THIN-IDEAL DEPICTIONS ON RETAIL FASHION WEB SITES

POPULAR WITH TEENAGE FEMALES:

AN EXPLORATORY

CONTENT ANALYSIS

by

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April 19, 2010
ABSTRACT

THIN-IDEAL DEPICTIONS ON RETAIL FASHION WEB SITES

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AN EXPLORATORY

CONTENT ANALYSIS

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The University of Texas at Arlington, 2010

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The purpose of this quantitative study was to investigate the body type portrayals teenage females are exposed to during an online shopping experience. The researcher conducted an exploratory content analysis of prominent images found on 367 web pages across 16 web sites popular with teenage females. Three theoretical perspectives informed the research: Social Comparison Theory, Cultivation Theory, and Objectification Theory.

Research revealed that images on the web sites that contained models in prominent images depicted the thin-ideal. Additional findings are reported regarding the physical attributes of images found on retail fashion web sites popular with teenage females, as well as suggestions for future research.
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CHAPTER 1
INTRODUCTION

1.1 Description of Thesis

Substantial research has explored the various effects of media consumption on body image in males and females of all ages. Studies have revealed that media images in print and television advertisements, magazines, and television shows portray thinness as beauty, otherwise defined as depicting the thin-ideal. Further, these images have shown to correlate with negative body image and body-focused anxiety in women (Halliwell & Dittmar, 2004; Hendricks & Burgoon, 2003; Myers & Biocca, 1992; Fay & Price, 1994), as “women are more likely than men to use attractive models as comparisons when evaluating their own bodies” (Franzoi & Klaiber, 2007).

Over time, specifically since the 1950s, models in advertising have become progressively less curvaceous and thinner overall (Fay & Price, 1994; Guillen & Barr, 1994; Martin & Gentry, 1997), and on average, the women depicted “weigh 23% less than the average woman, and the majority meet the criteria for anorexia” (Goodman, 2005, p. 195). This progression correlates with a rise in body image issues and eating disorders and is cause for concern; in fact, after participating in a body image summit, the British Medical Association (2000) concluded that the media play a significant role in the onset of eating disorders (see also Halliwell & Dittmar, 2004). It is the media’s increased focus on physical characteristics that appears to spark a superficial concern about outward appearance, influencing individuals to favor being thin over being comfortable (Aubrey, 2007), thus contributing to negative body image perception and potential eating disorder symptomatology.

Advertising is becoming increasingly prevalent in our society. Teenagers are constantly exposed to advertising messages through various media—such as newspapers, magazines,
and television—that appeal to their varying desires. In recent years, another layer has been added to the advertising process: rather than direct consumers to visit a brick-and-mortar store location or call a customer service number, advertisements now call for the consumer to visit company web sites to learn more about or purchase the product advertised. It is in this environment that a teen encounters additional, previously unstudied, images that could potentially affect his/her body image.

Because of the new dimension that has been added to the advertising process, it is important and valuable to know what types of images teenage female consumers are exposed to during subsequent experiences on web sites. This study seeks to define the contents and characteristics of online images—specifically those found on retail fashion web sites—to gain a better understanding of what types of images teenage female consumers are being exposed to while shopping online.

1.2 Body Image

Figueroa (2003) defines body image as “the mental picture that persons form of their bodies” (p. 21). The National Women’s Health Information Center (2009), a division of the U.S. Department of Health and Human Services, discusses the importance of a healthy body image on their web site:

With a positive or healthy body image, a woman has a real perception of her size and shape, and she feels comfortable with her body. With a negative body image, a woman has a distorted perception of her shape and size, compares her body to others, and feels shame and anxiety about her body...A poor body image can lead to emotional distress, low self-esteem, dieting, anxiety, depression, and eating disorders. Developing a positive body image and a healthy mental attitude is crucial to a woman's happiness and wellness (U.S. Department of Health and Human Services, 2009).

Body image negativity and dissatisfaction in females is prevalent in Western cultures and appears to start young. In one study, 40% of a sample of 6-year-old girls reported wishing
they were thinner (Muller, 1998). Another study of 12- to 14-year-old girls showed that 78% of them wanted to weigh less, while only 19% were considered overweight by national health standards (Eisele, Hertgaard, & Light, 1986). Body image dissatisfaction is further intensified following body changes in puberty, as increases in adiposity and the onset of curves moves girls further away from the characteristics seen on the thin-ideal (McCarthy, 1990; Bearman, Martinez, Stice, & Presnell, 2006).

In addition to the above findings, several longitudinal studies have looked into how developmental phases affect levels of body dissatisfaction. Martin and Gentry (1997) found a change in perception of body image over time. By studying fourth graders (around 10 years old) and sixth graders (around 12 years old), they found that self-perceptions of body image in the sixth graders were significantly more negative than the fourth graders. Bearman et al. (2006) examined body satisfaction in teenage males and females and found that while there were no significant differences in body satisfaction between the sexes at age 13, by ages 14 through 16 the females were “significantly more dissatisfied” (p. 9) with their bodies. As the study progressed over two years, the female participants were “generally more dissatisfied with their bodies” than the male participants at each subsequent evaluation (p. 9). In another study, Jones (2004) found that high school females were less satisfied with their bodies than middle school females, indicating that developmental phases and body change through adolescence indeed play a role in perceived body image and satisfaction. Borland and Akram (2007) found that body image issues “affect younger women more often and in more negative ways than older women” and that “body image stabilizes or, at least becomes less of an issue as women mature” (p. 325).

Teenagers, defined for this study as ages 13-19, are in a life phase centered around developing their identities while simultaneously being cultivated by mass media and making cultural representations (Livingstone, 2003). It is the uncertain time during the teen years that
women appear to be most vulnerable to body image dissatisfaction, and the reasoning behind studying images found on web sites popular with this demographic in this research.

1.3 Internet

1.3.1 Internet and Advertising

Much research has been done on the effects of exposure to images in media (such as content and advertising on television and in magazines, as will be reviewed in the next chapter) on body image perception. However, one medium that is surprisingly unstudied in this context is the Internet—specifically the extension of advertising into the online retail shopping experience and how images found on those sites affect body image. In the past, traditional advertising found on television or in magazines called viewers and readers to take action by visiting a store to purchase or by calling to order the advertised product. However, the emergence and popularity of the Internet coupled with the convenience of purchasing products online has added a new dimension to traditional advertising. Now, a common call to action in a television or magazine advertisement is to visit the company’s web site for more information and/or to order the product. This provides an additional avenue for consumers to be presented with images before making a purchase, therefore an additional avenue to bring about a reflection on body image in susceptible teenage females. Further, many companies advertise with cross-media campaigns, utilizing both traditional advertising in television or magazine advertisements as well as online advertising methods to create synergy among the communication tools (Chang & Thorson, 2004).

1.3.2 Internet and Teens

The continuing trend of business and social activities moving to online environments and the prevalence of teenagers on the Internet makes this particular study relevant and increasingly important. Noble and Noble (2000) make the point that because Generation Y has been exposed to the Internet from a very young age, they are likely to go online for any information, research, or shopping needs. Further, as Cheng’s (1999) interview with a president
and CEO of a large Internet company reveals, “teens are unquestionably the drivers of this medium [the Internet]. They have made the Internet part of the fabric of their culture today” (p. 47). In addition to its popularity among this age group, the Internet is also a risk: 85% of parents surveyed reported that the Internet posed the greatest risk to their children of all forms of media due to its easy accessibility and broad content (Common Sense Media, 2006 as cited in Louge, 2006).

This information, combined with findings that the vast majority of teenagers use the Internet and that the number of teenagers making purchases online is steadily rising (Lenhart, Hitlin, & Madden, 2005), makes understanding what types of images teenagers are exposed to during the online shopping process valuable. As has previously been found with images contained in other media, images found online also have the potential to affect body image perception due to simple exposure.

1.4 Purpose of Study

The purpose of this exploratory study is to define what types of images teenage female consumers encounter while shopping online. Previous research has indicated that an individual’s body image perception can be affected by exposure to the thin-ideal in content and advertising in media such as magazines and television, however, the Internet has not yet been studied as medium in this context. Therefore, this study was conducted as a means to initiate the study of Internet images as they relate to body image perception. A sample of images from retail fashion web sites was examined using a content analysis to identify common characteristics and body types of the models depicted.

1.5 Theoretical Framework

The theoretical framework used in this research includes Social Comparison Theory (Festinger, 1954), Cultivation Theory (Gerbner, 1969) and Objectification Theory (Fredrickson & Roberts, 1997). In the next chapter, the review of literature will detail these theories as well as previous studies that are relevant to body image and media exposure.
1.6 Method

While the majority of studies done on media effects on body image have focused on surveys—both qualitative and quantitative—as the main methodology, a comparative quantitative content analysis was chosen to perform preliminary exploratory research about the images found on retail fashion web sites. Web pages from 11 web sites popular with teenage females were analyzed.

1.7 Further Chapters

Chapter 2 presents an overview of the theoretical framework and historical perspectives on television and magazine advertisement effects on body image as well as research questions. Chapter 3 outlines the quantitative methodology used in the collection and analysis of data for the study, and consequent results are reported in Chapter 4. Chapter 5 discusses implications and limitations of the present study and offers suggestions for future research.
CHAPTER 2

REVIEW OF LITERATURE

Pompper and Koenig (2004) define body image as “the way a person perceives weight, body size, and appearance” (p. 89) of one’s own body or others. The following review of existing literature will examine the effects of exposure to media images of “ideal” body types on body image in women, focusing strictly on the images that women are exposed to through various media and how those images have been found to affect body image perception. Three theories were chosen to be the framework for the study: Social Comparison Theory (Festinger, 1954), which addresses the concept of individuals comparing themselves to others—for this study, comparing body types; Cultivation Theory (Gerbner, 1969), which describes the phenomena of an individual’s perceived social reality being influenced by media content—in this case, thin-ideal images; and Objectification Theory (Fredrickson & Roberts, 1997), which examines the notion that the objectification of women in media leads to distorted body image perception.

Two mediums of distribution of thin-ideal images that have been repeatedly studied are those found in television and magazines, both in content and advertising. Currently, television remains the most pervasive form of media and information communication in the United States. Nielsen Media Research (2006) reported that the total average time an individual watched television per day during the 2005-2006 television year was 4 hours and 35 minutes. Nielsen Media Research also found that teenage girls increased their average daily television viewing in the 2005-2006 television year by 6% from the 2004-2005 television year, becoming the driving force behind the overall rise in teenage television viewing (Nielsen Media Research, 2006). In 2009, The Nielsen Company estimated that 114.9 million households would have a television for the 2009-2010 viewing season (Nielsen Wire, 2009).
Magazines are another prevalent and popular form of entertainment for American women, and in turn, a key avenue for advertisers to present females with advertising images. Many women’s magazines are focused on fashion, health, beauty, and sex, many with editorial pages historically focusing on health issues revolving around dieting, weight loss, exercise, and nutrition (Pompper & Koenig, 2004; Weston & Ruggiero, 1986). These topics further highlight the emphasis on the thin-ideal, not only by offering images within the pages, but information on how to attain the ideal.

Magazines have a wide reach: four out of five American men and women read magazines (Magazine Publishers of America, 2009). Specific to teenagers, 12-17 year-olds comprise almost one quarter of readers of women’s magazines, and advertisers have begun to take advantage of this statistic, targeting them not only in teen-specific magazines but magazines marketed to adults as well. Teenagers and young adult females are routinely exposed to mainstream fashion magazines featuring thin-ideal images of women—in fact, Hendriks and Burgoon (2003) found that they spend an average of 51 minutes per month flipping through or reading fashion-specific magazines, more than any other genre of magazine. Further, 60 percent of teenagers and young adult females spend time with magazines each day (The Kaiser Family Foundation, 2004).

2.1 Internet

As mentioned previously, no studies have been done to date regarding use of the Internet and its potential effects on body image perception. However, the need is great: the Internet is quickly becoming one of the most popular forms of media for people of all ages.

2.1.1 Internet Popularity

A nationwide survey done by the Pew Internet & American Life Project found that 74% of American adults (ages 18 and older) use the Internet (Rainie, 2010), and that 81% of those adults shop or research online for services or products (Pew Internet & American Life Project, 2009). An earlier study by the same group found that 87 percent of all teenagers (around 21
million) are online (Lenhart et al., 2005). It is approximated that 20% of teenagers' free time is spent on the Internet (Miller, 2007), up to almost 17 hours per week—six times the national average (Masker & Somosi, 2004; see also Figure 2-1).

![Figure 2-1 Media Consumption for Teens and Young Adults in 2003](image)

Corroborating teen Internet use as reported above, OTX Research released a study in 2008 that breaks down levels of Internet consumption, illustrated in Table 2-1 (OTX Research, 2008).

<table>
<thead>
<tr>
<th>Hours Online Per Week</th>
<th>Total</th>
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<tr>
<td>Light (1 to less than 8)</td>
<td>45%</td>
</tr>
<tr>
<td>Medium (8 to less than 15)</td>
<td>31%</td>
</tr>
<tr>
<td>Heavy (15+)</td>
<td>24%</td>
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2.1.2 Online Spending

In 2005, Americans spent $81 billion on goods and services purchased through online retailers. While already staggering, this number has been predicted to experience an annual
growth of 12%, resulting in a $144 billion online spend by the end of 2010 (Perez, 2006). Perez also reports that offline and online purchases will increasingly be influenced by buyers’ online research activities (2006). Pertinent to the specifics of this study, Goldsmith and Flynn (2004) reported that one-third of all online purchases were clothing in 2001 and that number continues to grow.

The current teenage market sector is considered to be the largest age segment of the American population since the Baby Boomers (Zollo, 2004; Tsao & Steffes-Hansen, 2008). In turn, teenage purchasing power is growing rapidly; in 2000, teen spending in the United States was valued at approximately $27 billion per year—accounting for one-fourth of worldwide teenage consumption (Moses, 2000)—and is estimated to reach $91.1 billion by 2011 (“Teen Spending and Web Usage Up,” 2007). Lenhart et al. reported in 2005 that 43% of teenagers had made purchases online, a number that had risen 71 percent since an initial study in 2000 (2005). Illustrating growth, a 2008 OTX market research study (as cited by Montgomery & Chester, 2009) stated that 58% of teenagers have made a purchase online, and the number is predicted to continue to grow (Tsao & Steffes-Hansen, 2008).

Relative to retail fashion web sites and this study, Forrester Research (as cited by Whitney, 2010) reported that in 2009, online clothing sales reached $27 billion. Due specifically to the tech-savvy of the teen market and their propensity to purchase clothing online, it is expected that retail fashion purchases will outpace other popular online retail purchases such as electronics and computers over the next few years (Whitney, 2010).

2.1.3 Internet Use

The idea that the home pages of web sites themselves can be considered advertisements is an important element to consider. Singh and Dalal (1999) consider the home page “the most important online advertisement of all” (p. 96), and that web pages qualify as advertisements especially when considered from three angles: conceptual, physical, and functional. They deduce that “home pages meet the conceptual definition of advertising, they
resemble ads in physical appearance, and they perform the same basic functions—to inform
and persuade—as other communications messages” (p. 92). However, it is also important to
note that home pages differ from traditional advertising due to the unique advantages of the
web medium in that the message is available to consumers on demand, and web pages offer
the consumer the added benefit of interactivity—the ability to interact with and navigate the site.
Further, the messages found on web sites can be continually updated to reflect the most current
information, something that print and television advertising cannot offer. It is this ability to offer
the most up-to-date content—combined with the ability to instantly link to product information
and purchasing—that makes Internet advertising increasingly valuable.

Relevant for this study and related to the concept of Internet advertising is the way in
which consumers view and use web sites. Neilsen and Loranger (2006) found that the web
users in their study visited a site’s home page first 40% of the time, and visited an interior page
on a site first 60% of the time. The higher percentage of interior page views is attributed to
specific product searches in search engines; however, they also note that “users often turn to
the home page when they want to get a general idea of what a site does, even if they entered
on an interior page” (p. 28). This information strengthens the need for understanding what kinds
of images are found on each level of web pages—such as the home page—that are most often
viewed, potentially influencing body image perception in the viewer.

As has also been stated in previous research, it is critical to view the Internet as a new
social environment in which universal adolescent issues pertaining to identity formation and
self-worth (both including body image perception) are explored in an online world
(Subrahmanyam, Greenfield, & Tynes, 2004; Louge, 2006).

The next section will review three theoretical perspectives: Social Comparison Theory
(Festinger, 1954), Cultivation Theory (Gerbner, 1969), and Objectification Theory (Fredrickson
& Roberts, 1997).
2.2 Theoretical Perspectives

2.2.1 Social Comparison Theory

Leon Festinger’s (1954) original Social Comparison Theory posited that people compare themselves to others for self-evaluation reasons, usually comparing themselves to those they find similar to themselves or those they find socially desirable in an effort to gauge social standing. The effect of the comparison is then based on whether the comparison is upward or downward. Upward comparison refers to a comparison to someone who is perceived to have a better situation or better attributes than the comparer, while downward comparison refers to a comparison to someone who is perceived to be worse off than the comparer. Social comparison theory has been used to study the act of comparison and its effects in a variety of situations, including but not limited to students comparing academic performance with other students in classroom environments (Dijkstra, Kuyper, van der Werf, Buunk, & van der Zee, 2008), health behavior such as the phenomenon of adolescents choosing to or opting not to smoke cigarettes based on whether they perceive images of people smoking as favorable or unfavorable (Gibbons, Gerard, Reimer, & Pomery, 2006; Gerrard, Gibbons, Lane, & Stock, 2005), exercise behavior in college students based on comparison of their peers (Ouellette, Hessling, Gibbons, Reis-Bergan, & Gerrard, 2005), determination of career success, again based on peer comparison (Heslin, 2003), housework division of labor for each spouse as well as compared to other marriages (Buunk, Kluwer, Schuurman, & Siero (2000), and individuals’ household money spending when one feels better or worse off than others (Karlsson, Dellgran, Klingander, & Garling, 2004).

Since Festinger’s original work was published, researchers have expanded his theory, adding additional motives for social comparison in addition to self-evaluation: self-improvement and self-enhancement. These three forms of appraisal are the major tenets of Social Comparison Theory, discussed in detail below.
Self-evaluation. Self-evaluation can be defined as the “judgment of value, worth, or appropriateness of one’s abilities, opinions, and personal traits” (Martin & Gentry, 1997, p. 22), and this form of comparison is used to gather information about one’s own standing in relation to others (Krayer, Ingledew, & Iphofen, 2008; Wood, 1989). Within self-evaluation, there are two types of comparison effects: assimilation effect and contrast effect. Assimilation effect refers to positive self-evaluation after an upward comparison due to the assumption that the comparer internalizes the success/positive attributes of the comparison target. Contrast effect is a negative self-evaluation after an upward comparison, likely due to the perceived comparison discrepancy (Xue, Zhou, & Zhou, 2003).

Self-improvement. Self-improvement is defined as “an individual’s attempt to learn how to improve or to be inspired to improve a particular attribute,” and is generally an upward comparison by nature (Martin & Gentry, 1997, p. 22). This form of comparison is generally employed to “learn how to improve a particular characteristic or for problem solving” (Krayer, Ingledew, & Iphofen, 2008, p. 893). The outcome of the comparison may fluctuate based on whether the comparison inspires the comparer to improve oneself to the level of the comparison target, or is threatening to the comparer because the comparison target is perceived as an unattainable standard (Martin & Gentry, 1997).

Self-enhancement. Self-enhancement is defined “as an individual’s biased attempt to maintain positive views of him/herself to protect or enhance self-esteem” (p. 22) and occurs when downward comparisons are made (Martin & Gentry, 1997). This form of comparison protects self-esteem and self-worth, allowing the individual to maintain a positive opinion about him/herself (Krayer, Ingledew, & Iphofen, 2008; Wood, Giordano-Beech, & Taylor, 1994; Thornton & Arrowood, 1966; Wood, Giordano-Beech, & Ducharme, 1999).

Research on media effects on perceived body image tends to focus on the self-evaluation and self-improvement aspects of the theory, both of which are based upon upward comparisons in the media effect context. These components come into play throughout studies
of media effects on body image because people compare themselves to images of other people in various media, and that comparison leads to positive or negative effects on body image perception (Festinger, 1954; see also Goodman, 2005). Specific to body image perception, Social Comparison Theory posits that people will compare themselves and significant others to people and images whom they perceive to represent realistic goals to attain. It also posits that individuals will be motivated to meet that goal after a comparison. Further, it suggests that people make automatic comparisons as a result of seeing these images without even knowing they are doing it (Botta, 1999).

The following literature has studied social comparison effects on body image from television and magazine exposure.

Television. Television exposes viewers to a wide range of varying images due to the presentation of multiple characters throughout a program, thus creating a lesser social comparison effect than magazines (Sohn, 2007). However, television still has a significant effect on body image perception. Botta (1999) found that adolescents “look toward people they see on television to define what their own bodies should look like” (p. 36-37) and that the more adolescents are exposed to television images that endorse the thin-ideal—such as dramas like Melrose Place and Beverly Hills 90210, as used in Botta’s 1999 study—“the more they compare themselves, and the more they strive to be thin, the more they dislike their bodies, and the more they engage in unhealthy behaviors” (p. 37).

Magazines. Research has found that exposure to fashion, celebrity, and fitness magazines has a negative effect on young women’s body image (Krcmar, Giles, & Helme, 2008) and has demonstrated that exposure to media images from women’s fashion magazines is capable of causing body image concern among young women (Posavac, Posavac, & Posavac, 1998). Adomaitis and Johnson (2008) found that individuals compare themselves to the models in such magazines and feel inadequate as a result, aspiring to have the physical
characteristics depicted by the model in the advertisements or commenting on their believed inability to achieve a similarly perfect physique.

While measuring social comparison effects from magazines, Sohn (2007) found evidence that indicated that “exposure to certain media channels appears to influence social comparison in different ways” (p. 24) and that the effect of social comparisons on overall body satisfaction was moderated by differences between media channels. Sohn suggests that television has a lesser impact on social comparison than does magazines due to the range of images presented. Television presents a wider range of images and therefore body types due to the varying number of characters on each show, while magazines present a narrow range of images and body types that focus on just one body at a time and usually feature models with similar body types. No research has been done to date regarding the range of image exposure when using the Internet. However, on the basis of Sohn’s assumptions, it stands to reason that the Internet, as yet another media form, may have an impact on social comparison due to the range of images portrayed. Thus, the first research question is proposed:

**RQ1:** During an online shopping experience, are teenage female consumers presented most often with a narrow (one model at a time or one type of model across the medium, like magazines) or wide (multiple models and/or types of models at one time, like television) range of images?

2.2.2 Cultivation Theory

One theory used to explain the connection between media consumption, social comparison, and resulting body image perception is Cultivation Theory. This theory was developed by George Gerbner (1969) as a way to explain the contributions of television viewing on viewers’ perceptions of reality, and has since been adapted for use across media. This theory posits that heavy media consumers, in comparison with light media consumers, perceive the world around them to be similar to what they see in media (Gerbner, 1969; Gerbner & Gross, 1976; Gerbner, Gross, Morgan, & Signorielli, 2002), thus shaping their social reality. The
theory was originally developed to explain the correlation between television violence and heavy viewers’ conceptualization of the likelihood that they might be victims of violence (Gerbner & Gross, 1976). Cultivation Theory has since been used to study the effects of television viewing on such topics as assumptions of realistic family models (Morgan, Leggett, & Shanahan, 1999), attitudes toward science and environment (Shanahan, Morgan, & Stenbjerre, 1997), physical and mental health issues (Gutschoven & Van den Bulck, 2005; Diefenbach & West, 2007), sex roles and behaviors (Ward & Friedman, 2006; Zurbiggen & Morgan, 2006), political views and foreign policy (Morgan, Shanahan & Signorielli, 2008; Morgan, Lewis & Jhally, 1992; Besley 2006), and has also been used for multinational and cross-cultural comparative analysis on issues such as politics, history, and economy (see Morgan et. al., 2008).

An important aspect of Cultivation Theory is the concept of mainstreaming, which refers to the ability of heavy television viewing to cultivate a single system of beliefs and perceived social realities across groups differing in cultural, social, and political values. It represents the “theoretical elaboration and empirical verification of television’s cultivation of common perspectives” (Morgan et al., 2008, pp. 41-42). Because television plays the part of the primary storyteller in American culture, it has become the fundamental reflection of the mainstream values of our society. These mainstream values can be thought of as a relative commonality of outlooks and principles that heavy exposure to the television world tends to cultivate, leading to the phenomenon of repeated television exposure being referred to as the true “melting pot” of the American people (Morgan et al., 2008).

Cultivation theory, when studied in terms of body image, “has been used to explain how heavy consumers of the unrealistic images of beauty prevalent in the media internalize those images as sociocultural norms to which they might try to adhere, potentially resulting in body dissatisfaction and disordered eating symptomatology” (Nabi, 2009, p. 9). Because individuals perceive reality as it is depicted through thin-ideal images that are omnipresent in media, their
perception of beauty and body size is distorted. This misunderstanding leads to self-comparison with the perceived reality and development of unrealistic goals for their bodies (Botta, 1999).

Hendriks (2002) explains that Cultivation Theory is useful and effective for explaining the pervasiveness of ideal body images, as well as who is most likely to be influenced by media images of ideal women—heavy media consumers who believe in media reality and are less knowledgeable about concepts related to body image. Hendriks’ research also points out that immediate cultivation effects cannot always be detected because cultivation is a long-term process that produces subtle changes.

Every day, individuals are exposed to up to 3,000 advertising images (Kocina, 2006; Sohn, 2007) through various media channels—such as magazines and television—that “sell values, images and concepts of success and worth, love and sexuality, popularity and normalcy. They tell us who we are and who we should be” (Kilbourne, 2003, p. 422). Commonly, this imagery “focuses or centers around the ideal, thin female body…that particularly concentrates on the explicit representation of the ideal image of thinness” (Myers & Biocca, 1992, p. 119), and cultivates the belief that “individuals who are attractive do better in our society—they are more successful, happier, and more self-sufficient” (Hendricks & Burgoon, 2003, p. 1). Advertisements have the ability to “legitimize and confirm societal pressure to be thin” (Fay and Price, 1994, p. 6). Due to the accumulation of years of exposure to media in teenagers and its influence in building their view of reality, Cultivation Theory is an important theoretical building block that helps explain the effects from individuals comparing themselves with media images.

Television. Myers and Biocca (1992) found “evidence of fluctuations in women’s body images after brief exposures to [television] advertising” (p. 126). Their point of view is that Cultivation Theory explains the probability that young women overestimate the percentage of the female population whose body equates with the thin-ideal portrayed in media, and that previous cultivation allows for body image dissatisfaction even after only short exposure to thin-
ideal images in media. Further, Tiggemann (2005) reported findings that showed that the regular watching of soap operas (or romantic youth dramas, as mentioned previously) was correlated with the internalization of the thin-ideal in adolescents due to the media’s influence on conceptions of reality. 

Magazines. Hendriks and Burgoon (2003) found a correlational relationship between fashion magazine consumption and cultivation of body image values; the more often women were exposed to fashion magazines the more likely they were to believe in the importance of attractiveness and value thinness. Further, the women who held these beliefs were more likely to be dissatisfied with their bodies, on average wanting to weigh 11 pounds less—a loss that would move them to a weight that could be categorized as underweight. Nio (2004) provided evidence that media (such as fashion magazines) that depict and promote the thin-ideal have the ability to affect women’s perceived body image by cultivating the belief that the thin-ideal body type is “normal.” Similarly, Nentl (1999) found that magazines—especially fashion magazines—were considered by participants as the “standard bearers” for trendiness, thus cultivating a form of reality through the images shown. 

The majority of body image studies related to Cultivation Theory focus on both television and magazine consumption; the Internet as a medium for cultivation of body image perception has not yet been studied. However, the Internet is a popular form of media and should not be overlooked in the context of cultivation. To date, the only aspect of the Internet that has been studied in terms of cultivation effects is Internet gaming. Williams (2006) found that Internet game players’ perceptions of the likelihood of real-world violent criminal events (such as murder, rape, and assault) were directly impacted by their in-game experiences. These findings corroborate those of Cultivation theory, but as related to Internet use rather than traditional media.
The present research study seeks to explore Cultivation Theory as it pertains to Internet use, using media displacement theory (Robinson, 1972; Bogart, 1972; Finholt & Sproull, 1990; James, Wotring, & Forrest, 1995; Robinson, Barth, & Kohut, 1997) as reasoning.

Media displacement theory posits that consumption of one type of communicative activity displaces other forms of communicative activities (Dutta-Bergman, 2005), thus illustrating that new forms of media displace older forms of media as vehicles of communication because individuals only have a limited amount of time to spend on any given media. Displacement has been studied for effects on new media as each developed: radio broadcasting in terms of displacing print media such as newspapers (Lazarsfeld, 1940), television in terms of displacing radio (source), and more recently, computer mediated communication in terms of replacing traditional communication methods (Finholt & Sproull, 1990; James, Wotring, & Forrest, 1995; Robinson, Barth, & Kohut, 1997). Simply stated in terms of the present study, media displacement theory assumes that the more time that an individual spends on the Internet (new media), the less time he/she spends on more traditional forms of media such as television and magazines. Kayany and Yelsma (2000) reported findings that the use of online media displaced time spent on watching television, reading newspapers, using the telephone, and participating in domestic conversations. With 87% of all teenagers spending 20 percent of their free time on the Internet (Lenhart et. al., 2005) and the fact that magazine readership and subscriptions have been experiencing a severe decline since 2005 (Sass, 2009), it is important to evaluate the images that they are exposed to through this medium and how those images in turn affect how they feel about themselves.

Cultivation has traditionally been studied longitudinally—as a repetition of images occurring over a period of time—however, due to being exploratory in nature, this study will be cross-sectional. Based on previous Cultivation research in which the thin-ideal was present in media, the following research question is proposed.
**RQ2**: Do the body types and physical characteristics of the models found on retail fashion web sites popular with teenagers depict the thin-ideal?

As mentioned previously, it has been evidenced that Internet users visit an interior web page first 60% of the time, mostly due to links populated in search engines that go to a specific product page (Nielsen & Loranger, 2006). Home pages are also important, as users visit the home pages of web sites first 40% of the time (Nielsen & Loranger, 2006), and home pages can essentially be considered advertisements for the brand (Singh & Dalal, 1999). Since users visit interior web pages first 60% of the time, home pages first 40% of the time, and additional secondary pages throughout the browsing session, it is pertinent to understand what body types are present on each of these page levels. Because of this focus on the importance of web page levels, the following research question is proposed.

**RQ3**: If the thin-ideal is indeed found on retail fashion web sites popular with teenage females, on which web page level (home, secondary, or interior) is the thin-ideal pictured most frequently?

Additionally, Bessenoff and Del Priore (2007) found that the body sizes of models varied based on age of the target market; models in media aimed at an older audience (over-35) were found to have larger bodies overall than models in media targeted to the teenage and early-twenties market. Additionally, Guillen and Barr (1994) found that models in “Seventeen,” a magazine targeted at adolescents and teenagers, were less curvaceous than the older models seen in magazines targeting adult women. Based on this idea that age can play a part in social comparison, the following research question is proposed.

**RQ4**: Does body size depiction vary on the basis of the perceived age of the models shown on retail fashion web sites popular with teenage females?

The final theoretical perspective, Objectification Theory (Frederickson & Roberts, 1997), will be reviewed in the next section, as it provides details on another aspect of images that has been found to effect body image perception.
2.2.3 Objectification Theory

Sexually objectifying media images are also cause for concern in terms of their effect on body image perception. The pervasiveness of these types of images led Fredrickson and Roberts (1997) to create Objectification Theory, which proposes that “sexual objectification of women’s bodies teaches women to internalize an outsiders’ perspective on the self such that they come to seem themselves as objects to be evaluated by others,” otherwise termed self-objectification (Aubrey, Henson, Hopper, & Smith, 2008, p 1). This theory “takes as a given that women exist in a culture in which their bodies are…looked at, evaluated, and always potentially objectified” (Fredrickson & Roberts, 1997, p 177). This phenomenon is thought to be most applicable to women because valuing slenderness and attractiveness is directed especially at women.

According to Frederickson and Roberts (1997), the media accomplishes sexual objectification through the visual presentation of bodies, i.e. focusing in on specific body parts such as bare stomach, buttocks, cleavage, or a bare chest (Kolbe & Albanese, 1996; Rudman & Hagiwara, 1992; Sommers-Flanagan et al, 1993; Aubrey, 2007), regarding them as if they were capable of representing the whole person, and through sexually themed content that emphasizes the importance of bodies and appearance.

Aubrey (2007) conducted research based in Objectification Theory and found that “exposure to television and magazines that objectify bodies is related to an increase in individuals’ self-consciousness about their appearance” (p.18). Further, Aubrey notes that “the media’s superficial emphasis on bodies appears to spark a similarly superficial concern about how one appears to others” (p. 19), which can, in turn, create negative body image.

Television. In a previous study of Aubrey’s (2006), it was found that exposure to sexually objectifying television shows was associated with an increase in viewers’ definitions of their physical selves in terms of external traits (what their body looks like) rather than internal traits (what their body can do). One explanation for this phenomenon, as discussed by Aubrey,
is that exposure to televised objectification cultivates a view of the self that emphasizes the importance of physical appearance. Gallagher and Picot-Hebert (2007) focused their research in Objectification Theory on the current television trend of the makeover show. This genre of reality television programming promotes external self-improvement, and due to their focus on superficial improvements to the body—whether parts of it or the body in its entirety—these shows contribute to the objectification of women. While little relationship has been found between viewing makeover programs and body satisfaction or body image, Gallagher and Picot-Hebert (2007) make the point that “with the creation of the makeover program...beauty is now seen as a commodity that can be bought and sold to help women achieve a sense of belonging” (p. 61). There may not be a direct correlation between makeover programs and women’s body image, but the fact that those shows portray beauty as a commodity is damaging to body image in itself.

Magazines. Several studies have focused on the effects of magazine consumption on an individual’s likelihood to self-objectify. Interestingly, Aubrey (2003) found that exposure to sexually objectifying magazines caused self-objectification among participants and sexually objectifying television did not, even though expectation was that both would cause self-objectification. A possible explanation offered by Aubrey for this finding is that magazines are more consistent in their presentation of thin-ideal bodies throughout the publication while television content and body depiction is more dynamic. This finding is similar to Sohn’s (2007) finding that magazines show a smaller range of images than does television, as discussed previously. Harper and Tiggemann (2008) found that magazine advertisements featuring thin, attractive female models produced a greater state of self-objectification than did other magazine advertisements. Similarly, Aubrey (2007) found that exposure to “magazines that objectify bodies [by focusing on individual body parts such as legs, buttocks, hips, waist, or breasts] is related to an increase in individuals’ self-consciousness about their appearance” (p. 18)—causing them to self-objectify.
Based on the review of previous research on body portrayals in media, it is important to learn whether retail fashion web sites popular with teenage females will portray women in a similar fashion as magazines and television. Thus, the following research question is proposed.

**RQ5:** Will the images of the models found on retail fashion web sites popular with teenage females focus on individual body parts such as legs, buttocks, hips, waist, or breasts more often than the entire body as a whole?

Aubrey et al. (2008) presented a group of women with two kinds of images: one set that focused on individual body parts of women and another that showed barely-clothed women. Their research found that the images of the women wearing a limited amount of clothing activated negative statements from participants while the images focusing on body parts did not. Therefore, further exploring the idea of objectification in media, the following research question is proposed.

**RQ6:** Will the images of the models found on retail fashion web sites popular with teenagers depict women with limited coverage by clothing?

In the following chapter, the method for this study is discussed in detail.
CHAPTER 3

METHODOLOGY

To define what types of images female consumers are seeing during an online retail shopping experience and to address the hypotheses and research questions, images of female models found on the top teenage female brands’ retail fashion web sites were analyzed using a quantitative content analysis. As mentioned in previous chapters, the Internet – and specifically retail fashion web sites – has not been studied in terms of its cultivation of the thin-ideal or its potential effect on body image perception. This research does not seek to study cultivation effects or body image perception, but to perform exploratory research on web site content to assess the body types and characteristics portrayed in the images teenage females are exposed to when shopping online.

Research was conducted to test and/or answer the following hypotheses and research questions. Descriptive statistics and chi-square analyses were reported.

**RQ1:** During an online shopping experience, are teenage female consumers presented most often with a narrow (one model at a time or one type of model across the medium, like magazines) or wide (multiple models and/or types of models at one time, like television) range of images?

**RQ2:** Do the body types and physical characteristics of the models found on retail fashion web sites popular with teenagers depict the thin-ideal?

**RQ3:** If the thin-ideal is indeed found on retail fashion web sites popular with teenage females, on which web page level (home, secondary, or interior) is the thin-ideal pictured most frequently?

**RQ4:** Does body size depiction vary on the basis of the perceived age of the models shown on retail fashion web sites popular with teenage females?
RQ5: Will the images of the models found on retail fashion web sites popular with teenage females focus on individual body parts such as legs, buttocks, hips, waist, or breasts more often than the entire body as a whole?

RQ6: Will the images of the models found on retail fashion web sites popular with teenagers depict women with limited coverage by clothing?

3.1 Variables

Per the hypotheses and research questions above as well as the literature review, independent variables in this study are perceived model age (how old the model looks to the coder, based on range), and web page level (home, interior, or secondary). Dependent/outcome variables are thin-ideal depictions and objectification.

3.2 Teen Retail Fashion Web sites

In 2008, Women’s Wear Daily conducted an online study of 7,000 teenage females and found that the top five retail apparel brands most preferred by teens are Hollister (owned by Abercrombie and Fitch), American Eagle Outfitters (including brands Aerie, 77 Kids, and Martin + Osa), Forever 21 (including brands Heritage 1981, Twelve by Twelve, Love 21—Contemporary, and Faith 21—Extended Sizes), West Coast Brands (including brands Anchor Blue, Billabong, PacSun, Quiksilver, Rainbow, Roxy, Volcom, and Zumiez), and Aeropostale (Hall, 2008).

Each of these top five brands’ web sites, as well as affiliated or parent brands (Abercrombie and Fitch as an example of a parent brand; Aerie as an affiliated brand), and each of the West Coast Brands highlighted above brought the potential sample of web sites to 20. However, some sites were eliminated due to incompatibility with the study. Brands whose sites only displayed a sample of their current collection and also did not have online ordering available (Anchor Blue, Rainbow) were removed, as they were considered irrelevant. Aerie was removed because it sells only one category of clothing—intimate apparel. Twelve by Twelve was removed because of a lack of clothing categories—the study was developed to analyze a
sample taken from six clothing categories on each site (see the next section) to accurately collect, compare, and analyze data. Therefore, web pages from a total of 16 web sites were coded.

Content analysis of numerous pages within each web site that a teenage female might view while shopping online, including the home page, the main page for women’s fashion, main “home” pages for categorical products, and individual product pages within those categories, was conducted to determine what types of images teenage female consumers might be exposed to during an online shopping experience.

3.3 Sample

3.3.1 Unit of Analysis

The unit of analysis for this study was individual web pages found on the web sites of the 11 retail fashion brands mentioned above. Web users visit one web page at a time, thus providing a natural unitizing point. For this study, individual web pages were defined as pages accessible through a unique link, as individual links had to be provided to coders for the sample.

A stratified convenience sampling method was utilized in order to collect information strategically from each type of page (home, secondary, and interior) on the chosen retail fashion web sites. All home pages were coded (11 pages), as were all of the main/home pages for girls/women on each site (11 pages). All main/home pages for each of the six coding categories (66 pages) were sampled. Finally, three individual product pages were sampled from each coding category by choosing the first three listed on the main/home category pages (198 pages). A total of 286 individual web pages were coded by two coders over the course of a week.

3.3.2 Code Book Rules

In order to create an appropriate sample, a review of the content of the web sites chosen was performed in order to delineate what apparel categories were consistently advertised on each site, and therefore what parts of the site should be sampled. It was noted
that all sites listed categories of clothing labeled “jeans” or “denim” and “dresses,” so those categories were immediate additions to the list of apparel categories to be sampled. Additional categories listed by the majority of the sites were or contained the words “tops,” “sweaters,” “bottoms,” “swim,” and “swimwear.”

The final six categories that contributed to the sample of web pages included: tops, sweaters, bottoms, jeans/denim, dresses, and swim/intimates. Because not all sites listed those three categories specifically but alluded to them or had acceptable substitutions, situational guidelines were developed to provide a consistent sample. Those are as follows:

- **Tops**: If a site lists “tops” as a category, but the only working links are subcategories of that section, the first listed subcategory (graphic tees, for example) was included in the sample. If “tops” is not listed, the first listed category relating to that category of clothing was sampled (tees, for example). For sites that specified “knit tops” and “woven tops,” the first listed choice was sampled.

- **Sweaters**: If the term “sweaters” was not specifically used as an apparel category name, the apparel under the categories of “hoodies” or “fleece” was used. If both categories existed on the site, “hoodies” was used.

- **Bottoms**: If the term “bottoms” was not specifically used as an apparel category name, one of the following category names was sampled: “pants,” “shorts,” or “skirts.” The category to be sampled was chosen was in the aforementioned order if the category before it was unavailable due to lack of usage or usage within a different category (for example, one of the sites listed “Jeans & Pants,” so the category labeled “Shorts & Boardshorts” was sampled).

- **Jeans/denim**: These two categories were combined for coding purposes, as each site listed one term or the other, both referring to the same style of product.
• *Dresses*: Every site in the sample contained a category for dresses, so no substitutions were necessary.

• *Swim/intimates*: These two categories were combined for coding purposes. The majority of sites listed swimwear as a category; some of the sites that did not have swimwear had intimates. Further, very few sites did not contain either category but had “tanks,” so that category was sampled. If “tanks” was not an option, “shorts” was used, but only if it had not been used for the “bottoms” category.

### 3.4 Content Analysis Coding

Two coders were chosen to code 416 total web pages. Individual web page links were compiled by the researcher into a spreadsheet. A training and pilot coding session was conducted by the researcher; during this time coding instructions and sample images were looked over and discussed in order to ensure that both coders had a complete understanding of the process. It was made clear at this time that if for any reason a link supplied by the researcher as part of the sample was broken or linked to a web page that no longer existed that it should be documented as such in the first cell of the coding spreadsheet by simply typing “broken.” There were 16 instances of this; all were removed from the study.

#### 3.4.1 Reliability Assessment

The coders analyzed a pilot sample of 33 web pages (three pages from each brand’s web site) to test for reliability. Two of the links were broken, so those were removed from the test sample findings, leaving 31 web pages coded during this session. For this pilot sample, percent agreement per category ranged from 64.52% to 100% and averaged 92.88% for the session. Scott’s Pi was also calculated for each category to take chance agreement into account (Scott, 1955) and ranged from .50 to 1 and averaged .89 (see Table 3-1). Both reliability methods were calculated using ReCal2: Reliability for Two Coders, found at [http://dfreelon.org/utils/recalfront/recal2/](http://dfreelon.org/utils/recalfront/recal2/). Categories with low reliability ratings were remedied.
by sorting differences through discussion, allowing for further clarification in coding the study sample.

Table 3-1 Reliability Calculations

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</tr>
<tr>
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<td>Body Type 2</td>
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<tr>
<td>Clothing Type - Bottom</td>
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</tbody>
</table>

Due to the aforementioned high reliability findings (average 92.88 percent agreement and average Scott’s Pi of .89), each coder was permitted to code half of the sample over a one-
week period. This decision was made for pragmatic reasons: web sites are inherently dynamic and content changes rapidly. Splitting the sample between the two coders resulted in a shorter total coding time, allowing for fewer broken links and site changes and a fuller end sample. Coder 1 was given 143 web pages, and Coder 2 was given the remaining 143 web pages of the sample.

3.5 Coding Variables

Coders were asked to code for 24 variables for each web page in the sample. The first two sections of coding categories referred to general web page and image characteristics based on the web page being viewed such as brand information and whether the main image on the page contained a model, while the last section coded for demographic and physical attributes specific to models shown on the web pages, such as body and beauty types.

3.6 Coding Decisions

For this study, a prominent image is defined as the largest main image on a web page. Prominent images containing more than one female model were coded for only the most noticeable, dominant model in the image; if there was more than one dominant model, coders were asked to code the model furthest to the left. This decision was made to provide a uniform guideline for choosing the model to code if necessary. If there was no prominent image on the page being viewed, coders responded to coding categories 1-6 only (the sixth category assessed whether the page had a prominent image). The 26 web pages that did not contain a prominent image were later eliminated from the study, as this study was specifically looking at main images on web pages.

3.6.1 Identification and Brand Information

For documentation purposes, coders were asked to record the identification number assigned to the web page they were viewing. This number was found either on the spreadsheet containing all of the links to the web pages in the sample, or in the code book next to the screenshot equivalent of the web page being viewed. Coders then specified the retail brand of
the web page on which the image was found. This information was obtained by either examining branding and logos located in the upper left-hand corner of the web page or by checking the first part of the URL found in the address bar at the top of the Internet browser window.

3.6.2 **Web site/Webpage Information**

Before coding individual models on web pages, coders were asked to document information about the brand’s web site and details pertaining to elements of each individual web page, such as site offerings, web page level, and product category, as detailed below.

3.6.2.1 Site Offerings

Coders were asked to identify whom the site they were viewing offered clothing for. Choices were women/girls only, men/boys only, or both women/girls and men/boys. This information could be found within the static site menu found at the top or left side of each page viewed.

3.6.2.2 Web Page Level and Category

To answer RQ3, coders were asked to indicate what level of web page they were viewing out of three choices: home page, secondary page, and interior page. This information was included in the spreadsheet containing the web page links for the sample. The home page for this study is defined as the main page of a brand’s web site. Only sixteen individual pages (one from each site) could be categorized as a home page. A secondary page is defined for this study as a page linked to directly from a site’s home page or one that is a main or “home” page for subcategories. For this study, main pages for women’s, girl’s, or apparel (if only female clothing is sold on the site) were considered secondary pages, as were category-specific main pages, such as those for the six coding categories: tops, sweaters, bottoms, jeans/denim, dresses, and swimwear/intimates.

If the coder was viewing a secondary or interior page, it was asked that the category of the product being viewed be coded. Choices consisted of tops, sweaters, bottoms, jeans/denim,
dresses, and swimwear/intimates. If the coder was viewing a home page and not a secondary or interior page, the last option was to be chosen: "Not applicable – I am not viewing a secondary or interior page."

3.6.3 Range of Images

Pertaining to RQ1 and the range of images found when viewing retail fashion web sites, coders were asked to code for multiple categories that pertained to basic elements of images found on the web page the coder was viewing. First, coders were asked to identify if there was one prominent image on the web page being viewed by selecting "yes" or "no." A prominent image was operationalized as being the largest and most eye-catching image on the page, as well as situated in a position on the screen where it could be seen without scrolling. Header images included on the page as part of the site menu were not included; only images specific to the page being viewed were considered. If no prominent image was found on the page, coders were asked to answer the question with "no," fill the each remaining cell pertaining to that web page with a dash ("-"), and proceed to the next web page in the sample.

If the coder responded "yes" to the presence of a prominent image on the page, the next category pertained to whether or not the prominent image contained at least one model, male or female; coders again chose between "yes" and "no." If the image contained at least one model, coders were then asked to count the total number of male and/or female models in the image and record that number in the associated cells in the coding spreadsheet.

If viewing an interior product page, coders were asked to indicate how many additional product images/views were available other than the prominent image. An option was available if the coder was not viewing an interior page. Similarly, coders documented how many of the additional product images, if any, contained at least one model. Options were available for coding if there were no additional product images or if coders were not viewing an interior page. In addition to coding for the number of models in prominent images as mentioned above, coders were also asked to record the number of different models used in images on interior product
3.6.4 Thin-Ideal Representation Based on Body Type Definitions

RQ2 questioned whether the thin-ideal was portrayed on the sample of websites. To answer this research question, the thin-ideal is defined as the media’s portrayal of thinness as associated with success, fashion, and beauty. For this portion of the study, body type portrayals were operationalized by descriptive definitions: ectomorphic, mesomorphic, and endomorphic. Wasylkiw, Emms, and Poirer (2009) used the three categories to describe the body types of models found in women’s fitness and fashion magazines in order to determine what types of images the respective audiences were exposed to with respect to women’s bodies. That study simply defined ectomorphic as “lean,” mesomorphic as “muscular,” and endomorphic as “soft, round.” In order to aid the coders’ understanding, definitions were expanded by including dictionary definitions. Merriam-Webster’s Collegiate Dictionary (2003) defines ectomorphic as “characterized by a lean slender body build with slight muscular development,” mesomorphic as “having a husky muscular body build” and endomorphic as “having a heavy rounded body build.” Coders were asked to classify the body type of the model shown on the web page into one of the three body types. If the model shown could not be classified into one of the three categories by the coder, it was asked that the “unknown/cannot distinguish” option be chosen. If no model was pictured in the image on the web page, coders were asked to choose the “not applicable—no model on page” option.

3.6.5 Thin-Ideal Depictions Based on Contour Drawing Rating Scale

A second measurement of body type was based on a scale adapted from Thompson and Gray’s (1995) Contour Drawing Rating Scale (see Figure 1). This scale is “designed with detailed features, are of precisely graduated sizes, and are easily split at the waist for accurate upper and lower body comparisons” (Thompson and Gray, 1995, p. 1). While used previously in survey-style, self-assessment research, coders were asked to compare the body type of the
model to the body types on scale and enter into the spreadsheet the number associated with
the image that most closely represented the model they were viewing. The adapted scale
depicted six body types and weights also described as below average (two figures), average
(two figures), and above average (two figures). Coding options were also available if there was
no model shown or if the coder could not distinguish body type.

![Body Image Scale](image)

Below Average  Average  Above Average

Figure 3-1 Body Image Scale (Adapted from Thompson and Gray, 1995)

3.6.6 Perceived Model Age

After coding general web page information, coders documented their perception of one
demographic attribute about models on the web pages, age, in order to answer RQ4. Age
choices were presented as the following ranges: pre-teen, teenage, twenties, thirties, and
forties. If coders wavered between two perceived age ranges, they were asked to code for the
younger age range. Sample images were provided for age range reference in order to ensure
reliability (see Appendix C). Coders were then asked to code for additional variables related to
physical characteristics of the models in order to respond to the remaining hypothesis and
research questions.

3.6.7 Objectification

For this study, objectification was defined as the physical representation of women that
focuses on specific parts of the body rather than the body as a whole. This was operationalized
in two ways. First, RQ5 questioned if the images of the models found on retail fashion web sites popular with teenagers would focus on individual body parts such as such as legs, buttocks, hips, waist, or breasts more often than the entire body as a whole. To answer this question, coders were asked to choose the description that most closely identified what parts of the model were focused on in the image at hand. To provide the most accurate documentation, this category was split into two regions: top and bottom. For the top half of the model, coders were asked to choose from thirteen descriptions:

- Face only
- Chest/bust and above
- Chest/bust and torso/waist only
- Torso/waist only
- Torso/waist and above
- Chest/bust
- Torso/waist and hip
- Torso/waist and hip only
- Hip only
- Hip and above
- Not applicable – top of model not shown
- Not applicable – no model on page
- Other

For the bottom half of the model, coders were asked to choose from eleven descriptions:

- Legs below knees only
- Legs from hips to knees
- Hips only
- All from hips down
- Waist/torso only
- Waist/torso and hips only
- Waist/torso, hips, and legs from hips to Knees
- All from waist/torso down
- Not applicable – bottom of model not shown
- Not applicable – no model on page
- Other

The second form of potential objectification was operationalized as the amount of the model’s body that was covered by clothes. To measure, coders documented the clothedness of the model, a concept adapted from Bessenoff and Del Priore’s (2007) body image study. Similar to other categories, this category was broken down into regions to best analyze and describe the amount of clothing worn. Regions were defined as top: chest/bust, top: arms, midsection, bottom: buttocks, and bottom: legs. It was asked that the coders indicate on a scale of 1-5, where 1=not at all covered and 5=fully covered, how much of each region was covered by clothes. Additional guidelines of 1=not covered, 2=1/4 covered, 3=1/2 covered, 4=3/4 covered, and 5=fully covered were given. Additionally, it was asked that coders enter “6” if the body
region in question was not shown in the image or if the amount of the body region shown made the amount of clothedness indistinguishable.
CHAPTER 4

RESULTS

A total of 416 web pages were coded from 16 retail fashion web sites popular with teenage females. Of the 416 pages in the sample, 16 were removed due to links that no longer worked, leaving 400 pages to be analyzed. Thirty-three of the remaining 400 pages in the sample did not contain a prominent image, and were therefore discarded from the study. The following findings are from coding 367 web pages containing prominent images. Percentages and a chi-square analysis were used to answer the research questions, reiterated below.

RQ1: During an online shopping experience, are teenage female consumers presented most often with a narrow (one model at a time or one type of model across the medium, like magazines) or wide (multiple models and/or types of models at one time, like television) range of images?

RQ2: Do the body types and physical characteristics of the models found on retail fashion web sites popular with teenagers depict the thin-ideal?

RQ3: If the thin-ideal is indeed depicted on retail fashion web sites popular with teenage females, on which web page level (home, secondary, or interior) is the thin-ideal pictured most frequently?

RQ4: Does body size depiction vary on the basis of the perceived age of the models shown on retail fashion web sites popular with teenage females?

RQ5: Will the images of the models found on retail fashion web sites popular with teenage females focus on individual body parts such as such as legs, buttocks, hips, waist, or breasts more often than the entire body as a whole?

RQ6: Will the images of the models found on retail fashion web sites popular with teenagers depict women with limited coverage by clothing?
In the following sections, findings are reported in the order the data was collected (also see Appendix A).

4.1 Brand Distribution

Results showed that brand distribution among the sample of 367 pages was as follows: Abercrombie and Fitch – 20 pages (5.4%), Aeropostale – 25 pages (10.3%), American Eagle Outfitters – 26 pages (6.8%), Billabong – 21 pages (7.1%), Faith 21 – 26 pages (7.1%), Forever 21 – 21 pages (5.7%), Heritage 1981 – 23 pages (6.3%), Hollister – 26 pages (7.1%), Love 21 – 19 pages (5.2%), Martin and Osa – 26 pages (7.1%), PacSun – 21 pages (5.7%), Quiksilver – 19 pages (5.2%), Roxy – 23 pages (6.3%), Volcom – 25 pages (6.8%), and Zumiez – 20 pages (5.4%). Had pages not been removed from the sample due to broken links, equal distribution of pages among brand sites would have been 6.25% for each brand.

4.2 Webpage General Information

Of the 367 web pages coded, 30% belonged to web sites that offered women’s or girls’ clothing only, while 70% belonged to web sites that offered both women’s or girls’ and men or boys’ clothing. Additionally, 4.4% were coded as home pages, 25.9% were secondary pages, and 74.1% were interior pages.

Regarding product categories within the sample based on coding secondary and/or interior pages, coders indicated that 337 pages (91.8%) of the pages were promoting specific category of apparel, while 30 pages (8.2%) were coded as having no category due to not being a secondary or interior page or because the coder was viewing a page simply to differentiate the women’s or girls’ apparel section from the rest of the site.

4.3 Prominent Image Information

As previously mentioned, a total of 367 pages within the sample were found to contain a prominent image. Of the 367 prominent images, 58.9% (216) contained a male or female model; 41.1% (151) of the prominent images did not depict a model at all.
4.4 Range of Images

RQ1 inquired whether teenage female consumers are presented with a narrow (one model at a time) or wide (multiple models at one time) range of images during an online shopping experience. This research question was answered by determining how many different models a viewer could be exposed to on all three levels of websites: home, secondary, and interior.

Numbers of models pictured in prominent images ranged from one (49.9% of the sample) to seven (.3% of the sample), while 41.7% of the images did not picture a model at all. Additionally, 20 pages (5.4%) contained images with up to three male models, with distribution as follows: one male model – 13 pages (3.5%), two male models – 5 pages (1.4%), and three male models – 2 pages (.5%). Crosstabulation revealed that male models were only pictured on home and secondary pages, while female models were found on all levels.

Table 4-1 illustrates findings on the number of interior page secondary images (i.e. additional product views other than the prominent image) available on each interior page, pertaining directly to RQ1. Categories ranged from zero additional images available (the prominent image on the page was the only product view available) to five or more secondary images shown. Pages containing four additional product images was the most common at 19.6% of the pages coded, followed by five or more images (15.8%), three images (15.3%), zero secondary images (13.6%), and two images (9.5%). Only one out of the 367 pages coded had only one secondary image.

Table 4-1 Interior Page Secondary Images

<table>
<thead>
<tr>
<th>Number of Images</th>
<th>Number of Pages</th>
<th>Percent of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>13.6</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>2</td>
<td>35</td>
<td>9.5</td>
</tr>
<tr>
<td>3</td>
<td>56</td>
<td>15.3</td>
</tr>
</tbody>
</table>
Table 4-1 continued

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>72</td>
<td>19.6</td>
</tr>
<tr>
<td>5 or more</td>
<td>58</td>
<td>15.8</td>
</tr>
</tbody>
</table>

Of the pages that contained interior page secondary images, coders reported that 5.2% were images that did not feature a model. However, 13.6% contained two secondary images with a model, 11.2% contained three secondary images with a model, 9.5% contained four secondary images with a model, 5.4% contained five or more secondary images with a model, and 3.3% contained just one secondary image with a model. Additional coding options were available if the coder was not viewing an interior page or if the interior page being viewed did not contain any secondary images.

Further, the number of different models shown across interior page secondary images was also coded. On interior pages, 56.5% of the pages featured only one model shown from different angles, while 42.4% of the pages did not have a model shown at all (only 1.1% featured more than one model).

RQ1, as reiterated above, examined whether the consumer was exposed to a narrow or wide range of images when shopping on retail fashion web sites. Based on findings that the majority of prominent images contained one model (see previous section) and the interior page secondary image findings that show that only one model is shown on each web page most commonly, it can be concluded that the majority of pages viewed contained one body type. These findings answer RQ1: a narrow range of body types was presented among this sample of web pages on retail fashion web sites.

4.5 Thin-Ideal Depiction

4.5.1 Body Type Depiction

RQ2 questioned whether models depicting the thin-ideal would be found on retail fashion web sites popular with teenage females. To measure depicted body types, prominent images containing a model were coded using two measurement methods. The first
measurement categorized the body types of the models as ectomorphic – lean and thin, mesomorphic – muscular and fit, or endomorphic – soft and round. Table 4-2 illustrates these findings in detail.

<table>
<thead>
<tr>
<th>Body Type of Model</th>
<th>Number of Pages</th>
<th>Percent of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ectomorphic (lean, thin)</td>
<td>183</td>
<td>49.9</td>
</tr>
<tr>
<td>Mesomorphic (muscular, fit)</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>Endomorphic (soft, round)</td>
<td>12</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Findings from the first body type measurement show that the majority of models depicted the thin-ideal.

The second measurement categorized the models into one of six body types based on a scale adapted from Thompson and Gray (1995; also see Figure 4-1).

Of the six categories in the body image scale, the models found on web pages of the sample fit into all categories except one: Above Average 2, the heaviest point on the scale. Coders could not distinguish body types for a small number of models (4.1%), and a percentage of the web pages were coded as having prominent images that did not contain a model. Distribution is illustrated in Table 4-3.
Findings from the second measurement again reveal that of the web pages that featured a model (60% of the sample), the majority portrayed the thin-ideal. Thus, RQ2 is answered affirmatively: models shown in this sample of retail fashion web sites popular with teenage females depicted the thin-ideal.

4.5.2 Web Page Level and Body Type Depiction

RQ3 examined the instances of thin-ideal depictions on three web page levels and questioned which level the thin-ideal was portrayed most often. A crosstabulation of data found that the majority of models found on home pages were coded as having an ectomorphic—thin and lean—body type (see Table 4-4).

<table>
<thead>
<tr>
<th>Web Page Level</th>
<th>Body Type 1</th>
<th>Ectomorphic</th>
<th>Mesomorphic</th>
<th>Endomorphic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Page</td>
<td>Count</td>
<td>9</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>2.5%</td>
<td>.0%</td>
<td>.6%</td>
</tr>
<tr>
<td>Secondary Page</td>
<td>Count</td>
<td>58</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>16.0%</td>
<td>.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Interior Page</td>
<td>Count</td>
<td>116</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>32.0%</td>
<td>.8%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

1 Two web pages featured male models on home pages; these were not coded for body type as this study looked specifically at characteristics of female models.
A second crosstabulation of data revealed the instances of below average body type depiction on the three web page levels based on the body image scale measurement (see Table 4-5).

<table>
<thead>
<tr>
<th>Web Page Level</th>
<th>Body Type 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Average 1</td>
<td>Below Average 2</td>
</tr>
<tr>
<td>Home Page</td>
<td>Count</td>
<td>% of Total</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>1.4%</td>
</tr>
<tr>
<td>Secondary Page</td>
<td>Count</td>
<td>% of Total</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>10.7%</td>
</tr>
<tr>
<td>Interior Page</td>
<td>Count</td>
<td>% of Total</td>
</tr>
<tr>
<td></td>
<td>116</td>
<td>32.0%</td>
</tr>
</tbody>
</table>

The thin-ideal was pictured on 50% of all home pages, 76.6% of all secondary pages, and on 42.3% of all interior pages. Thus, RQ3 was answered: Of the 60% of the sample web pages that contained a model in the prominent image, the secondary pages (women’s/girls home on sites that sell clothing for males and females, apparel category home pages on all sites) on this sample of retail fashion web sites popular with teenage females depicted the thin-ideal most frequently.

4.5.3 Model Age and Body Type Depiction

In RQ4, the perceived age of the models shown on retail fashion web sites was examined in relation to depiction of the thin-ideal. For the images that the coders were able to distinguish age, the largest percentage (21.8%) were found to be in their twenties, followed by teenage models (10.6%), pre-teen models (2.2%) and a small number of models (.8%) that appeared to be in their thirties. Coders were unable to distinguish the age of the models in 30.5% of the pages in the sample and 29.6% of the pages did not have a model prominently featured, thus only approximately 40% of the sample was used for the following calculations.

A chi-square analysis determined that the relationship between model age and thin-ideal depiction (Body Type 2 only; Body Type 1 findings contained very little variance and were therefore deemed irrelevant for this research question) was significant ($x^2(3)=115.969, p<.005$).
Thus, RQ4 was answered: the depiction of the thin-ideal (defined as ectomorphic in this measurement) on this sample of retail fashion web sites popular with teenage females varied on the basis of the perceived ages of the models shown.

4.6 Objectification

RQ5 asked if, as previously found on television and in magazines, the images of the models found on retail fashion web sites popular with teenage females would focus on individual body parts such as legs, buttocks, hips, waist, or breasts more often than the entire body as a whole.

In regard to which parts of the body were focused on most often in images displayed on the web pages, information was collected based on the top half and the bottom half of the model’s body. Of the images that included the model’s top half, the hip and above area was the most pictured at 29.7%. Of the images that included the model’s bottom half, all of the body from the waist down was pictured 14.4% of the time. Elaborate details of the findings of this category are found in Table 4-6 and
Table 4-6 Part of Model Body Shown: Top Half

<table>
<thead>
<tr>
<th>Part of Body Shown</th>
<th>Number of Pages</th>
<th>Percent of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest/Bust and above</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>Chest/Bust and Torso/Waist</td>
<td>2</td>
<td>.5</td>
</tr>
<tr>
<td>Torso/Waist and above</td>
<td>11</td>
<td>3.0</td>
</tr>
<tr>
<td>Chest/Bust, Torso/Waist, and Hip</td>
<td>9</td>
<td>2.5</td>
</tr>
<tr>
<td>Torso/Waist and Hip only</td>
<td>44</td>
<td>12.0</td>
</tr>
<tr>
<td>Hip only</td>
<td>31</td>
<td>8.4</td>
</tr>
<tr>
<td>Hip and above</td>
<td>109</td>
<td>29.7</td>
</tr>
<tr>
<td>Top half of model not shown</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>Part of Body Shown in Image</td>
<td>Number of Pages</td>
<td>Percent of Sample</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Legs from hips to knees</td>
<td>29</td>
<td>7.9</td>
</tr>
<tr>
<td>Hips only</td>
<td>26</td>
<td>7.1</td>
</tr>
<tr>
<td>All from hips down</td>
<td>32</td>
<td>8.7</td>
</tr>
<tr>
<td>Waist/Torso and Hips only</td>
<td>13</td>
<td>3.5</td>
</tr>
<tr>
<td>Waist/Torso, Hips, and Legs from hips to knees</td>
<td>44</td>
<td>12</td>
</tr>
<tr>
<td>All from waist/torso down</td>
<td>53</td>
<td>14.4</td>
</tr>
<tr>
<td>Bottom of model not shown</td>
<td>17</td>
<td>4.6</td>
</tr>
</tbody>
</table>

To more accurately answer H1, an additive index was implemented. Categories considered to be half of a body, “hip and above,” “waist/torso and above,” “all from hips down,” and “all from waist/torso down,” were assigned a value of 2. Therefore, if the full half was coded as shown for the “top half” category and the “bottom half” category, it was considered that a full body was shown. Similarly, individual body parts or sections such as “chest/bust only” and “hips only” were assigned a value of 1, and “not applicable” responses were assigned a value of 0 and later removed from the analysis. The index key was defined as follows:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 body part or ( \approx \frac{1}{4} ) body</td>
<td>( \frac{1}{2} ) body</td>
<td>( \approx \frac{3}{4} ) body</td>
<td>Full body</td>
</tr>
</tbody>
</table>

After removing web pages that were coded as not containing a model or as otherwise not applicable to this measurement, 214 web pages or 58.3% of the original sample remained. From these pages, the index yielded the following results: Mean = 2.86, Median = 3, and Mode = 3. This suggests that on average, images of models focused on more than half of their bodies at one time rather than just one body part or segment, with \( \frac{3}{4} \) model bodies appearing most frequently. Further, it was revealed that only 3.3% of images containing models were coded as focusing on only one body part and 16.4% were coded as showing half bodies. The majority
(71.5%) was coded as ¾ bodies, while 8.9% of the sample was found to portray the entire body of a model, per the index.

Therefore, RQ5 was answered: the images of models found on the sample retail fashion web sites popular with teenage females did not focus on individual body parts such as legs, buttocks, hips, waist, or breasts more often than the entire body as a whole.

4.6.1 Clothedness

RQ6 inquired about the level of clothedness of the models pictured, specifically, whether the images of the models found on retail fashion web sites popular with teenage females would objectify women by depicting models with limited coverage by clothing.

In order to accurately document the clothedness of the model’s entire body, this category was dissected into five parts for coding – top: chest/bust, top: arms, midsection, bottom: buttocks, and bottom: legs. The section titled bottom: buttocks was not applicable to the image at hand 97.9% of the time, so it is not being reported here.

Pertaining to model clothedness top: chest/bust, 58.9% of the pages were coded as not applicable. However, of the remaining pages, the model’s chest/bust was fully covered in the 12.3% of the pages, ¾ covered in 8.4%, ½ covered in 9.5%, and ¼ covered in 8.2%.

The subsequent category pertaining to the top of the model’s clothedness was top: arms. The model’s arms were found to be not at all covered in 26.4% of the sample. Clothedness of the model’s arms for the remainder of sample was as follows: ¼ covered (7.6%), ½ covered (4.9%), ¾ covered (3.0%), and fully covered (4.1%). Arm clothedness was coded to be not applicable in 52.9% of the sample.

The next region of clothedness coded for was the model’s midsection. In this category, 41.7% of the sample showed models with fully covered midsections, while 9.0% showed models whose midsections were not covered at all. Other ranges of clothedness were as follows: ¼ covered (.5%), ½ covered (1.6%), ¾ covered (2.2%). Further, 43.9% of the pages coded were classified as being not applicable in terms of portraying midsection clothedness.
The final category coded was clothedness of the model's legs. In this category, 25.3% of the sample contained images of models with their legs fully covered, while the remaining categories were coded as follows: not at all covered (3.0%), ¼ covered (7.1%), ½ covered (6.5%), and ¾ covered (3.8%). Pages were coded as not applicable in 53.1% of the sample.

Thus, RQ6 was answered. The images of models found in this sample of retail fashion web sites popular with teenage females did not depict models with limited coverage by clothing.
CHAPTER 5
DISCUSSION

The main objective of this study was to define the characteristics of images that teenage female consumers are exposed to during an online shopping experience to determine if the thin-ideal is predominantly depicted. While the thin-ideal is prevalent when models are shown, an interesting finding of this study is that a surprisingly large percentage of web pages did not depict models. The subsequent findings are to be interpreted given this particular finding.

Study findings and their implications, as well as limitations of the study and suggestions for future research, are detailed in the following sections.

5.1 Specific Findings and Discussion

5.1.1 Model Presence and Range of Images Presented

An important finding for the overall purpose of the study was the level of model presence found on the web pages in the sample. Ten of the sixteen web sites analyzed had models on the majority of their web pages, and four sites—Billabong, Quiksilver, Roxy, and Volcom—had models present on all of their web pages. The likelihood of the presence of model images on these popular web sites elevates the likelihood that the body types shown in the images will be perceived as reality.

The first research question addressed the range of model images presented on each web page in the sample. Findings revealed that if any model was present, most often it was only one model, even if shown in multiple images of various product angle views. Based on Sohn’s (2007) suggestion that magazines have a stronger social comparison effect on body image than does television due to the smaller range of bodies and body types presented, it can be assumed that the images found on retail fashion web sites could also have a strong social comparison
effect due to the small range of images presented. Further research is needed to ascertain social comparison effects.

5.1.2 Body Type Depiction

This study measured the body type of the models depicted on websites popular with teenage females by using two techniques. The first technique, in which coders were asked to describe the body type of the model shown using one of three descriptive terms—ectomorphic, mesomorphic, and endomorphic—produced results consistent with depiction of the thin-ideal. More than half of the web pages viewed contained models described as ectomorphic, or lean and thin. A very small percentage of the sites contained models that fit the descriptions associated with mesomorphic (muscular and fit) and endomorphic (soft and round) body types, however it is important to note that all of the models defined as endomorphic were found on the website for Faith 21, the plus-size division of Forever 21. The remainder of websites either contained prominent images that did not portray a model at all or coders were not able to identify body type due to model placement, positioning, or pose.

The second technique, a scale in which coders were asked to compare the body type of the model shown with a body image scale, produced similar results. Of the models shown on the web pages, the only ones classified as above average were found on the website for Faith 21. The majority of models shown were classified as below average in build. Only a minute percentage was classified as being of average body size.

Thus, it was found that that the body types and physical characteristics of the models found in 60% of the sample of retail fashion websites popular with teenage females depicted the thin-ideal. These findings are consistent with research on cultivation theory.

In addition, a significant relationship was found between model age and thin-ideal depiction, even though coders were unable to distinguish the age of the models in 30.5% of the pages in the sample, and 29.6% of the pages did not have a model prominently featured. More in-depth research is needed to truly flesh out the details about this relationship, however, this
information corroborates the Guillen and Barr (1994) and Bessenoff and Del Priore (2007) studies that found that thin-ideal depictions vary with media targeted at different ages. Research in this area should not be overlooked, as it is important to understand the various attributes that are present in images presented to the teenage set. Social Comparison Theory (Festinger, 1957) posits that people compare themselves with like others, including those perceived to be a similar age. A better understanding of the ages of models used in media targeting teenagers could allow preventative measures to be taken to ensure that social comparison effects such as negative body images are less likely to occur.

5.1.3 Web Page Level

Next, the frequency of and thin-ideal depictions was investigated based on web page level (home, secondary, or interior).

The home page of a web site is potentially the most often viewed, and is particularly important due to its ability to perform not only as an entry point to their web site, but also as an online advertisement (Singh & Dalal, 1999) and a point for site reference (Neilsen & Loranger, 2006). This study found that on home pages that contained at least one female model in the prominently featured image, all but one of them displayed images of models with ectomorphic—thin and lean—body types rather than mesomorphic or endomorphic body types. (The one home page that contained a model described as endomorphic—soft and round—was Faith 21, the plus-size division of Forever 21.) Similarly, in the same images on the home pages, the models were classified as mostly below average in terms of body size based on the body type scale adapted from Thompson and Gray’s Contour Drawing Rating Scale (1995).

Interestingly, the home pages of two brands, Abercrombie & Fitch and Hollister, featured male models only. These brands are owned by the same company, which suggests that male model placement was strategic, more than likely related to the positioning of their brands in the teenage market.
Interior pages of web sites are also important to this study, as consumers have been found to visit interior pages of web sites before any other type of page the majority of the time (Neilsen & Loranger, 2006). This study found that the largest percentage of interior pages featured a model classified as having an ectomorphic body type, with small percentages (less than 5% of pages) containing models classified as having mesomorphic or endomorphic body types. Similar to findings related to home pages, the majority of interior page models were found to be below average in body size, based on the body type scale. Interior pages, specifically those found on web sites where e-commerce is available, also have the unique aspect of additional product views, often displaying close-ups of products as well as views from varying angles, and sometimes on various models. In many instances in this study, the additional product views—also referred to as interior secondary images—contained models, adding yet another opportunity for consumers to be exposed to images that cultivate the thin-ideal.

Not to be overlooked, the secondary pages of the web sites are just as important—although not previously studied in terms of visitation rates—as these pages serve as an entry point to specific shopping categories and are frequently visited. This study found that these pages featured a higher frequency of thin-ideal model images than did either home pages or interior pages. Male models were also found on secondary pages, however, on these pages the male models were shown alongside female models.

An important implication of these findings is the reality that it is imperative that the Internet be studied in terms of media effects. This form of media is used differently than television or magazines, and offers layers upon layers of images and information that a web user of any kind can be exposed to at any given time. A study published almost a decade ago noted that “by the year 2005, the web is projected to grow by a factor of 20, to 200 million sites and 50 billion pages” (Palmer, 2002). If since 2005 the web has grown by another factor of 20—which is highly likely—the potential size of the web based on the number of sites and web pages is staggering. Combine the unimaginable size of the Internet with the growing trend of
advertising and entertainment—including television and magazines—moving to online environments, and it is increasingly obvious that the media effects of the Internet must be studied.

5.1.4 Objectification

The study also examined whether the images of the models found on retail fashion web sites popular with teenagers would focus on isolated body parts such as stomach, buttocks, cleavage, or chest. This aspect of potential objectification was measured by documenting the body parts focused on in each image. Findings revealed that on average, less than half of the models’ bodies were pictured at any given time, providing reason to the idea that women's bodies are objectified in media by focusing on individual body parts rather than the body as a whole.

Clothedness was measured by assigning a range to the amount of skin covered by clothes. Overall, the images of models found in this sample of retail fashion web sites popular with teenage females did not depict models with limited coverage by clothing. Further, images that depicted models wearing little clothing could be explained by the season in which the pages were analyzed. As summer approaches, many retail fashion web sites have begun to advertise clothing for the warmer months that by nature provide less coverage.

5.2 Practical Implications

5.2.1 Brand Information

In general, most of the web sites in the sample analyzed featured models on some pages and not on others. However, four brands of the sample featured models on every web page: Billabong, Quiksilver, Roxy, and Volcom. Interestingly, all four brands are part of one parent company, West Coast Brands. Also interesting are the findings that show that the web sites that are part of West Coast Brands depicted the thin-ideal less frequently than the others, and were the only brands other than Faith 21 and 77 kids that featured models described as “average” in size. On the opposite end of the spectrum are Abercrombie & Fitch and Hollister:
these brands only portrayed male models on their home pages and no models at all on secondary or interior pages. Further, interior pages did not have secondary images for products advertised. Due to these findings, it could be suggested that the brands above be considered “safe” sites – sites that do not focus on thin-ideal females and therefore would have a lesser or non-existent effect on body image perception.

5.2.2 Thin-Ideal Representation

An impactful finding from this research is the determination that models portraying the thin-ideal were found on 60% of the web pages in the sample. The remaining 40% of web pages in the sample were found to contain prominent images that did not include a model at all. The amount of images containing thin-ideal models that a consumer is exposed to during an online shopping experience could potentially exacerbate the cultivation of the thin-ideal, and in turn, the likelihood of social comparison to these models and the possibility of negative body image perception. Even a five-minute exposure to thin-ideal media images results in a more negative body image state than does exposure to neutral objects (Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005), such as the clothing pictured without a model on the web sites analyzed.

Similarly, even though this study found that many pages contain multiple images, the additional images are usually of the same model pictured in the prominent image, therefore only exposing the viewer/consumer to one body type image at a time. When Sohn’s 2007 study is taken into consideration (where it was suggested that magazines had a stronger effect on social comparison outcomes than television because they presented a narrower range of images than did television shows), it can be reasoned that retail fashion web sites also have a strong likelihood for social comparison effects due to their presentation of a narrow range of body types on each page.
5.3 Theoretical Implications

Implications of this research on existing theoretical frameworks are outlined below.

5.3.1 Social Comparison Theory

The recorded attributes of the models analyzed indicate that thin-ideal representation was prevalent in images on the web sites of the sample that contained models. Therefore, it is likely that teenage fashion consumers could engage in upward comparison with the models if they believe that their sizes and presentation are fashionable and ideal.

The current study found that models portraying the thin-ideal were present in only 60% of the overall sample. Given that finding, it would be valuable for future research to determine if the percentage of models encountered correlates with the presence and strength of social comparison effects.

To better study the phenomenon of social comparison and its effects, as related to body image, survey-based and/or experimental research rather than content analysis research would be valuable. This way, specific effects of exposure to images on the web could be measured rather than basic characteristics of images that might have potential for effects. Using a survey method could also incorporate the concept of user involvement and how the level of involvement might affect the level of effects on perceived body image, as well as more detailed information related to media effects, such as the amount of time spent online and on each web site and web page.

5.3.2 Cultivation Theory

The findings of this study reveal that thin-ideal depictions were common on web pages with prominent images that contained models. However, findings also revealed that approximately 40% of the web pages in the sample did not have a model present at all in the most prominent image on the page.

The presence of thin-ideal depiction on the pages that contained models supports previous findings in regard to traditional media. Cultivation theory posits that the thin-ideal can
be cultivated through repeated media exposure. However, the large amount of web pages found to not contain model images could potentially reduce the intensity of any cultivation effects due to lessened exposure overall to the thin-ideal. Although this study did not measure cultivation effects, it is important to continue studies in this direction due to widespread and constantly growing Internet use among teenagers.

5.3.3 Objectification Theory

Objectification Theory is currently utilized in limited number of studies regarding images of women in media. This research contributed to the theory by broadening the scope from magazines and television into the Internet as a media form. However, findings regarding potential forms of objectification such as focusing on individual body parts were not consistent with previous research. On average, images containing models (approximately 60% of the sample) depicted over half of their bodies, and most often pictured ¾ of their bodies. Thus, there seems to be no real danger of objectification of female bodies on retail fashion web sites popular with teenage females. This could be explained by a number of factors, the main one being that objectification may not translate to this context due to the process of online shopping. Focusing in on details of a garment seems to be the main reason for portraying disembodied images, not purposely focusing in on cleavage as is more easily done in other media. Additionally, many images of objectified models found in magazines are most likely depicting a specific brand image, and objectified models found in television could just as easily be portraying a character. Online shopping is simply that—products for sale online, personality unattached.

Findings on the lack of coverage by clothing were also unsubstantial. One potential reason for this is seasonality. Seasonality is a limitation with retail fashion web sites in regard to clothedness depictions and potential objectification. Due to the season the data for this study was collected (late winter/early spring), many clothing items featured were for warmer months, and therefore short-sleeves, tank tops, shorts, and swimwear were common in images. These
items show more skin than do winter clothes such as sweaters and long pants, thus affecting the ranges of clothedness recorded. It would be valuable to study web pages longitudinally in order to capture potential variance in web site images based on season, due to the types of clothing advertised during different times of the year.

5.4 Limitations

While informative as an exploratory study, this research has multiple limitations. First, this content analysis lacked a comparison point for retail fashion web sites. A natural comparison point to online retail shopping would be printed catalogs; however, that form of advertising is slowly being phased out, especially in collateral targeting teens. Similar to catalogs are teen-focused magazines, however at the time of this study, only a few teen-based magazines remained in print.

An additional limitation of the study was found in the model age category in the content analysis. While a small amount of information pertaining to age was gathered, it was hard for the coders to distinguish model age based simply on an image online. For future studies, it might be helpful to perform survey research and have participants rate the extent to which they consider a model similar in age to themselves rather than assign a specific age to the model.

A final limitation of this particular study is the discrepancy between web sites in terms of how their clothing is categorized and advertised. For example, American Eagle Outfitters’ web site contained over twenty-five categories under the women’s clothing umbrella, even though Quiksilver contained only seven categories. For the purpose of this study, the researcher was able to combine categories for equal study across the web sites, but more valuable information might be found if the sites were similarly organized. However, due to the lack of control over this variable, it would be useful to randomly sample a specific number of pages from each site rather than perform a stratified sample as done here.

It would also be beneficial to pursue media effects studies on other types of web sites such as social media web sites, news web sites, and magazine web sites, among others, as
these types of web sites are used heavily by teenagers.

5.5 Conclusion

In conclusion, this study provides valuable exploratory research on the types of images teenage females are exposed to during an online retail fashion shopping experience, thus elaborating on previous research influenced by Social Comparison Theory, Cultivation Theory, and Objectification Theory.
APPENDIX A

CODING INSTRUCTIONS
Code Book – Instructions

Please read detailed instructions before coding.

About the Coder:
Coder Name. Type your first name in the cell specified for “coder name.”

Coding Spreadsheet:
Each column of the coding spreadsheet pertains to a specific coding category, as defined below. Assign a code (by typing it into the associated cell on the spreadsheet) to every category for each web page of the sample based on the following:

IMAGE INFORMATION:
A. Image identification number. Type the image identification number associated with the image you are currently coding, found in the spreadsheet containing the links in the sample or next to the screenshot in that section of the code book.

B. Brand. Indicate the number associated with the brand advertised on the web page you are viewing. This information can be found by branding in the top left corner of the web page, or by looking within the URL.
   1. Aeropostale
   2. American Eagle Outfitters
   3. Billabong
   4. Forever 21
   5. Heritage 1981
   6. Love 21
   7. PacSun
   8. Quiksilver
   9. Roxy
   10. Volcom
   11. Zumiez
   12. 77 Kids
   13. Abercrombie
   14. Faith 21
   15. Hollister
   16. Martin and Osa

WEB SITE/PAGE INFORMATION:
C. Site offerings. Indicate the number associated with the description of the gender the site sells and advertises clothes for overall. This information is found within the site menu.
   1. Women/girls only. This site only sells clothes for women/girls.
   2. Men/boys only. This site only sells clothes for men/boys.
   3. Men/boys and women/girls. This site sells clothes for women/girls and men/boys.

D. Web page level. Indicate what page level is being viewed.
   1. Home page – Main page of the brand’s web site.
   2. Secondary page – A page linked to directly from the home page. For this study: Women's/Girls'/Apparel main pages, product type main pages.
   3. Interior page – A page linked to directly from a secondary page. For this study: Specific product detail pages.
**E. Product web page category.** If viewing a secondary or interior page (as defined above), indicate what category (based on categories being coded; noted in sample spreadsheet) of product you are viewing.

1. Tops
2. Sweaters
3. Bottoms
4. Jeans/Denim
5. Dresses
6. Swimwear/Intimates
7. Not applicable - I am not viewing a secondary or interior page.
8. None – I am viewing a women's/girls'/apparel main page.

**PROMINENT IMAGE CHARACTERISTICS:**
The following section assesses characteristics of the most prominent image on the page. If the most prominent image is a rotating image, please code for the image in the first rotation only.

**F. Prominent image presence.** Indicate if there is one prominent image on the page you are viewing. If no prominent image is present, enter a "-" for the remainder of the cells in the coding sheet and proceed to the next image.

1. Yes
2. No

**G. Model presence – main image.** Indicate if there is at least one model present (male or female) in the most prominent image on the page you are viewing.

1. Yes
2. No

**H. Number of female models.** Indicate the total number of female models in the most prominent image on the page you are viewing by typing the number in the associated cell of the coding sheet. If no female models are present, enter "0."

**I. Number of male models.** Indicate the total number of male models in the most prominent image on the page you are viewing by typing the number in the associated cell of the coding sheet. If no male models are present, enter "0."

**J. Interior page images.** If viewing an interior page (as defined above), indicate how many different additional product images (i.e. other than the prominent image) are available for the detailed view of the product.

1. 1
2. 2
3. 3
4. 4
5. 5 or more
6. 0
7. Not applicable - I am not viewing an interior page.
**K. Model presence – interior page secondary images.** If viewing an interior page (as defined above), indicate how many of the secondary product images (additional views) on the page you are looking at, if any, contain at least one model.

1. 1
2. 2
3. 3
4. 4
5. 5 or more
6. 0
7. There are no additional images for the product.
8. Not applicable – I am not viewing an interior page.

**MODEL DEMOGRAPHICS AND PHYSICAL CHARACTERISTICS:**

The following section assesses the demographic and physical traits of the main female model in the most prominent image shown on the web page you are viewing. Code for one model only; if more than one model is in the main image, choose the most prominently featured model in the foreground. If there are two or more models featured in equal prominence, code the model furthest to the left.

**L. Model age.** Estimate the age of the model in the most prominent image as you perceive it. Use the sample images associated with each age bracket as a comparison if necessary. If wavering between two age ranges, please choose the younger range.

1. Pre-teen (10 – 12)
2. Teenage (13 – 19)
3. Twenties (20 – 29)
4. Thirties (30 – 39)
5. Forties (40 – 49)
6. Under age 10 or 50+
7. Cannot distinguish
8. Not applicable – no model in image.

**M. Model body type – 1.** Choose the body type that best describes the model’s body shape, as defined by Wasylkiw, Emms, and Poirer, 2009.

1. Ectomorphic (lean, thin)
2. Mesomorphic (muscular, fit)
3. Endomorphic (soft, round)
4. Unknown (cannot distinguish)
5. Not applicable – no model on page.
**N. Model body type - 2.** Using the following figures, choose the one that is closest in comparison to the model's body shape. Enter “7” in the coding sheet if there is no model on the page you are viewing. If you cannot distinguish the model's body type, please enter “8.”

1. Below Average
2. Average
3. Above Average

**O. Model body part – top.** Indicate what part(s) of the top half of the model's body is/are shown in the image you are viewing.

1. Face only
2. Chest/bust and above
3. Chest/bust only
4. Chest/bust and torso/waist only
5. Torso/waist only
6. Torso/waist and above
7. Chest/bust, torso/waist, and hip
8. Torso/waist and hip only
9. Hip only
10. Hip and above
11. Not applicable – top of model not shown.
12. Not applicable – no model on page.
13. Other (please list in corresponding cell in coding spreadsheet)

**P. Model body part – bottom.** Indicate what part(s) of the bottom half of the model's body is shown in the image you are viewing.

1. Legs below knees only
2. Legs from hips to knees
3. Hips only
4. All from hips down
5. Waist/torso only
6. Waist/torso and hips only
7. Waist/torso, hips, and legs from hips to knees
8. All from waist/torso down
9. Not applicable – bottom of model not shown.
10. Not applicable – no model on page.
11. Other (please list in coding sheet)
Q. Model clothing type – top. Indicate what type of clothing is shown on the model in the image you are viewing.
1. None/not shown
2. Top/Tee/Shirt
3. Sweater
4. Dress
5. Intimate apparel (bra)
6. Swimwear
7. Tank
8. Not applicable – no model shown
9. Cannot distinguish

R. Model clothing type – bottom. Indicate what type of clothing is shown on the model in the image you are viewing.
1. None/not shown
2. Pants/Leggings
3. Jeans
4. Dress (if listed above, list again here)
5. Skirt/Shorts
6. Intimate apparel (panties)
7. Swimwear
8. Not applicable – no model shown
9. Cannot distinguish

CLOTHEDNESS:
Indicate which parts of the model’s body are covered by clothes in the image you are viewing, based on 1 = not at all covered and 5 = fully covered. Also use the scale below for reference. If the body part in question is not shown, or you cannot distinguish because of the amount of the body part shown, please enter “6.”

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<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td></td>
<td>Not covered</td>
<td>¼ Covered</td>
<td>½ Covered</td>
<td>¾ Covered</td>
<td>Fully Covered</td>
<td>Not Applicable</td>
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S. Model clothedness – top: chest/bust. On a scale of 1-5, where 1 = not at all covered and 5 = full chest/bust covered, indicate how much of the model’s chest/bust is covered by clothes.

T. Model clothedness – top: arms. On a scale of 1-5, where 1 = not at all covered and 5 = full arm covered, indicate how much of the model’s arms are covered by clothes.

U. Model clothedness – midsection. On a scale of 1-5, where 1 = not at all covered (full midriff visible) and 5 = full midsection covered (no midriff visible), indicate how much of the model’s midsection is covered by clothes. The midsection is defined as the area from the bottom of the ribs of the model down to the hips.

V. Model clothedness – bottom: buttocks. On a scale of 1-5, where 1 = not at all covered and 5 = full buttocks covered, indicate how much of the model’s buttocks is covered by clothes.

W. Model clothedness – bottom: legs. On a scale of 1-5, where 1 = not at all covered and 5 = legs fully covered, indicate how much of the model’s legs are covered by clothes.
X. **Number of different models shown in interior images.** If viewing an interior page (as previously defined), indicate how many different models are shown across all images on the page (prominent image and interior page secondary images). For example, if the same model is pictured in both the prominent image and all of the secondary images, you would code “1.” If one model is pictured in the prominent image and a different one is pictured in all of the secondary images with a model, you would code “2” and so on.

1. 1
2. 2
3. 3
4. 4
5. 5 or more
6. 0 – There are no models pictured on the page I am viewing.
7. Not applicable – I am not viewing an interior page.
APPENDIX B
CODING WORKSHEET
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<tr>
<th>ID</th>
<th>Brand</th>
<th>Site Offerings</th>
<th>Page Level</th>
<th>Page Category</th>
<th>Prominent Image</th>
<th>Model Presence</th>
<th># Female</th>
<th># Male</th>
<th>Interior Page Images</th>
<th>Model Presence Interior</th>
<th># Different Models</th>
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<th>Body Part Bottom</th>
<th>Clothing Type Top</th>
<th>Clothing Type Bottom</th>
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<th>Clthdnnss Top Arms</th>
<th>Clthdnnss Mid</th>
<th>Clthdnnss Bottom Buttocks</th>
<th>Clthdnnss Bottom Legs</th>
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APPENDIX C
SAMPLE WEB PAGES
APPENDIX D

MODEL AGE – CELEBRITIES
Model Age – Images for Comparison

Images obtained from IMDB.com (celebrities) and NewFaces.com (pre-teens).

Pre-teen:

Teenage:
Twenties:

Thirties:
Forties:
REFERENCES


Lunau, K. (2008). Study finds real women don't sell. Maclean’s, 121(33), 34-34.


BIOGRAPHICAL INFORMATION

Kelly Hosley graduated with a Bachelor of Arts in Communication with minors in English and Psychology from Texas A&M University in August of 2005. In her free time, Mrs. Hosley most enjoys reading and spending time with her husband, family, and friends.