have achieved other types of success they believe may be attractive to potential romantic partners, such as financial security, positions of authority, power and respect, etc. And finally, older men simply may have adjusted their priorities to focus more attention on issues such as maintaining good health, achieving and maintaining career success, spiritual and intellectual development and the maintenance of relationships with friends and family members, including children.

This study analyzed the contents of fitness magazines and how readers interact with these titles. It did not analyze aspects related to the production of these texts. However, findings suggest that this is an area that deserves further attention. For example, the content analysis revealed that *Men's Fitness* magazines, owned by Weider Publications, was more likely than *Men's Health* to include advertisements for Weider bodybuilding products, such as publications and supplements. As a result, *Men's Fitness* was more likely than *Men's Health* to feature images of men with professional bodybuilder physiques. *Men's Fitness* also was more likely than *Men's Health* to include contents related to leanness and muscularity.

The 2002 acquisition of Weider Publications by American Media Inc., publisher of the tabloids *The National Enquirer* and *The Star*, could have an effect on the contents of this magazine. Following the acquisition, the new owners expressed the goals of increasing circulation to 1 million and lowering the average age of readers from 34 to 30

(Fine, 2003). As noted by new editor in chief Peter Sikowitz, the magazine will feature less “finger-wagging” over health matters, and more fun (Fine, 2003). One of the first changes was the acceptance of spirits advertising—forbidden under the Weider regime (Fine, 2003). Beginning with the April 2004 issue, the magazine has been redesigned to have a look that is “bolder, cleaner, and easier to navigate” (Sikowitz, 2004, p. 10).

Future research could compare the contents of magazines published prior to and following the acquisition to identify any possible differences that may reflect the ownership change.

### **Conclusions**

Findings from this study suggest that fitness magazines disseminate only one type of male physique as healthy, fit, and attractive: the lean and muscular physique, characterized by chiseled abdominal muscles. Dissemination of this ideal may have the positive effect of promoting involvement in healthy activities, such as exercising with weights. However, the ideal is an extreme, unrealistic representation, which may contribute to body dissatisfaction and engagement in unhealthy, appearance-driven pursuits. In fact, few men can achieve the ideal without doing so.

Interviews with college men suggest that they may be internalizing the ideal and engaging in behaviors designed to attain it, such as limiting carbohydrates and/or fat in their diets, increasing consumption of protein, exercising (particularly with weights), and using performance-enhancing supplements such as whey protein, creatine, caffeine, and ephedra to reduce body fat and increase muscle mass. Some of these behaviors, particularly the use of PES supplements, could lead to serious health problems, including injury and death.

Overall, however, the interviews did not suggest that exposure to the magazines was a significant factor in motivating either men's acceptance of the lean and muscular ideal or their involvement in behaviors linked to the pursuit of that ideal. Rather, interview findings suggest that other influences, such as previous involvement in competitive sports or interactions with friends who engage in these behaviors, may contribute to an interest in body change that precedes the reading of fitness magazines. However, more research is needed to determine whether—and if so among which readers—exposure to fitness magazines may serve to reinforce existing concerns related to achieving a lean and muscular physique.

College men's preoccupation with body shape-related goals takes place within a sociocultural historical environment that places a premium on appearance over health—an environment characterized by dangerous fad diets and highly successful “extreme makeover” television shows. As suggested by Sarah Grogan (1999), who conducted a thorough review of body image among men and women, there is a need for society to move away from a focus on extreme, appearance-centered body ideals:

Based on what we know about men's and women's body image, we can conclude that the way forward in terms of developing positive body images must be a reduction in the objectification of the body (both male and female) and the development of body ideals based on function as well as aesthetics. In particular, the cultural acceptance of the wide variety of body shapes and sizes that represent the normal range, and the de-stigmatisation of overweight, may help to reduce dissatisfaction (p. 189).

Rather than focusing primarily on appearance, fitness magazines could (theoretically) address other topics, such as achieving a healthy and functional body, eating for optimum health (rather than for fat-loss and/or muscle development), maintaining spiritual and mental well-being, and building supportive romantic and family relationships. Instead of featuring images representing one extreme body type, they could

present diverse representations of healthy men. This type of approach might promote a greater focus on health than on appearance. As noted by study participants, if you exercise in order to be physically fit and healthy, appearance will follow. However, if you place appearance first, you may engage in very harmful activities in order to achieve the perfect look.

Because fitness magazines rely on advertising dollars, a change in focus from appearance to health would require an increased demand for health-related (rather than appearance-related) products. As long as society continues to place a premium on appearance over health, this is not likely to happen. Rather, current trends suggest that a perfected physical appearance may continue to gain in importance over the years, for both men and women.

One of the main factors that seemed to protect students in this study from developing more serious body image concerns seemed to be the belief that although attaining the ideal might contribute to romantic or professional success, it was not a requirement for doing so. Looking lean and muscular would be nice, but it was not necessary. Most had other priorities in their lives. Some noted that as long as they were able to attract a romantic partner, they would not care too much about their own appearance. Others suggested that self-confidence and intelligence were more important than looks.

Should men's physical appearance continue to grow in importance as a mate characteristic and/or as a requirement for career success, college men may perceive increased pressures to mold their bodies to fit the cultural ideal. This could contribute to

an increase in body dissatisfaction among men, combined with attempts to achieve the societal ideal via exercise, nutrition, cosmetic surgery, and other means.

However, it also is possible that men might continue to place other priorities ahead of achieving appearance goals. If that is the case, the mechanisms by which men are able to resist internalizing the ideal would be important to study because they might be useful in helping men who do develop strong appearance concerns. Moreover, an understanding of these mechanisms might also contribute to a better understanding of why women, in general, seem to be more vulnerable to appearance concerns than are men.

## APPENDIX A CODING INSTRUMENTS

This appendix includes the following coding instruments, which were used in the content analysis conducted for this dissertation: codebook, coding sheet for advertisements, and coding sheet for articles.

**Codebook: Articles and Advertisements**  
**Men's Health and Men's Fitness Magazines**

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### Introduction

The coding sheets for the articles and advertisements are a little different. I suggest coding the articles and advertisements separately. When coding an article or ad, be sure to turn the next page to check if it continues on the next page.

## Advertisements

Only ads 1 page or longer were selected. The magazines were listed chronologically, with the *Men's Health* issues listed first. Every third ad was selected, with starting points alternating from 1 through 3.

Identifying Information	
<b>Ad ID</b>	Indicate the ad's ID number, written on post-it note.
<b>Coder ID</b>	Write your initials.
<b>Product</b>	Indicate the brand and type of product being advertised (examples: Gap jeans)
<b>Magazine</b>	Indicate the magazine: 1. Men's Health                      2. Men's Fitness
<b>Year</b>	Indicate the year the issue was published (example: "1999")
<b>Month</b>	Indicate the month the issue was published (example: for January, write "01")
<b>Length</b>	Indicate the length of the advertisement, in half-page increments. Be sure to round up. For example, if the ad continues on another page, but fills up less than half of the next page, count it as 1.5. If it fills up more than half of the next page, count it as 2, and so on.  Please note that prescription drug ads usually include one or more extra pages listing possible side effects and other information. That page should be counted too.
<b>Type</b>	Indicate if the ad is an advertisement or advertorial. An advertorial is an ad that looks like an article. It usually is identified as an ad on the top or bottom of the page.  1. Advertisement    2. Advertorial

<b>Product Type</b>	
<p><b>Carefully review both the images and text included in the ad and place a check mark beside the type of product being advertised. Select only 1.</b></p> <p>If the ad is for a sale, what type of product is being sold?</p>	
<b>Automotive</b>	Cars, motorcycles, oil, tires.
<b>Performance-Enhancing Supplements</b>	Products containing protein, creatine, or ephedra, carnitine, chromium, glutamine, or other performance-enhancing supplements. (Also include e-ephedra-free versions.) Usually are advertised as increasing muscles, decreasing fat, and/or increasing energy levels. Examples: Metabolife, Hydroxycut, Stacker 2, PowerBar, designer whey protein bar, creatine serum, Meso-Tech whey protein, Detours bar, Myoplex, Promax bar, Ultra Ripped, Thermogenic Thyrolean, Methoxy-pro bar, energy drinks.
<b>Other Nutritional Supplements</b>	Using (or not using) vitamins, minerals, herbs, etc. other than the ones listed above. Includes supplements to increase testosterone, penis size, or otherwise enhance sexual function. Examples: Glucosamine, Centrum, Enzyte. However, if it is a cream or patch, select "Medical."
<b>Clothes/Shoes/Accessories</b>	Designer wear, sports clothes, athletic shoes, socks, as well as accessories, such as sunglasses and belts.
<b>Grooming Products</b>	Perfumes, lotions, deodorant, toothpaste, mouthwash, hair color, hair removal, breath mints.
<b>Food or Beverages</b>	Cereals, microwave dinners, water, alcoholic beverage, meal replacement bars that are primarily advertised as foods, not supplements (Tiger's milk bar, pure protein meal replacement bars).
<b>Medical</b>	Prescription and non-prescription drugs such as Claritin, Viagra, Testro Gel; Andro Gel, Rogaine, Tylenol; heat packs, medical supplies.
<b>Media/Communications</b>	Cable, TV show, magazines, newspapers, books, videos, telephone company, cell phone, Bose equipment, music, car stereo, TV, head phones, sound equipment, web sites (e.g., expedia.com, ESPN.com), videogame, car stereo.
<b>Exercise Equipment</b>	Treadmill, weight training equipment.
<b>Financial/Career</b>	Banks, mutual funds, credit cards, insurance.
<b>Other</b>	Other type of content not listed above. Please describe. Examples: Army, Navy, Air Force, jet skis, event, fundraiser, Circuit City, Best Buy, contacts, prescription eyeglasses, paper towels, dog food, condoms, diamonds, flowers, braces, camera, hotel, tools, PSA, unable to determine.

## Major Benefits

Note: This section is the same for advertisements and articles.

Articles: These are “service” magazines, that is, they try to provide information that the readers can use in their daily lives. What do the images or text included in the article suggest about the benefits to the reader of following the advice provided in the article?

Advertisements: What do the images or text included in the ad suggest about the benefits of buying this product?

The benefits should be explicitly mentioned or pictured in the ad or article. Identify only major benefits. Feel free to scan, rather than read every word in the article. Pay particular attention to headlines, quotes, and subheads. Check major benefits only.

<b>Leanness/ Weight-loss</b>	Decreasing weight or losing fat: Ex: losing love handles, dropping a few pounds.
<b>Muscularity</b>	Obtaining a more muscular appearance. Ex: Increased muscle mass, more muscular arms, legs, chest; sculpted abdominals, etc.
<b>Beauty</b>	Improving <i>other</i> aspects of physical appearance or attractiveness. Ex: Better hair, smoother skin, moisturized skin, odor control, perfumed skin, no dandruff, looking young, etc.
<b>Fitness or Sports Performance</b>	Improving performance in a competitive sport; improving aerobic fitness, strength, performance, endurance, flexibility, speed, energy level Ex: Being able to run farther, lift heavy things at home more easily.
<b>Style</b>	Improving style, coolness, appeal. Ex: being associated with expensive cars, fashion, cars, designer sunglasses, or other products; being seen as fashionable, cool, hip.
<b>Health</b>	Improving physical or mental health. Ex: Achieving lower risk for heart disease or diabetes; stress reduction, relaxation, sleeping better, cholesterol, killing germs, lactose intolerance, preventing or treating aches and pains, allergies, protection from sunburn, sinusitis.
<b>Sex or Romantic Relationships</b>	Improving sexual or romantic relationships. Ex: attracting women, better sex, how to satisfy a woman, increasing passion, sexual techniques, pickup lines.
<b>Financial/Career</b>	Improving financial situation or career status. Ex: making money in the stock market, getting a raise.
<b>No Benefits</b>	No benefits listed or implied.
<b>Other</b>	Cues suggesting that buying the advertised product or following the advice in the article will lead to other major benefits. Please list any major benefits not referenced above. Ex: comfort, convenience, savings, entertainment, improving non-romantic relationships, prize, safety, cleanliness, taste.

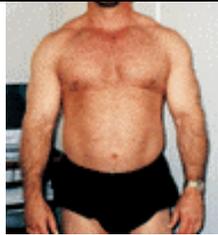
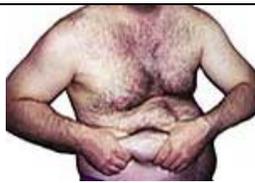
## Images of Men

Note: This section is the same for advertisements and articles.

# of Images of Men: Count and indicate the total number of photographs (not cartoons or drawings) of adolescent or adult males. If an image appears more than once (is repeated) count each occurrence separately. If the same man is shown in several pictures, count each separately too. You must be able to tell it is a man and not a woman (e.g., a foot by itself does not count).

Body Fat/Muscularity: Categorize each image, starting at the top left of the page and moving clockwise. If the image spans two pages, start at the top left of the first page and move clockwise around the entire image. Use examples provided. If you cannot tell the level of fat or muscularity, choose "can't tell."

Examples are provided below.

BODY FAT			
<p><b>Low Body Fat</b> Very lean, no signs of body fat visible.</p>			
<p><b>Medium Body Fat</b> Some body fat visible (e.g. love handles, stomach not flat).</p>			
<p><b>High Body Fat</b> Obese. A large amount of body fat visible (e.g., large stomach).</p>			
<p><b>Can't tell</b> Can't tell level of body fat or can't distinguish between two levels.</p>			

<b>MUSCULARITY</b>			
<b>Not Muscular</b> No signs of muscle definition.			
<b>Somewhat Muscular</b> Some muscle definition.			
<b>Very Muscular</b> A lot of muscle definition (e.g., ripped abdominals).			
<b>Unnaturally Muscular</b> The look of a professional bodybuilder, a hypermale look achievable only through steroid use.			
<b>Can't tell</b> Can't tell level of muscularity or can't distinguish between two levels.			

### Negative Portrayal:

For each image, place a check mark in the box if the image represents a negative portrayal.

Examples:

- ◆ The image is a “before” shot in a weight-loss advertisement where the person is shown as overweight before the treatment and thin after the treatment.
- ◆ The image of an obese person is used to illustrate an article about losing fat.
- ◆ The image of an extremely thin person is used in an article about the dangers of anorexia.

## Articles

Identifying Information	
<b>Article ID</b>	Indicate the article's ID number, written on post-it note.
<b>Coder ID</b>	Indicate the initials of the coder.
<b>Title</b>	Indicate the title of the article. If there is more than one phrase or sentence, write only the first one.
<b>Magazine</b>	Indicate the magazine: 1. Men's Health                      2. Men's Fitness
<b>Year</b>	Indicate the year the issue was published (example: "1999")
<b>Month</b>	Indicate the month the issue was published (example: for January, write "01")
<b>Length</b>	Indicate the length of the article, in half-page increments. Be sure to round up. For example, if the article continues on another page, but fills up less than half of the next page, count it as 1.5. If it fills up more than half of the next page, count it as 2, and so on.
<b>Type</b>	Indicate if the article is a story or a product review. An article that is primarily a list of products, should be categorized as "product."  1. Story                      2. Product
<b>Cover</b>	Indicate if the article is referenced on the cover of the magazine. Please note that the page number of the article may not be listed on the cover. Please check the heading of the article and compare it with the text listed on the cover.  1. Yes                      0. No

NOTE: This coding sheet is designed for articles addressing topics such as nutrition, sex and relationships, fitness, etc., which usually provide advice on things the reader can do to obtain certain benefits (such as health, or improved sex life). If an article is purely for entertainment (e.g. jokes, funny facts), you should indicate: main topic: *other*; benefits: *none*; methods: *none*.

<b>Main Topic</b>	
<p><b>Carefully review both the images and text included in the article and place a check mark by the category that best represents its main topic. What is the article about?</b></p> <p><b>If it is <i>impossible</i> to pick 1, pick 2 but not more than 2.</b></p>	
<b>Leanness/ Weight-loss</b>	Content related to decreasing weight or losing fat.
<b>Muscularity</b>	Content related to obtaining a <i>muscular appearance</i> . Ex: building lean muscle mass, improving muscle repair and recovery, increasing muscle definition.
<b>Beauty</b>	Content related to <i>other</i> aspects of physical appearance or attractiveness. Ex: hair styling, perfumes, lotions, looking young, hair removal, hair coloring, grooming.
<b>Fitness or Sports</b>	Content related to increasing <i>physical fitness</i> . Ex: aerobic fitness, strength, performance, endurance, flexibility, speed, energy level. Content related to competitive sports. Ex: football, basketball.
<b>Style</b>	Content related to improving style, coolness, appeal. Ex: being associated with expensive cars, fashion, cars, designer sunglasses, or other products; being seen as fashionable, cool, hip.
<b>Health</b>	Content related to physical or mental health. Ex: decreasing health risks for diseases, reducing stress, improving sleep, cholesterol, killing germs, lactose intolerance, aches and pains, allergies, protect from sunburn, sinusitis.
<b>Sex or Romantic Relationships</b>	Content related to sex or romantic relationships. Ex: attracting women, better sex, how to satisfy a woman, increasing passion, sexual techniques, pickup lines.
<b>Financial/Career</b>	Content related to finances, career, legal issues. Ex: job interview.
<b>Nutrition</b>	Content related to food and beverages, such as recipes, diet plans, fruits and vegetables.
<b>Other</b>	Other type of content not listed above. Please describe. Ex: humor, family relationships, travel, celebrities, history/story, gardening.

## Benefits

**Note: Use instructions provided for advertisements.**

<b>Methods/Techniques</b>	
<p>What do the images or text included in the ad or article suggest about how to achieve the benefits above? Identify only the major methods being addressed. Feel free to scan, rather than read every word in the article. Pay particular attention to headlines, quotes, subheads, large size text.</p> <p style="text-align: center;"><b>Check ALL that apply.</b></p>	
<b>Dieting</b>	Reducing consumption of foods, avoiding some types of foods, such as junk food or foods high in fat, carbohydrates, or sugars.
<b>Nutrition</b>	Eating healthy foods, such as fruit and vegetables, drinking plenty of water, avoiding alcoholic beverages. Eating more soy, protein, etc., getting vitamins or minerals from food.
<b>Performance-Enhancing Supplements</b>	Using (or not using) creatine, protein powders, protein bars, fat loss or energy pills or other performance-enhancing supplements. (See examples on page 2.)
<b>Other Nutritional Supplements</b>	Using (or not using) vitamins, minerals, herbs, etc. other than the ones listed above. Includes supplements to enhance sexual life. (See examples on page 2.)
<b>Medications</b>	Using (or not using) over the counter or prescription drugs.
<b>Therapy/Treatment</b>	Seeing a doctor, chiropractor, or acupuncturist, getting a massage, having surgery.
<b>Mental/Spiritual</b>	Focusing on internal (mental/spiritual) qualities, rather than physical ones. Ex: anger control, conflict management, determination, perseverance, truthfulness, kindness, improved communication.
<b>Anaerobic Exercise/Weight Training</b>	Engaging in weight lifting or other types exercises that tone or increase muscle mass (e.g., push-ups, sit ups, anaerobic exercises, workouts using resistance bands).
<b>Aerobic exercise or Sports participation</b>	Running on the treadmill, stationary bike, jogging, etc. Participating in football, basketball, soccer or other sport.
<b>Stretching</b>	Doing exercises to increase flexibility, such as yoga.
<b>Grooming or Style</b>	Using perfumes, lotions, shampoos, deodorants, hair removers, etc., Wearing fashionable clothes or accessories (e.g., watch, sunglasses).
<b>No Methods</b>	No methods included.
<b>Other</b>	Other methods. Examples: product purchase. Please list.

## Images of Men

**Note: Use instructions provided for advertisements.**





APPENDIX B  
QUESTION GUIDE FOR INTERVIEWS

This appendix contains the final version of the question guide used in the in-depth interviews with undergraduate males. As noted in Chapter 3, questions regarding men's fitness magazines were omitted when interviews were conducted with non-readers.

## **In-Depth Interviews - Final Question Guide**

### **I. Warm-Up, Explanations, and Introductions**

Hi, \_\_\_\_\_. Thank you for participating in this interview. As you know, this interview is being conducted as part of my doctoral dissertation. Before we begin, could you please review and sign this consent form?

I will be audiotaping our session so that I don't lose any of your comments. These recordings will be used to write a report that will not identify you by name. There are no right or wrong answers. I am just looking for your opinions and ideas.

I also should remind you that your participation is voluntary. You do not have to answer any question you don't want to answer.

### **II. Opening**

A. Tell me a little about yourself.

1. How old are you?
2. Where are you from? Where did you grow up?
3. Do you have brothers and sisters? PROMPT for ages
4. What are you studying? PROMPT for where he is in program (Freshman, Sophomore, etc.). What got you interested in this area? What are your plans for the future?
5. Who do you hang out with? Where do you meet your friends?

### **III. Media Use**

1. How do you spend your free time?  
PROMPT for media use
2. What kind of TV shows do you like to watch? How many hours a week?  
PROMPT for sports shows
3. How much time on the Internet? What sites?
4. What type of music do you like?

**IV. Exercise**

1. Do you do any sports?
2. When did you start? Why?
3. What kind of sports/exercise/work outs do you do regularly?
4. On a regular week, how much time do you spend exercising?
5. What are the main reasons you exercise (fitness, recreation, build muscle)?

**V. Nutrition**

1. What kinds of food do you eat on a regular day?
2. Are there things you try to eat more of? less of?
3. Do you read food labels?
4. What about nutritional supplements?

**VI. Fitness Magazines****A. General**

1. Which men's magazines are you familiar with?
2. Which ones do you read?
3. How often do you read them?
4. Where do you read them (at home, at the gym, at a friend's house, at a bookstore)?
5. Do you ever talk to your friends about these magazines? What kinds of things do you talk about?

**B. AUTO DRIVING: Show issues of two magazines.**

1. How do you read these types of magazines? How long do you spend with an issue?
2. What types of articles do you read? not read?
3. What do you think of the ads?

4. How old were you when you first started reading these magazines? Why did you pick it up? Have your reasons for reading these magazines changed over time?
5. What, if anything, would you change about them?

## **VII. Ideal Male Body**

1. Describe the kind of body that most people in this society think is attractive for a man.

PROMPT for example: Actor? Athlete? Friend?

2. Is that the type of body that you consider ideal? Why or why not?
3. Do you compare yourself to the ideal? If so, do you compare yourself to images in the media or to people you know? What is more important?
4. How do you feel about the ideal?
5. How important is it for you to achieve that look?
6. What would be good about achieving the ideal? What would be bad about it?
7. How close are you to the ideal? How about your friends?
8. Do you do anything to reach the ideal? What about your friends?

## **VIII. Grooming**

1. Do you remove body hair? For what reasons? What about your friends?
2. What are your thoughts about hair color, mousse, moisturizers and other similar products advertised in these magazines? Do your friends use them?

## **IX. Closing**

That's the end of my questions. Is there anything you would like to add? Thank you for participating. Your input was extremely valuable. Have a great day.

APPENDIX C  
SAMPLE INTERVIEW TRANSCRIPT

M: Tell me a little about yourself.

T: My name is Tony [Note: This is an alias. All real names have been omitted from this transcript for confidentiality reasons.]. I am a senior in journalism. I was born and raised in Florida. I grew up an hour south of here in Leesburg, Florida. And I've gone to UF my entire college career. I'm starting grad school in January.

M: Do you have brothers and sisters?

T: No, I'm an only child. I was spoiled growing up, all only children are. But I hope that didn't screw me up too much. My parents are still in Leesburg. They're both teachers. My dad was a high school math teacher and he's retired now. And my mom was an elementary school teacher. She was supposed to be retired but they pulled her back and now she's teaching again.

M: Tell me a little bit about your friends.

T: My best friend here in Gainesville is my roommate. He's also Tony, but we call him Tom, cause we've been roommates for almost 3 years, so it's easier to just have one Tony. If we're gonna be talking about *Men's Health*, about stuff like that, he's very very much into working out. He was a very small guy. And he was sort of a real, real skinny guy in high school. And he one time just decided to start working out. He's been doing it for 5 years. Just between you and me, I think he's a little too into it. He's a little obsessed with it. He really got me into eating better and working out more and got me interested in reading these kind of magazines. He's probably my best friend up here. I have several friends who, since I went to high school an hour south of here, I've known for 20 years, like, since I was a little baby, who are up here too. And I still keep in touch with them. But a lot of friends I've had up here, like past roommates and friends and stuff, since I've been here so long, a lot of them have graduated and gone. So I'm sort of the last of my circle of friends, me and a couple other people. I guess I need to get on the ball and start meeting some new people.

M: What do you like to do on your free time?

T: I like to play around on the Internet, looking stuff up. I'm a real big reader. I started reading at the end of high school and now I can't get enough of it. I always have at least 20 books that are on my list to read.

M: What kind of books?

T: Really all over the place. I'm mainly into fiction. I don't read a lot of nonfiction. Fantasy novels to a certain extent. I've read some of the bigger fantasy novels. I'm actually really into, he was an English professor here at the University of Florida for like 30 years, a guy by the name of Harry Cruise. And he's very hard-boiled, like Gothic southern writer. His writing is a little screwed up but he's such a good writer. I've read like 3 or 4 books of his, and he's one of my favorites now. Most of the books I've been reading, they've been getting more screwed. I can't read any of the straightforward fiction. It's always sort of like twisted. I think I'm just going to get more and more screwed up and skewed until, finally, the absence of that kind of thing is going to fascinate me. And then, it will be kind of a circular thing, and I'll recapture the innocence of youth that way. I don't know. But I like to read a lot. On the physical side, whenever I can find someone, I like to play racketball a lot. You're really working out hard with the cardiovascular thing, but it's a game, so you don't really realize it. It's not work. So I like doing that a lot. I just do sort of the basic stuff, like going to the movies, watching TV, that sort of thing. Although, since I've been in college, I haven't really watched a lot of TV. I don't have the time.

M: What do you watch on TV?

T: Well, as much as I hate to say, I love Friends, Scrubs is also real good. Up until this year I had HBO, and all the HBO series are wonderful. So I watched those. But not anymore cause I don't have it. Comedy Central is pretty much on all the time at our place. Another thing, I think I'm getting a little bit older, but MTV and VH1, it used to be it's all MTV and blah, blah, blah. And VH1 was like for old people. Now, it's pretty much even now, and I think later in the year I'll start liking VH1 more. When I was like 16, 17, 18, especially, I didn't dislike it. I even watched some stuff there once in a while, but it was sort of older, like adult music, not kid's music and stuff. But now I guess I'm an adult cause VH1 is like great. I love the 80s. All that stuff. So I'm starting to like VH1 more than MTV.

M: When you are online, what sites do you go to?

T: Whenever I get interested in stuff, whenever I see a movie, cause I saw like Kill Bill a little while ago, I got into a big Quarantino kick, so I starting researching all kinds of stuff. I ended up finding out about this Japanese movie called Battle Royale, with this girl who had a small part in Kill Bill. The reason she got that part was because of her part in this Japanese movie. So I downloaded that and watched that movie. And I really liked that movie a lot. I just sort of get interested in something and research it. The Internet is really the best way to do that sort of thing, if you just meander around the whole world wide web.

M: Any sites that you go to regularly?

T: There's this one site that is kind of a humorous site called liquidgeneration.com. It sort of makes fun of pop culture and slash movies and stuff like that. I go to that every once in

a while. I like amazon.com a lot since I want to find out what books to read, so I'm on that a whole lot. Those are really the only 2 that I go to all the time.

M: What about music?

T: I occasionally listen to just about everything except for, I don't really listen to rap very much. I really hate the term, but I'm really into a type of music called alt-country. A lot of bands, like the Old 97s and Whiskeytown, a lot of bands that no one's ever heard of. But I like them a lot. It's almost like, these people are from places where country is really popular, like Texas and Alabama. The people from places like that, they sort of kind of wanted to do like rock music or whatever. But the country influence was so much, it's sort of like rock music with a little twang in it. It's not country music but it's twangy a little bit. It's just great. I don't know. I love it a lot. I listen to that a lot. As far as more popular bands go, again my roommate Tom, he's a big metal head, so I sort of listen to a little bit of that sort of stuff just by osmosis, I guess. I used to like Dave Matthews band a good amount, but since I got into college I've kind of gotten away from that a little bit. I like Pete Dinklage (?) a lot. Things like that.

M: What don't you like?

T: Well, straight country, not that I dislike it, but I just don't listen to it. And like R&B and like rap, I don't really get into very much either. Well, I don't really listen to a whole lot of classical, not like socially, or opera, or anything like that. But as far as popular or semi-popular music, I sort of meander all around. Like I'm trying to get into a 70s band, Big Star, now. I've got a couple of their CDs. The thing with music, when I listen to, especially new artists, but even just any new CD, I almost never like it right off the bat. I have to listen to it a little bit, to sort of get used to it. And then I'll either like it a lot or I won't. So I'm investigating a couple of bands right now.

M: How often do you listen to music?

T: A whole lot. Usually in car, I'll pop a CD and drive around. But a lot of times if I'm surfing the Internet, I'll listen to music on my computer. As much as I can. As long as I'm not having to concentrate on something else, like I'm writing a paper. But I definitely like music a whole lot.

M: I forgot to ask—how many hours a week do you think you watch TV?

T: Not that many. If I had to guess, maybe an hour an a half a day. So that would be about 10 hours maybe, or something like that, which is probably not that little, but (laughs). When I was in high school, I probably watched like 4 or 5 hours a day.

M: You mentioned racketball. Do you do any other sports?

T: A couple of years ago, like in the beginning of college, I played a lot of basketball. I was terrible but I played it. I haven't really played that a whole lot, although I like sports a lot. I like watching basketball and football, especially. But I don't really play. I'm not very adept at sports. Racketball, I'm OK at. If some people asked me to play basketball

who I knew that I could not necessarily beat, but at least compete with, I would, although I think I'd probably tire out very easily. As far as active things, I don't like it, but I've tried to get into running. Like I'm in a jogging class right now and I have a portable MP3 players so I can run while taking my mind off the running. I'm trying to do that as well. I try to get to the gym. I haven't been doing very well lately. But I try to get to the gym, 3 times a week is my goal, but usually once or twice is good too.

M: And what do you do at the gym?

T: I find it's more interesting for me, and I hear it's good for the body too, that I switch between doing like, 3 different days, like back and bi, chest and tri, legs and shoulders; or sometimes I'll switch up and I'll do opposites, like bi and tri. I've also tried, although it's very hard, to do HIT training, high-intensity training. What you're basically doing, just one or two, like really really super sets, per muscle group, and you're doing a full body workout every time you work out. That said, although you're trying a lot harder while you're doing it, you have your whole body worked out in like 45 minutes. But according to a lot of research, cause I actually did an article on HIT training, it's supposed to give you as good of a workout and be as good for your muscles as traditional working out, which is do this for a day, do this for a day. I try to switch between all of them just so my body doesn't know what's coming.

M: When did you starting doing weights?

T: About the time that I became roommates with my roommate, Tom. That was my sophomore year, so about 3 years ago. I haven't been constant throughout that. I've had up and down periods. But that's sort of when I started it, and I've tried to at least have a semblance of a weight training program since then.

M: How many hours a week do you thing you work out?

T: Currently not as much as I want to. Maybe between one and two hours of cardio a week. And that's not as much as I want. And weight training, probably about the same. When I was really doing good, I'd do like maybe 3 ½, 4 hours of weight training a week and, for a while, like 5 or 6 hours of racketball or running. I was doing very well for a while. Not any more.

M: Because of school?

T: Well, partly because of school. The past couple of semesters have been very tough for me but mainly just because when you stop a little bit it's so much harder to start back again. I guess something came up and I didn't do it for a couple of weeks. I just never have gotten back into the routine. It's mainly my fault, not my schedule's.

M: When you were growing up, did you do any sports? (15:00)

T: Well, not on any real competitive level. I think I might be better at sports if at my heart I were more competitive. If I'm playing a sport and I get beaten, I really can't bring myself to care too much. And I think to be good at sports, you have to care cause that's

sort of the point. I've always enjoyed playing. I've played sports, especially basketball, and I swam a lot when I was younger, but I never really had the drive to try to be the best in sports. I didn't really care that much. I never was very competitive. I never was in any leagues or any real teams. It was always like pick up games on the playground or just like playing around. I was relatively active, just not like that.

M: What are the reasons why you exercise?

T: Well, the most immediate reason is you find when you work out, especially when you first start working out, you see gains, like you lose some weight which is definitely a good thing, especially in college. You eat so much fast food, you can't really help it. It keeps your weight down. And you sort of get more of a toned body. You find very, very quickly that you look better in your clothes, you look better in the mirror. People will say, "hey, you look like you've been working out." Everyone wants to look good. Everyone wants to put forth that sort of image. And I guess that would be the primary reason why I do it. Although once I really got into it, you really just flat out feel better. And I don't even mean your ego feels better, but you have more energy. Or at least me, you have more energy, your baseline mood is just higher than it would be. That definitely doesn't come immediately, as far as I'm concerned. That comes a little bit later. But once you get to that point, that's definitely a great reason. That definitely kept me going when I didn't feel like working out. I would think, "hey, if I don't work out today, I won't work out next time. I'm going to be one down next week." So those two reasons probably, with the first one being the primary, because it's what really gets me to work out. And the second one probably being a better reason in the end cause I just feel better. Those would probably be the two main reasons.

M: What is your diet like?

T: Well, again it fluctuates, and you caught me in a bad cycle. But I try to mainly look out for fat. I try to cut out as much fat as possible. And I'm weak sometimes, I'm not as weak at other times. When I'm at the grocery store, if there are two things, one is low fat and the other's not, unless the low-fat one really tastes bad. Cause I must confess, I still really enjoy eating. I'm not to the point where I'm just eating for fuel. I really don't want to get there, even though that's probably the best place to be physically. But I'm not there and I don't think I will be. But if I'm not giving up a whole bunch in taste and enjoyment, I'll definitely make the conscious decision to do low-fat. Cause I think that's the biggest thing. I should but I really pay no attention to carbs whatsoever. Carbs are good and I just have all the carbs I want. Again, probably not a good thing. I try to eat a lot of meat. My roommate sort of has a little adage, he won't eat a meal unless it has some meat. And I don't go that far but I definitely like my steak, I like my chicken, so I eat a good bit of meat. As far as fruit and vegetables go, I eat fruits I think enough. We get fruit, mainly bananas and apples at the grocery store, and I definitely eat those pretty regularly. Vegetables, I wish I ate more fresh vegetables. When I eat vegetables, unless I'm at home and my parents are cooking, then I usually eat the canned stuff. I don't know if healthwise that really makes a difference. I think it does, but I don't know if it really does or not. I would think that fresh vegetables would be better for you. But I usually resort to the canned stuff when I'm on my own.

M: Walk me through, like what would you have for breakfast?

T: A typical day, when I have class, I get up, I might have an apple before I go to my class. I get up pretty soon before my first class. I'll maybe have an apple, maybe have nothing. I'll go to my first class. After my first class, I usually have a little break so on campus here I might pick up a Subway sub, maybe a footlong turkey sub or there's like a sliced chicken meal over at the racket club I might pick up. I'll have a meal if I have time to. And then I'll go to the rest of my classes. And go home somewhere between 3 and 5 and make a meal. Depending on how good I want to be, it could be a good sandwich with baked chips or I have some oven pizzas that are not good at all, but sometimes I'll eat that. I'll have a meal, whether it will be good or not around 5 or 6 maybe. And then a tiny couple of snacks will tide me over until like 8 or 9, and I'll probably have another meal of, basically it depends on what's in the house. Maybe if I'm up real late I might have another snack, but probably not. That's probably about my day. So kind of like a semblance of a meal in the first part of the day and then two meals—early dinner and late dinner, I guess.

M: Are those meals sandwiches, or do you cook?

T: Like I said, it really depends a whole lot on what we have in the apartment or if I want to go out and get something. I eat a lot of sub sandwiches, like Subway. I eat a lot of that if I have the money. If we have it, I definitely eat a lot of sandwiches. We get these really great low-fat hot dogs. I eat those. A good bit of time, on the bad end, I'll eat Chef Boyardee ravioli and things of that nature, like canned foods. I'll eat some canned soup, stuff like that. Sometimes, if we have the stuff to make it, we'll bake different kinds of chicken dishes or pasta dishes, like garlic chicken or barbecue. Sometimes we'll grill out some steaks. We have a grill on our porch, so we'll grill some steaks out. We buy some fresh vegetables. Mostly I'm doing the canned stuff. But sometimes we have potatoes and stuff that we make. I'd say maybe once a week, maybe more like once every other week, we'll grill out steaks and have like mashed potatoes, my roommate and I, and we'll sit down and eat it. But we're so bad about going to the grocery store, it gets to the point where there's like a 3-week period when there's nothing in the apartment. We then have to go out or just scrounge for whatever kinds of soups or whatever we have that haven't eaten yet in the cupboard.

M: If you go out, where do you go?

T: I eat at Subway a lot, like I said. I go to Moe's burrito place, not a lot, but sometimes. I love KFC, and I keep that as a treat, every once in a while cause it's definitely not good for you at all. Every once in a while I'll eat that. If I'm going out with some friends or something, like going out to a restaurant, Bennigans or some place like that, I'll usually get a steak, when I go out to a place like that. Steak and fries, or steak and some type of potato. That's everything, usually. I like to try different stuff, but those are the places I go more often than not.

M: Do you go out at night?

T: As far as like going out and drinking and that sort of thing, I'm really, I'm kind of burned out on it. I go out maybe once every other week, like going to a bar or something. I don't really like clubs very much but I'll go into a bar and maybe have some drinks with some friends. Every once in a while I like to go out and meet some friends and have some drinks, and I'll have a drink, whatever. Maybe play some pool, go bowling, something like that. My friends and I go to the coffeeshop every once in a while, have some coffee, hang out and talk. We do that some nights. Go to the movies every once in a while. That sort of thing.

M: Do you read food labels?

T: I do for the most part. I'm sort of mechanized, like I know I get this, I get this, but I definitely read the labels. They get you a lot of times with the serving size, cause the serving size is like a third of what you think, so you have to triple whatever the numbers are. I definitely look at fat. I look at carbs. I don't know why I do, cause that's never a factor. But I look at fat. And if something else really pops out, like it has an obscene amount of sugar or something, that's usually sort of reflective of fat as well. If a huge number of that pops out, I'll pay attention to it.

M: Why do you pay attention to the fat?

D: It's probably not true, but I just feel that it's the most important thing to cut out of your diet if you want to start eating healthy. Everyone tells me, and I certainly believe, that you need to keep an eye on your carbs too. I just don't go that extra step. In my mind, I've sort of made my peace. As long as I look at my fat, then I'm fine. I'm eating healthy enough. That's just sort of a rule I have in my head. And I guess it should change but I don't think it's gonna.

M: Do you take any vitamins?

T: No, I really don't. I tried to start, several years ago, and just because when I get up, I just get up and go to class, and it might be a couple hours before I get food in my stomach. Most vitamins, you don't want to take and not eat anything cause it really hurts. You want to have it with food. I guess that's the reason I never really got into it. But no, I don't really take any vitamins.

M: What about supplements?

T: No, not really. I have before. My roommate, he's really into working out. He takes the protein shakes and that sort of thing. And sometimes I'll do it. I mean, I've never bought it myself. If he offers, after we work out together, I'll have some of his. But definitely not on a regular basis.

M: Creatine?

T: No, again, I have before but not in any sort of real basis.

M: None of the other ones, like andro?

T: I definitely consciously stay away from those, like andro and anything higher than that as far as steroids and stuff. When I work out, I want to get results but I don't want that. I don't want to be mood changing and all that kind of stuff. I want to stay away from that. Although I know a lot of people who definitely do that.

M: Do you read any magazines?

T: Yeah, I read some magazines. I have a subscription to *Maxim* magazine and a free subscription to *Stuff*, which came with it but I don't like *Stuff* that much. I like music magazines like Rolling Stone and a couple others that are more underground. *Uncut* magazine, a British music magazine, and *Magnet* magazine, it's an American magazine but it's sort of more of an independent label magazine. I read a lot of music magazines. In terms of health magazines, I pretty much stick to *Men's Health*. I don't have a subscription but I read probably on average, probably like every other issue. I usually buy those on the newsstand and flip through those. Movie and entertainment magazines, on occasion, I'll get into.

M: I have one [*Men's Health*] here.

T: I don't think I've read this one.

M: How do you read them?

T: I do look at the cover, cause I'm learning how to make them. To a certain extent, I look at all magazines with a professional eye. But as a reader, I definitely scan the cover lines to see what pops out. Although I'm sure most people realize this, and I definitely do, but the cover lines, a lot of times, don't have a whole lot to do with the actual article. It's to get you to open the magazine. But I use that sort of as a guide. What I usually do with most magazines, not just health magazines but all magazines, I'll sort of like flip through it and I'll go to every page and scan it. If they're really short articles, I'll stop and read them. But I'll basically go through the whole magazine just so I see everything that's in the magazine. And after that, I'll pick it up and flip through it and I'll eventually read all the stuff I want to read. But I'll basically first look through the whole thing to get an idea of everything that's in the magazine.

M: What kind of stuff are you usually interested in?

T: With *Men's Health*, I flip through it and I like the briefs. I believe in the beginning, they sort of have brief sections, little tidbits about food news and health news. I like to scan through those. Those sort of things I definitely like to read. I enjoy, I think they have several sort of Q&A types of things, the bartender Q&A, and they have a girl, I like those Q&As as well. Every once in a while, obviously, they have a whole lot of workout routines to do. Every once in a while, I'll try those, especially if I'm getting tired of my current routine for a certain muscle group or whatever, and I see it in here, I'll definitely try it. The nutrition stuff is kind of hit or miss with me. I've definitely read some before and I found them very interesting and a lot of it I sort of ignore. I guess it's just if I feel it pertains to me, like I believe there was one article several months ago about food myths, that sort of grabbed my attention and I learned stuff from that. There was one, I think that

was all about high fructose corn syrup, that almost everything has that, how bad that is for you and everything. Those will get my attention. But I won't as a rule stop at the nutrition stuff unless the specific topic jumps out at me. They always have this sort of thing where they're like comparing the three people. Usually not my first couple of times flipping through the magazine, but I'll always eventually read through that whole thing. But that's not usually one of the first things I go through. They have these small little profiles, every once in a while. I usually read those, even if I don't know who the person is. With Men's Health, I'll pretty much, unless something doesn't really jump out at me, I'll pretty much eventually read everything. In my first pass, I'll read a lot of the brief stuff, the rapid fire stuff, the question and answer. I always like to check out the last page here. I always read that the first time I open the magazine. I usually, the first time I go through the magazine, unless it really jumps out at me, I won't read the features. I'll leave that for a time when I'll pick up the magazine, I'm bored, and I'll read a feature.

M: Are there any features that you find more interesting or less?

T: As far as the features on the workout routines, even if I use them, I usually won't read the whole feature. Just a small part of it, like do this. And I'll try that and see how that works for me. Come to think about it, I probably don't read those very much. I sometimes take from them, but I usually don't read those. I probably even read the nutrition stuff a little bit more. In a lot of Men's Health, they have a whole lot of not nutrition but health features that I guess, since I'm 23, I'm not really worried about heart disease or heart attack at this point. A lot of especially the health-related things in Men's Health are definitely geared more towards the older man. When I say older, I mean late 20s and 30s. Not older, just older than I am. So like usually I might read through those but those definitely aren't priorities either because I feel they don't really pertain to me yet. I usually put them secondary as well because those really aren't the health issues that I have yet. (36:37)

M: When did you start reading Men's Health?

T: Relatively recently. Maybe 2 years ago, maybe a little bit less, a year and a half, two years ago.

M: Do you remember why?

T: I had sort of gotten into a pretty regular workout routine. I changed my eating a little bit, trying to get a little bit more nutritious. Really, I think the reason I originally picked it up is because I kind of started thinking about what kind of magazine do I want to write for, eventually. And I had never really read these types of magazines before. I picked it up just to see what it was all about. I really had the expectation in my mind that all these magazines, I still think some of them but not Men's Health, were just all about workouts. And Men's Health isn't like that. And I thought it was until I read through it. It sort of surprised me. It definitely focuses on health in several different ways but it also has like more sex, better sex [from the cover], I mean, sex sells. That's always interesting. It's definitely a more rounded men's magazine than I originally thought it would be. So I was pleasantly surprised. But I really didn't know what the magazine was all about. About a

year and a half, two years ago, I picked it up cause I knew it would have stuff I would identify with because I was trying to start a more healthy lifestyle. That's why I picked it up to begin with.

M: Is there anything you don't like about the magazine?

T: Again, I wouldn't necessarily say I don't like it, but a lot of the health things, like the heart attack and that sort of stuff, I don't feel really apply to me as of yet. But I don't think they're bad articles. I just don't think they're for me right now. I can't really think of anything. Let me just flip through and see if anything comes to me. No, I'm afraid I can't.

M: Have you seen *Men's Fitness*?

T: I don't think I've ever really read it at all but I knew that it was a magazine. I don't really know much about it. *Men's Health* is the only magazine of this type that I really look at too much.

M: None of the others, *Muscle & Fitness*, *Flex*?

T: No, I don't get those, cause I don't want, I'm not working out in order to get big. I don't want to build my body. I just want to be healthier, feel better, look a little better, be a little bit more toned. I feel, especially *Flex* and the one with these huge guys on the cover, I'm just not nearly serious enough about that sort of thing in order to get benefit from that. But I've never read the magazine, so that might be a false assumption. But *Men's Health* has really been the only one that I've really stuck with.

M: What do you think most people in our society think is the ideal male physique?

T: I think, applying to both males and females, you look on any cover, fat is a no-no. If you have excess fat, you should get rid of it. And I don't know how true that should be, but I think, in our society, it's very true. It's surprising in the past 5 or 8 years, that's always been a very big deal with women, body image, like on *Cosmo* and stuff. But it's really getting to be a very big deal for men, too. And I don't really think it was like that before. So I think, definitely, get rid of your fat. For a male, I think they are pushing the very toned abs a lot. I really don't think most people, the *Flex* covers with the huge guys. Most women I've talked to think that that looks a little disgusting. I think the general population just wants that [points to magazine model] or a little bit bigger. Just sort of like toned. Like that. I even think that's on the higher end of normal. I think that's Tiki Barber. He's a pro football player. Toned, muscles being defined, but definitely I don't think like huge muscles. I think that [magazine model] would be ideal right there. I think there's definitely a big push on the six-pack. The abs. Looking good with your shirt off is really what the ideal male form is these days. With the arms defined, biceps and triceps, not huge but defined pec muscles. I think he [Tiki Barber] is in the higher end of the ideal. Much bigger than that I think would not be ideal, in my perception.

M: And what do you think is the ideal, for yourself?

T: I think to a certain extent you should aspire to be as healthy as possible. But I definitely think that when it comes to both men and women, there's too much of an emphasis on get rid of any fat that you have. There's people who are not that skinny but they're not fat. I definitely think there's too much emphasis in general society in the lowest body fat percentage you possibly can without being anorexic. You should be active and toned. But in this day and age, like 500 years ago, someone was toned because they were out working. They didn't work out, they survived. And I think that's more like ideal body and it was how they were naturally. It's just sort of in our genes, what a healthy providing male, what that was 500, 1000, 2000 years ago. Like what that was is what I think is attractive now. That's just sort of instinctively what a productive body is. So I think you should ascribe to that. But big, big muscles, I don't think that's really the point. I think sort of like toned and functional. Back to fat, I think like a fat guy, I think he's running a health risk and that's obviously not the ideal body image. But I think there's too much of an emphasis on get rid of fat and, to a lesser extent, get as big as you can. Being as big as you can I don't think is really the ideal.

M: What would you change about the way you look?

T: Right now, I'm carrying probably between, back to the fat, probably 5 to 7 more pounds around my midsection that I want. I would like to be a little bit bigger in mainly the upper body, the arms, my pecs, just because I'd love to have the six-pack abs. But like I said over and over, I don't aspire to be big or anything. I just kind of want to be toned to a better extent, just so the clothes will hang better on me. That's really all I want. I don't care if I can lift a certain amount of pounds. I don't care if my biceps are this many inches around. I don't care about any of that stuff. I just want to slim down a little bit, just tiny bit, and get my upper body toned a little bit more. That's all I really want for myself.

M: What do you think of the images in these magazines?

T: Well, I think that they are a little unrealistic, especially, for *Men's Health*, I guess the target age for *Men's Health* is like probably around 20 to 40. I think especially the 35 to 40-year-old, I mean, they're getting, I mean 35 to 40 is not old, but it's old enough that, unless you're working real hard, you're not looking like this at 35. I think it's unrealistic to a certain extent. He's a professional athlete [Tiki Barber] so he needs to look like that. The average person is not going to be looking like that. I think they're unrealistic. I definitely don't think it's to the point like the skinny models on *Cosmo* and that sort of thing. I definitely don't think it's that drastic. I think for women, it's like there's nothing wrong with this woman, you should be like that. I don't think it's nearly as drastic, like an unfair representation, for men. But it is unfair to a certain extent. I mean, for the 20, 25-year old who wants to look like that, it's not that hard. Well, that might even be unrealistic, for a 20, 25 year old wanting to look like that.

M: Or the six-packs?

T: See, the six-packs, I might have a skewed view because I really get the feeling that the University of Florida, and Gainesville in general, is a very, very physically active place.

That's pushed a whole lot. Six packs are pretty common around here. I think that's sort of skewing my view cause I don't think that's how it is all over the place. I don't know for a fact, but I don't think it is. So, I mean, I don't have six packs but I know a lot of people do, so maybe that's sort of skewing my view. Maybe it is a little unfair to say to any guy, hey listen, you really should have a six-pack. But so many people around here do, maybe it's just skewing my view a little bit. It hurts to try to get a six-pack. The big thing about the six pack is not only, for guys, not only do you have to work the muscle, but you have to really get serious about losing the fat because the first fat that's gonna get on a guy is gonna go over where the six pack is. To get the six-pack, you have to get the six pack and then you have to really really cut as much fat as possible off your body so people can see the six-pack. So it's sort of a dual, I think that's what makes it so hard, it's kind of the dual job of getting them and uncovering them.

M: What would be the good think about achieving the look?

T: Well, I think it would probably be a bit of an ego boost. If I got to the point where I ideally wanted to be, I'd walk around and I'd know that that's where I wanted to be. Maybe people would comment, hey, you look good. But even if they didn't, I would know. So I think it would be an ego boost. And the better your body is in shape, the less you have to work to be in shape. Automatically your metabolism is higher, you're processing food more efficiently. So all of that would be a plus too. I'd be in better physical shape so it would be easier to stay in better physical shape. It would be less work. It would just be maintaining, which is definitely a lot easier than trying to improve. That's really all I can think of. I mean, mentally I think I would feel better. Although probably, like anything else, once I achieved what I wanted to be, I'd probably push it up a little bit higher so I'd have to achieve that. It would probably be sort of a never ending thing cause a lot of things are like that. So probably, there would be good points and bad points, like having a new goal to go too. Cause I probably wouldn't just want to maintain. I'd probably want to get it a little bit higher, just because that's how people work, I think. I'd feel better because I would have achieved and I'd feel that I looked better, and just physically it would be easier for me to stay healthier. I'd be feeling better.

M: Any other bad points?

T: I don't know. Maybe I'd be cool once I got to my ideal right now. Hopefully, I'd say, OK, that's cool, I'm here. But, now that I think about it, that probably would be a bad thing. I probably would have another higher goal. Which, I mean, is still improving yourself, but you don't get to enjoy to the full extent. Any other bad things? Well here in Gainesville, this is very, I'm kind of stretching it a little bit, but here in Gainesville, I can definitely imagine someone looking at someone who is ideally in shape like that and having a bad impression of them, thinking that all they care about is looks. Again, I'm kind of stretching it. But that could possibly be a bad thing as well. If you look good, people think that that's all you care about.

M: What do your friends look like?

T: My roommate, Tom, he's a very small frame guy but he's very, very toned, like full six-pack and all that stuff. But the thing with him is like he's, I think he wants to look like that and he just doesn't have the body frame for that. He can lift a whole bunch of weight and he looks good and cut and toned and everything but he's not satisfied with it. He wants to get bigger. And I don't know how much bigger his body is going to let him get. But he's very, very much in shape and he eats a whole lot better than I do. He has a very, very good body. My friend, Jane, she's not like fat and she's not, I wouldn't call her out of shape, but she doesn't work out at all. She's probably a little overweight. I don't know, not fat, but probably a little bit above what the norm should be. She's not very physically active at all. My other friend, Megan, she's a runner and so she gets a lot of cardio workout, but she's probably a tiny bit above average body-wise, cause she runs so much and everything. But nothing like drastic or anything. My other roommate, Mark, he's only been my roommate for about 6 months, he apparently was quite overweight for most of his life, or for a time, and then he made a conscious decision to start working out and start eating better and everything. So now he's very very skinny. He's kind of like lanky and wiry. He has some muscles and stuff but I think he's probably about average. He went from, apparently, I'm told, definitely overweight, to he's changed around, he's working out regularly, he changed his diet, so he's sort of just average.

M: But as far as being close to the ideal, it's more like one of your roommates is the one?

T: Well, for me, he's not. Like, I wouldn't want the body that he has. I would be satisfied with less than him cause I really don't care that much. But he's not even satisfied with what he has. I definitely think he'd be an above average physique. He better, he tries really hard.

M: Has he always been into that?

T: I think maybe about 5 years ago, like his last year in high school, first year in college or something, he decided, I want to start working out cause I'm tiny. He had a little bird chest. He started working out and he's never stopped.

M: Were you ever overweight growing up?

T: I don't believe so. I was really active. My parents had a pool, when I was a little, little kid, I'd spend like 7 hours in the pool a day when it was warm enough. I didn't try to stay in shape. I just played. But I was never really overweight. I think probably the most overweight I ever was was in the beginning of college, like most people go through, eating junk food and stuff, I probably got to maybe 170, 175, which is not like, fat, cause I'm 5'11", but probably a couple extra pounds. Right now, I'm sitting around probably 170 but I have a lot more muscle mass than I used to. And I'm still carrying a little more extra fat than I want to. But I think I was probably in the worst shape then, probably around 170, 175. Nothing drastic, but enough to where I wanted to, I sort of got the initiative to get a little more active, to work some stuff off.

M: I might have asked you this already, but about how many hours a week do you work out now?

T: Well, right now, like I said, I'm kind of in a low period, but probably around an hour and a half a week average weights, and probably about the same, maybe a little bit more cardio, maybe 2 hours. Usually running, sometimes racketball.

M: You lift at SW?

T: A lot of times I do it at SW. If I'm too lazy, my apartment complex has a gym, a crappy small gym, but sometimes I go there cause it's a lot more convenient.

M: Do you go by yourself or do you go with friends?

T: A lot of times I go with my roommate Tom, especially if I want to do a quick workout, but at my apartment complex gym, I usually go alone. I think he goes 3 times a week but he works as hard as he possibly can those three times, and he also does cardio as well. He really only started doing that in the past couple of months. I'm not sure why.

M: Do you do any flexibility stuff?

T: I'm in a jogging class. My jogging teacher is really big on stretching before and after. I really should do more of it. I don't stretch when I do weight training. And when I'm on my own, running, I usually do a little abbreviated version of the stretch that I do in jogging class. Probably not enough, but I do it. With weight training, I never really stretch at all, before or after. And stretching is definitely a big thing, especially when you're talking about people who weight train they can get real big. I'm sure you've heard the term, being "muscle-bound." To a large extent, from what I've heard, that's because they didn't properly. If you do a stretch routine, like a separate routine, if you do that, then you can maintain flexibility a lot more, especially if you're working out a lot and you're getting bigger. Because it's so easy to get muscle-bound if you get real big. I don't really do it. I stretch before and after jogging, usually, but I don't do like a separate stretch thing. Although I think I'm more flexible than I should be. I don't know why I am. I mean, I'm not real flexible, but I don't find flexibility problems a whole lot. Maybe it's because I swam so much when I was younger.

M: The other thing I'm asking people is about removing body hair.

T: I have removed body hair but I don't on a regular basis.

M: Where do you remove it from?

T: The pubic area. That's about it.

M: No chest or arms?

T: No, and no shaving, just trimming.

M: The pubic hair?

T: Yes. I've never done anything anywhere else really. Other than shaving my face, but I didn't think that counted. I've never gotten my eyebrows plucked or anything. Actually, there's a couple of hairs on my nose, every once in a while, that I'll either shave or pluck off, but that's about it.

M: Why did you do it?

T: I've done it before. I don't even know, I don't even know.

M: Did you read about it anywhere?

T: Yeah, and people recommended it to me.

M: They said it would be more attractive?

T: Yeah, more attractive, right. Cause that's an extremely common thing with females, to trim or shave, their pubic hair. And I sort of agree. If I were in a committed relationship, I don't know if I would or not, but I would definitely consider doing it regularly. That's really the only thing I've ever done.

M: What about your friends?

T: Well, Tom, for a while I think he shaved his legs. He's not a very hairy guy. He doesn't have a lot to shave.

M: Do you think it was for the muscles?

T: No, actually I think he had a girlfriend who wanted him to, so he started doing it for that. Once you start doing that sort of thing, you kind of have to do it. I don't think it was for working out.

M: But then he stopped?

T: Well, I think he stopped for a while, but I want to say he started again. I don't know why he started again. But I don't think it has anything to do with working out, like being more defined or anything. I'm trying to think if I have any friends that shave anything for body image. I know that bodybuilders, like competitive ones, they'll shave off everything for that. But I don't think I know anyone personally who does that.

M: Another thing I ask about is about hair products, moisturizers, that kind of stuff. What are your thoughts?

T: A lot of guys like to play around with highlights and stuff, with coloring their hair. I've never really done that. But it's definitely a good market. A lot of guys are into doing that, like highlight their hair and stuff. As far as hair products, guys want to put products on their hair--probably not as much as girls do, but just like girls do. It's definitely a valid market, I think. I don't know about moisturizers. I don't moisturize.

M: But you do use the hair gel?

T: Oh yeah. I put like mousse in my hair, different products and stuff, especially if I'm gonna go out on the town with some people. I definitely I want to make sure I look as good as I can make myself. I definitely pay attention to that and I think most guys do.

M: Do your friends?

T: Oh yeah, definitely. Hair products. And, like I said, not myself, but a lot of people, the highlights and stuff. I think all that is very appropriate to these types of magazines.

M: Why appropriate to these types?

T: Men's magazines in general. I don't think it really connects to the working out at all, just the same audience.

M: It's just that several years ago there weren't so many products.

T: It may be the changing culture. Like guys do that now. I can't really find a connection with it having anything to do with men's health magazine, but men in general. It's just more common.

M: Let me see if there's anything I forgot. Do you compare yourself to the ideal?

T: It's hard not to at least on a subconscious level, comparing yourself to the guy on the billboard or whatever. But I don't really concern myself with it too much. I think everyone compares themselves to a certain extent. I don't feel bad if I don't have that or that, or if my muscles aren't that big. It doesn't really concern me that much. But I do.

M: What about to people around you?

T: Yeah, that might even be a little bit stronger. If I'm standing beside the person. That might affect me a little bit. Again, I don't think it really really. If I'm hanging out with someone who's in really good shape, like that's not going to cause me to go out and work out today because I want to look like that guy. But it probably plants a seed in my head, kind of makes me more aware. It's not a really drastic recognition to me. But I think it probably does affect to a certain extent the way I want to look. I've been to other places. I've never seen so many, I don't care what time it is, you ride around there will be someone jogging on the side road and the gym will have some people in it. I don't know what it is about UF and Gainesville. It's just sort of the culture, I guess. I guess Florida, and there are so many beaches, people want to look good in bathing suits. I don't know, but it's definitely very, very prevalent here.

M: What are some other thoughts you have?

T: That was about it. I kind of segued a lot. I kind of exhausted the things I was thinking about.

APPENDIX D  
SAMPLE FILEMAKER PRO DATABASE PRINTOUTS

This Appendix presents two sample printouts from the FileMaker Pro 5.0 database that was used to assist with the analysis of the transcripts of the in-depth interviews conducted for this dissertation. The first printout presents the summary of information prepared for the transcript provided in Appendix C. The second printout lists levels of readership fitness magazines and athleticism by participant (please note that all names are aliases).

## Sample Database Printout of Information from the Transcript in Appendix C

### Tony

**Readership** 1 High (6 issues per year--reads entire mag.)

#### Friends

Best friend in Gainesville is roommate, Tom, who works out a lot and wants to get bigger. Tom was very skinny in HS. He got Tony into eating better and working out more and got him interested in reading fitness magazines (1). Began weightlifting when became roommates with Tom (6). Takes protein shakes sometimes with him. Female friends not very active, somewhat overweight (20).

#### Exercise

Did not participate in organized sports growing up. Swam, played with friends, was active. Doesn't like sports too much because is not very competitive (6). In the beginning of college, played basketball a lot but was not very good. Would do it if friends asked. Tried to get into running. Is in a jogging class. Likes to play racquetball. Does 1-2 hrs. cardio and 1-2 hrs. weight training p/wk.

#### Reasons

Most immediate reason is to get more of a toned body, keep weight down, and look better in your clothes. But once you start, you just feel better. (7) You have more energy, better mood.

#### Nutrition

Diet fluctuates ("you caught me in a bad cycle") (7). Tries to cut out as much fat as possible, but is "weak" sometimes (8). Does not pay attention to carbs but thinks should (8). Eats a lot of meat--steak, chicken. Has fruit. Wishes he ate more vegetables. Eats out: Subway, sandwiches, Moes, Bennigans, KFC (as a treat, because it's definitely not good for you). Eats canned foods, oven pizza. Grills out with roommate once a week. Are bad about going to the grocery store. Reads labels. No vitamins.

#### PES

No supplements now. Takes protein shakes sometimes with roommate. Has tried creatine. No andro or steroids because doesn't want to be "mood changing," but knows a lot of people who do that (11).

#### Themes

**Influence of friends:** Roommate influenced him to work out, eat better, read fitness magazines (1); played basketball if friends asked (5). Began weightlifting when became roommates (6). Takes protein shakes with roommate, who has body image problems: started to work out senior year in HS because was tiny; had little bird chest (21); obsessed with working out (1), likes heavy metal (4), "looks good and cut and toned and everything but he's not satisfied with it. He wants to get bigger" (20).

**College as a Time of Transition:** In college, you eat so much fast food (7, 21). Diet fluctuates (7). You caught me in a bad cycle. (7) Wishes ate more vegetables (8). Eats better at home.

**Eating for Fuel vs. Enjoyment:** Still enjoys eating. Is not at the point where is just eating for fuel (8).

**College Town Places Premium on Appearance:** Gainesville is a physically active place...I don't have six packs but I know a lot of people who do. (18) "I've never seen so many...jogging...and the gym will have some people in it...very prevalent here" (25-26).

**Athleticism** 2 Moderate (2-4 hours p/week: weights and cardio)

#### Media Use

Likes to spend free time on the Internet (humorous site called liquidgeneration.com) and reading fiction. Hasn't watched much TV in college because of lack of time (10 hr/wk). Likes Friends, Scrubs, HBO series, Comedy Central (is on all the time at his place), MTV, VH1. Music: likes all country. No rap, straight country, or R&B. Listens to music a lot.

#### Magazines

Has subscription to Maxim. Likes music magazines like Rolling Stone. Reads every other issue of MH. Started maybe 2 years ago when was trying to start a more healthy lifestyle (15). Scans cover lines, flips through, reads briefs and short articles; reads last page; eventually reads the whole thing (12). Tries out routines sometimes but doesn't read whole feature. Reads some of the nutrition stuff, if feels pertains to him. Doesn't care for some of the features on health problems like heart disease because is not worried about it yet. Feels they are geared more towards older men (14). Doesn't read bodybuilding mags because is not working out in order to get big (15).

#### Images

Images are a little unrealistic, especially for 35-40-year olds. (17). The average person is not going to look like that. Not as bad as skinny models on Cosmo. Unfair even for a 20, 25-year old (18).

#### Body Image

Has never been overweight but put on a little of weight in beginning of college. Would like to lose probably 5-7 pounds around midsection and be a little bit bigger in the upper body, arms, pecs. Would love to have the six-pack abs but doesn't want to be big, just toned, so clothes will hang better. Doesn't care if can lift a certain amount of pounds or if biceps are this many inches around (17).

#### Ideal

S: "For a male, I think they are pushing the very toned abs a lot...Looking good with your shirt off is really what the ideal male form is these days" (16). Doesn't think most people (esp. women) like huge guys (16). Toned muscles and being not huge but defined. A lot of emphasis on getting rid of fat, and, to a lesser extent, getting as big as you can (17). Own ideal: toned and functional; not "muscle-bound." Looking like the ideal might give an ego boost. People might comment. Would be easier to maintain. Might never be satisfied, though (19).

#### Six-packs

Hard to get. Must work the muscle and lose fat (18 quote).

#### Body Hair Removal

Trims pubic hair. People recommended. Says it's very common with females and he agrees it's more attractive. If were in committed relationship, would consider doing it regularly. Tom shaved his legs for a while but is not very hairy (23). Thinks Tom did it because girlfriend liked it, not for muscles.(24).

#### Grooming

Uses mousse and other hair products. Doesn't color his hair but says a lot of guys highlight.

#### Social Comparison

Thinks compares himself to media and people around but only subconsciously. The latter may be stronger.

## Sample Printout: Summary of Readership and Athleticism

	<b>Readership</b>	<b>Athleticism</b>
Arnold	1 High (20-25 fitness mags p/yr., of these 8-10 are MH)	1 High (8 hours/wk. primarily weights but also cardio)
Dennis	1 High (3-year subscription expired 2 months ago)	2 Moderate (3 hours a week. Mostly cardio but some exercises at home.)
Tony	1 High (6 issues per year--reads entire mag.)	2 Moderate (2-4 hours p/week: weights and cardio)
Keith	1 High (8-9 issues in past year)	1 High (7-8 hours/wk. weights; plays basketball occasionally)
Doug	1 High (Had 2-year subscription; now reads 2-3/year)	1 High (15 hours/wk. weights and cardio)
Nick	1 High (roommate has subscription to MH)	1 High (20 hours/wk.)
Greg	2 Moderate (Doesn't usually read, but read a stack of MH past summer)	3 Low (Does skateboarding when it's warm out)
Marco	2 Moderate (looks at 4-5 per year, but not thoroughly)	2 Moderate (5 hours p/week, weights only)
Mark	2 Moderate (not a reader but flipped through--spent 20 min. with--4-5 in past year)	3 Low (walks around campus)
David	2 Moderate (Reads bodybuilding magazines, 3/year)	1 High (12-13 hours p/week: weights and cardio)
Alan	3 Low (Never reads but bought 2 fitness magazines past summer)	2 Moderate (Intermural soccer 5 hours p/week)
Ted	3 Low (None)	3 Low (Some push-ups in the morning)
Derek	3 Low (None)	1 High (Lifts 6-8 hrs/wk.; plays basketball 3-9 hours/wk)

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## BIOGRAPHICAL SKETCH

Magdala Peixoto Labre is a researcher and writer who is interested in health issues, particularly those related to gender and body image. Born and raised in Rio de Janeiro, Brazil, Magdala has a BA in communication and an MA in international communication from The American University, in Washington, D.C. For nine years, she served as a senior writer/publications specialist for Educational Services, Inc., a Washington-based company that conducts government-funded projects in health, education, and other areas. In that capacity, she conducted research, wrote contract and grant proposals, and developed publications in the areas of drug and violence prevention, early childhood education, mental health, and eating disorders prevention. As a doctoral student at the University of Florida's School of Journalism and Communications, Ms. Labre has focused on topics related to body image and the media, such as the impact of the lean and muscular male body ideal, hairlessness norms for women, the construction of female beauty in websites visited by teenage girls, and the portrayal of female heroes in videogames.