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THE EFFECTIVENESS OF THE DOVE EVOLUTION FILM
AS A ONE-SHOT MEDIA LITERACY TREATMENT

by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
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ABSTRACT

The purpose of this study is to test the effectiveness of the Dove Evolution film as a one-shot media literacy treatment to change sociocultural attitudes toward appearance. Four speech classes at the University of Central Florida were used in a Solomon four-group design. Group 1 received a posttest; Group 2 received a pretest and a posttest; Group 3 received the treatment and posttest; and Group 4 received the pretest, treatment and posttest. The treatment consisted of the Dove Evolution film, a viral video introduced in 2006 by Dove as part of its Campaign for Real Beauty. The film has received 19 million views on the Internet in 2.5 years. A modified version of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3) was administered as a pretest and posttest, measuring four variables such as awareness and internalization of the media ideal, pressure to achieve the media ideal, and desire to be athletic. It was hypothesized that the treatment would raise awareness but lower internalization, pressure and desire to be athletic. Although none of the hypotheses were supported, there were statistically significant changes. Contrary to expectations, the awareness measure decreased and the pressure score increased. The results and implications are discussed.

This effort is dedicated to the glory of God (1 Corinthians 10:31).

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LIST OF ACRONYMS/ABBREVIATIONS

SATAQ-3 The Sociocultural Attitudes Towards Appearance Questionnaire

CHAPTER ONE: INTRODUCTION

Introduction

The six-hour bus ride from Phnom Penh, Cambodia to Ho Chi Min City (Saigon), Vietnam affords the curious foreigner a view into the simple life of Cambodian rice farmers as well as the urban bustle of Vietnamese cities and towns. Both rural and urban settings along this route share an intriguing feature with American culture: the prevalence of television. The shacks surrounded by rice paddies contain only the bare necessities of rural Southeast Asian life: mats and bedrolls instead of tables and chairs, a few boxes to store bowls and clothes instead of closets and cupboards, the obligatory Buddhist altar and a battery-powered television set. Across the border, city neighborhoods resemble a dense field of dandelions as TV aerials of uniform height and shape sprout quaintly from the houses. These two cultures of Indochina may be very different from the United States, but a common bond is our love for TV. Media reaches around the globe.

Need for the Study

The prevalence of the electronic media in the lives of America's youth can hardly be overstated. A Kaiser Family Foundation report on the nearly insatiable media habits of young people labeled today's 8-18 year-olds as "Generation M" (Rideout, et. al., 2005). One factor is the amount of exposure of today's youth to media. American students in grades 3-12 spend 6.3 hours per day with the media, more hours in a week than the standard full-time job. College students spend six times as many hours in playing video games and watching television than in reading books (Prensky, 2001). The second factor

is the lack of parental control over the media accessed in the typical home. Rideout et al. found that less than half (46%) of the homes studied had guidelines about television watching; only one-fifth of these homes enforced the rules. Among junior-high and high school students, only 23% of homes had rules about computer usage, 16% had guidelines about music selections and only 25% had home computer filters. Rideout et al. also found that few parents screened the media content of their children by reading the advisory labels before purchase (14% for CDs; 10% for video games) and a minimal amount (6%) used the parental control technology available for television. Ziegler (2007) stated, “With the high degree of access and the low degree of screening and monitoring of media content (by government or parents), media producers have *carte blanche* influence over Generation M” (p. 71).

In our own media-saturated culture the challenge of how to process media involves two discrete dimensions: the quantity of media exposure and the quality of media content. First, there is simply too much media content for us to process (Potter, 2004). Television broadcasts are available 24-hour per day, seven days per week. The typical household television set is on for seven hours of the day, and children and teens spend about the same amount of time with new media (Bergsma, 2008). Internet access at home means that there are more ways to spend time with computerized mediated communication. The new media is not only emerging, but converging as telephones become PDAs and more people use their phones to send email and text messages, surf the web, watch movies and listen to music. The impact of media, particularly TV, has long been debated as critics have claimed that heavy TV viewing shortens the attention span of children and hurts their education (Fisch, 2002).

There is reason to be concerned over media effects upon users. Some research studies reveal a number of negative effects (Zeigler, 2007). A study of African-American teenage girls found that heavy viewers of rap videos were more likely to engage in violent behavior, drug and alcohol use and promiscuity (Wingood et al., 2003). Anderson's meta-analysis of 32 independent research study samples linked exposure to violent video games to aggressive cognition and "serious" aggressive behavior (Anderson, 2004, p. 113).

Concern over media content started before the reaction to Rhett Butler's infamous parting profanity in the 1939 epic "Gone with the Wind." Research pioneers Harold Laswell and Paul F. Lazarsfeld studied the effects of propaganda and radio in the 1930s (Rogers, 1994). More recently, populist voices have responded to parental alarm at media content. In 1998, a full-page New York Times advertisement endorsed by veteran actor Steve Allen called on concerned parents who were "fed up with steamy unmarried situations, filthy jokes, perversion, vulgarity, foul language, violence, killings, etc" to send money to the Parents Television Council to urge advertisers to "stop sponsoring sex, violence, filth and sleaze" (New York Times, October 14, 1998).

Despite the outcry against objectionable material on television some researchers are cautious about blaming the media for direct effects upon viewers. (e.g., Klapper, 1960) laying the groundwork for a limited effects perspective on mass media (Rogers, 2002). These limited effects are not insignificant. Heavy TV viewers adopt an inflated sense of the crime rate or "mean world syndrome" (Gerbner, 1972), which leads to fear of going out at night (Gerbner, Gross, Morgan & Signorielli, 1994). Some heavy television viewers and video game users become de-sensitized to violence as a result of increased exposure to it (Buchanan, et. al., 2002).

Some of these significant effects are alarming because of the importance of the media to society. A Mediawise report blamed the media for a “culture of disrespect” and asserted, “Whoever tells the stories, defines the culture” (Walsh, et. al., 2004).

As a sex information source for young people, television has increased in popularity. In 1998, 29% of young people listed television as their most important source of sex information (running second to peers), up from 11% in 1986 (Stodgill, 1998). Rich (1999) concluded that among young people the media has emerged as a “super-peer.” Sexual content can be subtle and is rampant in advertizing for a wide variety of products (Harris and Scott, 2002). Although they did not find network television to be explicit in its portrayal of sexual content, Greenberg and Hofschire (2000) found that sexual innuendo is prolific and premarital and extramarital sexual activity is represented six times more than between married partners.

The research on sex in the media shows that exposure can ultimately affect behavior. Despite the catharsis theory to the contrary, an increase in viewing sexual material increases sexual arousal and increases the likelihood of engaging in sexual behavior (Harris and Scott, 2002). For adults, exposure to sexual material might also affect satisfaction. Research by Zillman and Bryant (1988) demonstrated that both men and women who regularly watched pornographic films reported less satisfaction with the appearance and affection of their partners. Pornography can also affect attitudes about rape. Zillman and Bryant (1984) found that persons who were repeatedly exposed to sexually explicit material recommended less prison time for rapists.

Violent media content has been a concern for over a hundred years, first notably in Chicago when local authorizes refused to permit theatres to show the film *The James Boys*

in Missouri. The Payne Fund Studies in the 1930s revealed surprising violence in movie theaters—not only on the screen but in the seats. In research conducted by Edgar Dale (1935), the content analysis of 1500 movies revealed an alarming amount of crime content. Furthermore, in Herbert Blumer’s survey of 2000 people, respondents confessed to imitating acts of violence witnessed in the movies. As TV spread in the 1950s government officials became concerned over violence in television and over the next two decades various groups debated the issue. The history of the debate over the past century has set the stage for researching violence in the media based on quantifiable data. There is a “clear consensus” among scholars that exposure to violence in the media causes aggression (Sparks and Sparks, 2002, p. 278).

There are several ways in which media violence affects viewers. One way is that the media teaches viewers what behaviors to imitate. Bandura (1965) applied Social Learning Theory to explain the effect of media violence: behaviors that viewers see rewarded are most likely imitated. Thus, when violent characters are not punished or their acts of aggression are glorified, their behavior is more likely to be imitated. Another effect of media violence involves priming, providing cues for aggression that interact with one’s emotional state to provoke violence or aggression (Jo and Berkowitz, 1994). Other effects of exposure to media violence happen to be opposite in nature: desensitization and fear. Desensitization is the subsequent reduction in emotion from repeatedly witnessing violence. The negative impact could include a reluctance to aid victims or a reduced inhibition against committing violent acts (Dexter, et. al., 1997). The fear response to exposure to violence can last for years, especially for a child (Cantor, 1999).

Despite the wide body of research that shows a variety of media effects, critics (network programming executives, for example) have a valid point: the media does not affect all audience members automatically. The hypodermic needle theory of direct effects has long been discounted by scholars, although it is resurrected in the public sphere by the occasional accusations of racism, political bias or influence upon the consumer in the media (Petty, Priester, and Briscoe, 2002). The evidence in support for this view of a powerful media is anecdotal. Scholars prefer the limited effects model, which recognizes that some media content can affect some people in some ways. These indirect effects, such as agenda setting and the cultivation effect, can be strong but they are the result of some very complicated variables. Nevertheless, the end result is that the media can teach us what to think about (agenda setting) and what to think (cultivation effect).

McCombs and Shaw (1972) examined the ability of the media to influence public opinion in a study of uncommitted voters in North Carolina in the presidential elections of 1968 and 1972. The study of the prior election did not reveal an ability of the media to change attitudes; this may be the result of the attempt of the media to be objective. However, when public opinion polls were compared to content analyses of newspapers, a high correlation became apparent. This agenda setting influence of the media is rather complicated; not only can the media give salience to an issue or candidate but also to the attributes of that subject of the news. Research on agenda setting is far reaching, and is apparent locally and nationally in our own country and has been confirmed in foreign studies as well. Bernard Cohen's (1963) oft-quoted remarks sum up the theory of agenda setting: "The press may not be successful much of the time in telling people what to think,

but it is stunningly successful in telling its readers what to think about” (McCombs and Reynolds, p. 10).

Cohen’s remark is valid as it relates to the short term, in the arena of politics, where much is made of the individual’s ability to choose through voting. However, it is absolutely naïve to deny that the media is successful in telling us what to think over a period of time. Harold Lasswell (1948) noted that one of the social roles of the media is the transmission of the culture. Agenda setting in the media extends beyond politics to the attributes of our culture, specifically, to the ideal appearance of males and females (McComb and Reynolds, 2002). The long-term effect of the media on our thinking is the heart of cultivation theory.

In the late 1960s George Gerbner began a longitudinal study of primetime television and its long-term contribution to the social perception of reality by heavy television viewers. The process of the interaction between viewer and programming is what he called cultivation (Gerbner, et al., 2002). Television is the mass storyteller, and most programs fit the mold. Cultivation analysis is in contrast to the effects models that focus on a measurable before/after variable; it is the aggregate of years of heavy media consumption which brings viewers closer together in their worldview.

Heavy television viewing can influence one’s perception of reality to resemble the primetime world. As a result of cultivation heavy viewers of television tend to see the world as mean and dangerous and overestimate the actual crime rate and underestimate the kindness of strangers. Cultivation is also effected by television portrayals of older persons. Contrary to the message of television the elderly are not nearly extinct, but alive and well (Gerbner, et.al, 1980).

Cultivation effects can slowly undermine family taught values. Repeated exposure to sitcoms and movies depicting sexually active teens can cultivate an acceptance of premarital sex (Harris and Scott, 2002). In a three-year study of teens and their television viewing habits, Chandra (2008) found that heavy exposure to sexual content predicts teen pregnancy in females and also predicts pregnancy responsibility in males.

The danger of erosion in family taught values is not lost upon conservative advocacy groups such as the American Family Association, which claims 2.6 million supporters worldwide. The group's founder, Donald E. Wildmon, began the group in the late 1970s after being repulsed by unsavory programming content while watching television watching with his children. He soon organized a "turn off TV week" that garnered widespread attention.

Some parents may be unwilling to ban television completely. Media affords a glimpse into the outside world. It provides educational content. But most of all, as with other electronic media, television entertains (Bryant and Miron, 2002).

While there are advocacy groups concerned with changing the content of the media, others place the responsibility upon the viewer. Susan Ziegler (2007) summarized this point of view:

"In our highly consumer-charged society, it is very difficult to change the culture of the media and how it serves the public. Therefore, it is essential to develop more educated consumers" (p. 78).

An alternative to media abstinence is media literacy, defined by the Aspen Leadership Institute as "the ability to access, analyze, evaluate and create media in various forms (Aufderheide, 1993). In matters of pedagogy, media literacy is an inquiry-based

approach to learning. Educators assert that it is central to critical thinking. The Center for Media Literacy proposes five core concepts and five key questions to ask about any media—questions that it claims can change the world. The questions and concepts are as follows: (1) “Who created this message?” based on the concept that all messages are constructed; (2) “What creative techniques are used to attract my attention?” based on the concept that media messages are constructed using a creative language with its own rules; (3) “How might different people understand this message differently from me?” based on the concept that individuals experience the same message differently; (4) “What lifestyles, values and points of view are represented in, or omitted from, this message?” based on the concept that media have embedded values and points of view; and (5) “Why is this message being sent?” based on the concept that most media messages are organized to gain profit and/or power (Center for Media Literacy, n.d.b.). As Irving and Berel (2001) put it,

Media literacy (sometimes referred to as “media education”) promotes adaptive behavior by teaching individuals, often children, to evaluate media critically and, consequently, to reduce the credibility and persuasive influence of media messages. P. 103

Potter (2004) recognizes that media literacy is a term so widely-used that a Google search can currently return thousands of hits, and this is merely a fraction of the material created for the Internet related to media literacy. Media literacy involves media studies as well as education. Media studies have been around for a long time and involve the critical content of television. Some claim that the mainstream media has contributed to the status quo of society, although this is counterintuitive to those who think the media is too liberal

rather than too conservative. But in practice there is a third perspective and it involves the practical aspect of solving health issues that may be caused by media exposure: alcohol use, youth smoking and eating disorders caused by body image distortion. These studies are mostly empirical and quantitative because of the paradigm shift toward a desire for results. Thus, media literacy, if it is the solution to the problems of the media, may be filter, framework or vaccine.

Purpose

The purpose of the current study is to explore the effectiveness of a one-shot media literacy treatment as intervention. Specifically, this study will test the ability of a short film to change attitudes toward appearance. UniLever, the parent company of Dove Soap, produced a viral video for the Internet entitled, “Evolution” that depicted an ordinary looking young adult female being transformed by makeup and digital manipulation into a billboard image. The evolution occurs at high speed: over four hours of work is compressed into the 75 second film. The film ends with the caption, “no wonder our perception of beauty is distorted,” implying that media images are untypical of the general population. The techniques of the beauty industry are exposed and it proposes to promote skepticism. Thus our research question is “to what extent is the Dove Evolution film effective to teach media literacy?”

Theoretical Framework

Media literacy finds its theoretical framework in the work of Paulo Freire (1970, 1973), the Brazilian activist who taught farm workers how to read to enable them to vote.

Freire's view of education reflected a critical pedagogy that seeks to recognize and question hegemonic forces in society. Freire sought to empower through education to overcome oppression from societal and political hegemony. Since the goal of empowerment education is social improvement and self-improvement, the process of critical thinking about the media leads to empowerment and self-improvement, especially in the areas of health issues.

One specific health issue relates to body image and eating disorders. Social Comparison Theory explains the tendency to draw conclusions about ourselves after comparing ourselves with others (Festinger, 1954). Social comparison can be made with others who are superior or inferior (Wood, 2000) and real or fictional persons (Wood, 1996). The majority of media images represent the media ideal of thinness and attractiveness (Watson and Vaughn, 2006). Upward comparisons are made with those perceived to be higher in social status and serves as an incentive to make self-improvements but these upward comparisons tend to depress mood (Wills, 1991). Three sociocultural factors are associated with negative body image: awareness of the thin ideal, internalization of the thin ideal and perceived pressures to achieve a thin ideal (Cafri, et al., 2005). The Sociocultural Attitudes Toward Appearance assesses these three measures and includes the desire to be athletic like images in the media (SATAQ-3; Thompson, 2004).

Research Hypotheses

In view of the literature on media effects and the promise of media literacy as an alternate to media abstinence, the following hypotheses will be tested:

H1: The Dove Evolution film as one-shot media treatment will increase awareness of the media ideal.

H2: The Dove Evolution film as a one-shot media literacy treatment will decrease internalization of the media ideal.

H3: The Dove Evolution film as a one-shot media literacy treatment will decrease pressure to obtain the media ideal.

H4: The Dove Evolution film as a one-shot media literacy treatment will decrease the desire to be athletic.

Definition of terms

Media literacy is defined as the ability to “access, analyze, evaluate and create media in a variety forms” (Aufderhiede, 1993).

Awareness, as measured by the SATAQ-3 is an “acknowledgement of societally based appearance norms” (Thompson, et.al., 2004). It is operationalized in the SATAQ-3 as recognition of the importance that society places on appearance.

Internalization is “the incorporation of specific values to the point that they become guiding principles” (Thompson, et. al, 2004, p. 294). As used in this study, internalization is the extent to which a person “accepts societal norms of size and appearance” and will change behavior to achieve that norm (Thompson and Stice, 2001, p. 181).

Pressure is the negative effect resulting from outside sources, such as teasing or negative comments about one’s weight, or perceived pressure from the media to achieve the media ideal of thinness.

Athleticism, as operationalized by the SATAQ-3 is the degree to which a person would like to have an athletic body. Athleticism is a newer form of the media ideal as

evidenced by the growth of exercise and fitness magazines as well as advertizing promoting an ideal physique (Thompson, 2004).

Design of the Study

The evaluation of the Dove Evolution film as a one-shot media literacy treatment was accomplished through a Solomon four-group design to control for pretest and interaction effects. Four classes of speech communication at the University of Central Florida were selected as conditions. These classes were taught on the same day by the same instructor in the same room for three conditions and an adjacent, identical room for the fourth condition. The treatment, the Dove Evolution film lasts 75 seconds. In condition one, a posttest questionnaire called “The Media and You” based on the SATAQ-3 was administered at the end of class. In condition two, a pretest was administered at the beginning of class and the posttest was given at the end of class. In condition three, no pretest was given; the treatment (the Dove Evolution film) was shown and immediately followed by the posttest; these were given at the end of class. The fourth condition contained all three elements: a pretest was given at the beginning of class and the Dove Evolution film was shown, immediately followed by the administration of the posttest; these were given at the end of class. The scores of the questionnaire were collected for statistical analysis.

Limitations of this Study

There are some limitations to this study. First, the sample size (n=108) was relatively small. Often the sample size affects statistical significance. Second, this study

did not control for demographics such as age, race, religiosity or sex. This, too, could have affected the outcome in terms of statistical significance.

Organization of this Dissertation

Chapter One is an introduction to this study. It examines the problem, introduces the purpose of the study, and presents the research hypotheses. Chapter Two contains the review of the literature relevant to the study. The procedures for collecting and analyzing the data are outlined in Chapter Three. Chapter Four organizes and explains the results of the data analysis. Chapter Five, is dedicated to summarizing the findings, conclusions, implications for practice and recommendations for future research.



Figure 1: Before and After Stills of the Dove Evolution Film

CHAPTER TWO: LITERATURE REVIEW

Introduction

Inexperienced researchers of media literacy will be puzzled by the literature. Despite British scholar Len Mastermann's (1985) description of media literacy as a vast field and scholar James Potter's (2004) report of his Google search yielding 87,000 hits as being "the tip of the iceberg" (p. 23), a simple search in education and communication databases for "media literacy" will confirm faculty warnings that the research on media literacy is thin. Media Literacy may be a "complex and dynamic phenomenon" (Christ and Potter, 1998) but to the neophyte researcher it is stubbornly enigmatic. Frustration awaits the uninitiated media literacy researcher because the field is under-organized and under-developed.

Potter (2004) offers clarification when he described the field of media literacy a "patchwork of ideas" and explains:

Among scholars, media literacy is really the convergence of three huge bodies of knowledge: media studies (the industries, content, and effects), human thinking (how people attend to messages and construct meaning), and pedagogy (how to help people access information, develop skills, and become educated). (p.23).

"Media literacy" has been a convenient label for a variety of matters discussed in the public sphere. It has been applied to issues of public policy, critical culture, parental guidelines, elementary teacher guidelines, or the words of wisdom from Marshall McLuhan (Potter, 2004).

Media literacy curricula in schools grew during the 1970s, waned in the 1980s and resurged in the 1990s (Singer and Singer, 1998). Ironically, the United States is the

leading exporter of media yet lags far behind other countries in media literacy education (Kubey, 1998). Another irony is the lack of pedagogy in the U.S. while schools spend an increasing amount of the budget on technology (Semali, 2000).

The structure of the field of media literacy is still under-developed. This is reflected in the plurality of applicable theoretical frameworks, the diversity of definitions in the literature and in the activist groups claiming to be media literacy advocates.

The field of media literacy cannot be traced to a single theoretical framework that covers it (Cantor and Wilson (2003). This is seen by the application of social comparison theory to understand the media as the problem and the application of critical pedagogy that focuses on the general strategy for the cure: empowerment education.

The communication perspective itself contains diverse definitions. Potter (2004) reports an earlier attempt to conceptualize media literacy for a symposium for the Journal of Communication by asking media scholars to articulate their own concept of media literacy (Christ & Potter, 1998). The responses, in essay form, were remarkably varied among the scholars. Adams and Hamm (2001) consider media literacy as being able to “create personal meaning” from the media. Anderson (1981) states that the skills of media literacy were to be used for “some purposeful action” while Barton and Hamilton (1998; as cited in Margaret Mackey, 2002, p. 5-6) asserts that media literacy is an action that is social. Sholle and Denski (1995) consider media literacy to be a critical perspective, while Silverblatt and Eliceiri (1997) concur and add that it “empowers” the development of independent judgment about media. Hobbs (1997) defines media literacy as the “ability to access, analyze, evaluate, and communicate messages in a variety of forms.”

Potter (2004) sees this variety in responses as proof of wide interest in the topic but a need to unify different perspectives. Hobbs (1997) echoes the 1992 Aspen Media Literacy Leadership Institute and repeated by the National Leadership Conference on Media (Aufderheide, 1993). This may indicate that this definition has taken root in the pedagogical perspective: the ability to access, analyze, evaluate and create media in various forms (Center for Media Literacy, n.d.a).

The proliferation of citizen action groups on media literacy demonstrates the diversity of perspectives (Potter, 2004). Yet there are common themes. The Action Coalition for Media Education seeks to “encourage critical thinking and free expression” while encouraging activism. The Alliance for a Media Literate America emphasizes “critical inquiry, learning and skill building” instead of “media bashing and blame” (AMLA, n.d.). Children Now focuses on critical thinking in young viewers. Citizens for Media Literacy proposes that through critical thinking the fabricated stories in advertising can be replaced with one’s own stories. The Coalition for Quality Children’s Media (KIDS FIRST!) teaches children to avoid programs with bias and seek programs with high artistic standards. The Media Awareness Network teaches children to read the media messages. Media Watch challenges “abusive stereotypes and other biased images” in the media. The National Communication Association defines media literacy as being able to understand the subtleties and blatancies of media messages. The American Psychiatric Association is unique in its focus on violence in the media and the need for conflict resolution skills. The National Leadership Conference on Media defines it as the ability to access, analyze, evaluate and communicate messages in a wide variety of forms of literacy. The National Telemedia Council defines it as mindful viewing by questioning,

responding thoughtfully and even producing media both in print and non-print formats. The New Mexico Media Literacy Project defines media literacy as the ability to critically consume and create media, and this gives freedom to the consumers of the media. The Northwest Media Literacy Project is about critical assessment of the media and awareness of its effect on our planet. Finally, the Office of National Drug Control Policy seeks to help consumers protect themselves against media messages that glorify drug use. While the most common themes are awareness and skill-based critical thinking; some groups specifically recognize the need for access and production, indicating that they have brought into the definition of “the ability to access, analyze, evaluate and communicate media in its various forms” as publicized most visibly by the Center for Media Literacy (Center for Media Literacy, n.d).

There is more to media literacy than understanding a specific message. Duran, et.al., (2008) argue for a contextual perspective on media literacy so that the media literate person is one who not only understands the text of a message, but the context as well. To know the context means to understand what types of persuasive messages exist in the media, why media messages look as they do, who creates the messages, when we are affected by media, where alternative media can be located, and how to be an activist for change. Critical thinking is a desired outcome of media literacy education, teaching students to deconstruct, analyze and evaluate (Yates, 2004).

Paradigm Shift

Media literacy is evolving from academic exercises in critical analogy to practical interventions for various public and personal health issues. Activist groups such as the

Alliance for a Media Literate America (2001), inspired by the critical pedagogy of Paulo Freire (1970, 1973), still emphasize the importance of critical thinking skills to empower citizens at home, work and school, or as voters. Freire's empowerment education would ideally lead to social and individual improvement. In today's results-oriented society media literacy education is now being used as interventions to improve personal and public health issues (Bersgma, 2004).

In recent years researchers have become interested in measurable outcomes of media literacy education. Reviews of the literature have appeared in journals (Singer and Singer, 1998; Livingstone and Helsper, 2006), and seminars (Carney, 2006). Singer and Singer (1998) found the literature to be strong in critical viewing pedagogy but weak in empirical studies, a deficit that occurred despite the growth in media conferences domestically and in Europe. This review concluded with a call to produce research that will convince school administrators of the value of media literacy. Like physicians who are presented with sick patients, the Committee on Public Education of the American Academy of Pediatrics (CPEAAP, 2001) diagnosed American children with "violence and aggressive behavior, sexuality, poor academic performance, body concept, self-image and nutrition; dieting, obesity, substance use and abuse patterns" (p. 423) and pinpointed media as the cause for poor health. Seven years after Singer and Singer's (1999) review, attention turned to the effects of advertizing upon children. Livingstone and Helsper (2006) argued that media literacy is the key to whether children, regardless of age, are affected by it. In their review of the growing body of media literacy studies centered on advertising and food choice they discovered that younger children were susceptible to non-argument issues while older children were more susceptible to the argument of the

advertisements. For future research they recommended giving attention to both older and younger children rather than the middle range and giving greater attention to the theory that supports the observed effects of advertising effects. Finally, they argue for a reinterpretation of the literature and its application to policy, an intervention and evaluation of media effects.

The most valuable systematic review of the literature on media literacy to date was done by Bergsma and Carey (2008) to determine the effectiveness of media literacy in promoting health education. They conducted a review of research studies since 1990 to discover the context and process elements of an effective health-promoting media literacy education intervention. Their methodology was a systematic review of the research that searched specific databases with specific keywords and found that the intervention setting, length, skills taught, and who taught the intervention were the dependent variables. Based on outcomes, they also assigned effectiveness ratings as their independent variable. For their key word search they used “media literacy,” “media education,” “television education,” and “media analysis,” in health related indexes. They reviewed study references and articles, books, reports, etc. and initially found a sample of 65 studies but through exclusion/inclusion principles they narrowed them down to 23 studies. Surprisingly, the vast majority of these studies were domestic: two of these studies were published in Australia, two were published in the Netherlands, and nineteen were published in the United States.

Specific criteria were used to justify inclusion or exclusion from Bergsma and Carey’s (2008) review. First, the authors reviewed studies from 1990 until July 2006 (the

most recent date available). The second criterion was peer-reviewed, publicly viewable studies available through a searchable index. In addition, the studies must include a thorough methodology. The intervention must be 25 minutes or more in length. It was assumed that extremely short interventions of five minutes, for example, could not teach media literacy skills. The study focused on teaching media literacy skills rather than media literacy being part of a larger curriculum. These skills were operationalized as the ability to access useful media, analyze media messages using critical thinking skills (identifying bias and source credibility; determining fact from opinion, identifying the purpose of a message), evaluate a message in terms of truthfulness and relevance, and create messages according to specific goals. This review deliberately excluded from study the interventions that taught resistance skills or strategies to limit exposure. Within the twenty-three studies that met the inclusion criteria were twenty-eight interventions.

The health issues in Bergsma and Carey's (2008) studies under review included violence prevention (six), body image distortion (1), nutrition (two) and eating disorders (nine). Some studies involved children (13), while others involved teens (seven) and the rest involved college students (3). Most of the studies had a control group (19) or two control groups (one), but three studies had no control group. The studies' interventions also varied in terms of setting, length, who taught the intervention, core concepts taught and effectiveness of the intervention. Nineteen interventions occurred during the regularly scheduled class time, three in school but outside of class, three in community groups, one both in-class and in community groups and two studies did not specify the setting. In many cases (11) the researcher delivered the interventions, but at least in one case was assisted by the instructor. Teen peers delivered four of the interventions; two of the

interventions were delivered by college students. Classroom teachers delivered the intervention in three cases. In one of the studies Girl Scout troop leaders delivered the intervention. In six studies the intervention deliverer was not specified.

The intervention lengths in Bergsma and Carey's (2006) review ranged from 25 minutes to 24 hours and were grouped into long (5 hours or more), average (1-5 hours) or short (less than one hour). There were eight long interventions, nine average, and 11 short. The interventions were categorized into the five core concepts: all media messages are constructed (all 28 interventions); media messages are created using a creative language with its own rules (17 interventions taught this); different people view the same message differently (19 interventions); media have embedded values and points of view (28 interventions); and most media messages are constructed to gain profit and/or power (thirteen interventions taught this).

Evaluating intervention effectiveness proved to be a challenge by the varied designs and outcomes of the studies in Bergsma and Carey's (2008) review. The outcome measures were grouped into the following categories: health issue, design of the study, theoretical framework, outcomes, pre- and post-test results, re-test results and elaborated results. No conclusion was drawn from the length of treatment, because both effective and ineffective interventions are both long and short in this study. This review found no study on the prevention of sexual practices. Most health promoting media literacy programs are conducted in schools; there is no data to suggest that non-school settings would be ineffective. This review of studies has provided insight for future research, which should focus more on behavioral outcomes rather than knowledge or attitudes.

Review of Studies

To inform this study of the effectiveness of the Dove Evolution video as a one-shot media literacy treatment, the review of the literature followed a strategy similar to Bergsma and Carey's (2008) landmark review. The inclusion criteria were more liberal due to the researcher's initial experience with the thinness of the literature. First, the search term "media literacy" in Dissertation Abstracts yielded empirical studies that were examined to gain familiarity with the empirical research, including various instruments and methodologies and cited sources in the field. Further, the databases used to find peer reviewed research were expanded to include databases related to the three bodies of literature that make up media literacy (Potter, 2004): ERIC for education, Communication Studies, Communication & Mass Media Complete for media studies, and PsycInfo and Sociological Abstracts for health intervention. In addition, health related databases were included in the search. To maintain consistency, the subject search was limited to "media literacy" (in quotation marks) and "intervention." On data bases that provided the option, "empirical studies" were selected.

The inclusion/exclusion search criteria yielded 25 studies, a sample size similar to the final number Bergsma and Carey (2008) found with their wider search (fielding suggestions from colleagues) but narrower criteria. The studies informing the current study fall into the following categories based on health issues or skills taught: eating disorders (8), nutrition (2), sexual objectification (4), smoking (4), critical viewing skills (3), violence (2), and adolescent decisions about alcohol use (1) and media skepticism (1).

As with the Bergsma and Carey (2006) review, this search found no empirical studies on media literacy as intervention concerning responsible sexual behavior.

A competent analysis of the literature is orderly and purposeful. If done well the literature review will accomplish certain things: explicitly justifies what is included in the study; gives the broader context of the literature, examines research methods to test whether stated claims are warranted, clarifies past findings and what is lacking; and synthesizes the literature to formulate a new perspective (Boote and Beile, 2005). It is important to be systematic and objective in reviewing the literature. Even studies in journals can be found to be unimpressive (Ward, Hall, and Schramm, 1975). As in Bergsma and Carey's (2008) review of the literature, these studies will be scrutinized for the outcomes of media literacy skills and concepts taught.

Media Literacy as Intervention for Critical Thinking Skills

Three studies dealt with critical thinking: (Tidhar, 1996; Desmond, 1997; Hobbs and Frost, 2003). Tidhar (1996) tested the intervention effectiveness of Israeli TV in teaching critical thinking skills in a controlled experiment carried out in ten kindergartens divided into pairs matched by characteristics and randomly assigned to experiment and control groups. The participants were 150 preschool children, approximately half of them were low socioeconomic background and half were middle class. The intervention lasted five months and consisted of a pretest and a posttest. Statistical analysis of the quantitative data indicated that the posttest scores increased for the experimental group. The experimenters concluded that the media literacy skill of critical thinking was successfully taught although there were many questions left for further study. Desmon (1997) tested

the efficacy of an at-home intervention for young children involving parents. The sample consisted of 73 inner city school children in either first or second grade. The study used a pretest/posttest with a control group, and students had either personalized or non-personalized books. The time between pretest and posttest was five months. The intervention attempted to teach media literacy concept one (media messages are created) and it tested their ability to distinguish between TV and reality. In teaching concept two (media messages are constructed using a creative language and special techniques) it taught them about special effects). In teaching concept five (media messages are constructed to gain profit) it taught them about commercials. The results of this study showed a significant increase in awareness of the television industry in general. This study worked better for the second-graders than the first-graders. Hobbs and Frost (2003) sought to test the effect of a yearlong media literacy curriculum upon high school juniors' ability to think critically. Using a demographically matched control group, the study showed the critical thinking skills of the experimental group improved. Other measures improved as well so that students in the experimental group gained the media literacy skills based on the five core concepts.

Media Literacy as Intervention for Alcohol Use

One of the most popular studies of media literacy as intervention is Austin and Johnson's (1997) study on third graders' decision-making regarding alcohol. This study used a Solomon Four-Group design, with a pretest, treatment and immediate posttest. It also utilized a delayed posttest given after three months to half of the participants. The participants were tested concerning alcohol advertisements in the categories of understanding persuasive intent, realism, social norms, similarity, desirability,

identification, expectancies, and violence. All five of the core concepts were addressed in this study. This study found an increase in understanding for many of the variables studied and effects remained strong for delayed posttest. This study is one of the most cited in the literature concerning media literacy interventions. However, the limitation is that it measures behavioral intentions; perhaps considering the limitations of using third-graders as participants, it could not be expected to do better than measuring the potential of alcohol use rather than its actual use.

Media Literacy as Intervention for Violence

Three studies were found concerning violence (Cantor and Wilson, 2003; Nathanson, 2004; and Rosenkoetter, et. al., 2004). Cantor and Wilson's (2003) review of the research demonstrates the role that adults can have in mitigating violence through comments during media exposure to violence. They also found that interventions vary by effectiveness according to age and sex and they call for more research to determine the best approaches by parents, and media literacy presentations to reduce aggression. Nathanson (2004) conducted an experiment using two approaches to modifying children's response to violence: evaluative and factual. Using two age groups, children aged 5-7 and children aged 10-12, Nathanson found that the evaluative approach, commenting on the morality of the acts depicted was superior to the factual approach (explaining the media production techniques to show that the violence wasn't real. In the case of the older children the factual approach might have detrimental results. This experiment taught media literacy core concepts one (media messages are constructed) and two (media messages use its own language). Teaching the older children the media techniques for simulating violence did not help as much as the evaluative comments (which would be

core concept four—media messages have embedded values and points of view).

Rosenkoetter, et. al. (2004) studied 177 children in grades one through three in a year-long study consisting of 31 brief lessons in a classroom setting. The lessons taught media literacy core concept one (media messages are constructed) by teaching that the media distorts violence. This intervention was successful in reducing aggressive behavior in boys and less viewing of TV violence and identification with violent characters with girls.

Media Literacy as Intervention for Smoking

Three studies were examined on the effect of media literacy on smoking: Banerjee and Greene (2007), Gonzales, et. al., (2004), and Pinkleton, et.al, (2007). Banerjee and Green (2007) studied two intervention workshops using a combination of analysis—based on core concept one (media are constructed messages) and production—teaching the media literacy skill of creating media). Inoculation theory framed this study of junior high school students. The most successful of the three conditions was the combination of analysis and production (Gonzales, et al., 2004). Although the non-diversity of this study was an admitted limitation, the study of a predominately Hispanic population was appropriate for the current trend of Hispanic youth smoking. Pinkleton, et. al, (2007) conducted a Solomon-Four Group experiment to test the effectiveness of a two-year media literacy curriculum using 723 participants. The study found that smokers and non-smokers were affected differently by the curriculum. This intervention effectively taught media literacy core concepts one (media are constructed) and five (media messages are created for profit).

Overall these studies on smoking and media literacy set out to accomplish the most basic media literacy objectives, awareness of the nature of media messages. What remains is to discover whether the acquisition of media literacy skills affects tobacco use.

Media Literacy as Intervention for Sexual Objectification

More recent studies have examined sexual objectification (Reichert, LaTour, Lambiase, and Adkins, 2007; Choma, Foster, and Radford, 2007) and internalization of the media ideal (Yamamiya, et. al., 2004). Reichert, et al (2007) studied the effect of a media literacy video that detailed how women are displayed as sexual objects. As expected from previous research, women reacted negatively to media portrayals as compared to women in the control group. However, men were not affected by the treatment. This study supported a strong gender effect that needs to be explored in future studies. Choma, et al (2007) conducted two studies using the video Slim Hopes and objectification theory as the theoretical framework, with the distinction made between state self-objectification (viewing self as an object when in certain situations) and trait self-objectification (the individual tendency to view self as an object). Exposure to the Slim Hopes video had multiple effects. Negatively, the video heightened self-objectification in both studies, even after controlling for trait self-objectification. On the positive side, however, the viewing of the video seemed to overall empower the participants in the study. The study was limited by the sample size (white young women and older adolescents), relatively small effect sizes of various scores, and the context (non-clinical population). Yamamiya, et al. (2004) investigated why not all women are affected by exposure to the media ideal and tested internalization as a moderating variable. In two experiments, 123 young college women were studied. Women who were high in

internalization were affected by exposure to the media ideal. The media literacy treatment taught core concept one (related to critical thinking) helped reduced the adverse reaction of the media.

Media Literacy as Intervention for Eating Disorders

Some researchers have studied the food preferences of children to develop media literacy curricula as educational tools to foster good eating habits (Hindin, Contento, and Gussow, 2004). Others have studied the impact of a food preference media literacy intervention on parents (Evans, et. al, 2006). While these studies are more educational than interventional they are important to lay the foundation of good eating habits into teenage and college years.

Pathological eating disorders have received an increasing amount of attention and the studies are adding to the body of knowledge. Research expanded to include variations in the population. Kalodner (1997) broke new ground by studying non-eating-disorder college students (usually a control group), and Coughlin and Kalodner (2006) studied college women at both high- and low-risk for eating disorders using a specific media literacy program called ARMED. Further progress in the research occurred as Watson and Vaughn (2006) investigated the relationship of a media literacy treatment's length to its effectiveness finding that shorter-term treatments are not as effective as longer-term treatments. Stice and Ragan (2002) developed a more intense psychoeducational intervention with some success. Bissell (2006) found that one's desire to be thin to be linked with her visual literacy.

Research on body image progressed as well. A video called “Slim Hopes was compared with two media-literacy programs to study the effect of media skepticism (Irving and Berel, 2001). Cafri, et al. (2005) found three sociocultural factors associated with negative body image: awareness, internalization and pressure to achieve a thin ideal. Calogero (2005) identified self-objectification (the tendency to view one’s body as an object) as a link to eating disorders. Research by Buchholz, et. al., (2008) has expanded the body image literature to include female athletes in a study of the media literacy curriculum BodySense. These studies are discussed below.

To test the ability of externally- vs. internally-oriented interventions to promote skepticism toward the media and reduce negative body image, Irving and Berel (2001) compared a video-only intervention to a no-intervention and two different interventions, externally-oriented and internally-oriented. The authors were aware that targeting awareness of the media ideal of thinness might not be enough to affect body dissatisfaction and therefore sought to use the internally-oriented intervention to accomplish it. It was hypothesized that an externally oriented intervention could raise critical awareness of the media but not reduce the internalization of the media ideal of thinness. It was also hypothesized that an internally-oriented intervention could reduce internalization of the media ideal of thinness and therefore could reduce body dissatisfaction. The interventions fell into two categories: internalization and externalization. The methodology was to use 110 female college students randomly assigned into four groups: no intervention (n=24), a video-only intervention (n=28), an externally-oriented media literacy intervention (n=27) and an internally-oriented media literacy intervention (n=31). The sample was derived from responses to a questionnaire

given to undergraduate psychology students six weeks prior. The two intervention conditions consisted of a 15-minute video followed by a structured discussion, for a total of 45 minutes. The video-only condition consisted of a viewing of the video followed by an informal discussion. In all four conditions the research participants completed a questionnaire at the end and the control group participants completed a questionnaire only. Four types of measures were taken: body image, media skepticism, media activism intentions and affect. Body image was measured by the Eating Disorders Inventory-Body Dissatisfaction Scale (Garner, 1991), the *Physical Appearance State and Trait Anxiety Scale-Weight Scale* (PASTAS-W; Reed, Thompson, Brannick, & Sacco, 1991), and the Sociocultural Attitudes Toward Appearance (SATAQ; Heinberg, Thompson & Stormer, 1995). Media Skepticism was measured by the Media Attitudes Questionnaire (MAQ; Irving, DuPen, & Berel, 1998). Media activism intentions were measured by the number of postcards mailed to About Face, a media activist group based in San Francisco. Finally, affect was measured by the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988). The interventions fall into two categories: the external and the internal. The external oriented intervention taught critical thinking and media activism, while the internal oriented intervention taught the identification of faulty thinking leading to negative body image. Several limitations were admitted: the short length (45 minutes) of the intervention; the differences in participants and non-participants and motivation of the participants (required by the course); participant responses that may not have been candid because of surroundings; the focus on the study on media and thus the failure to account for family and friends as sociocultural influences; and the lack of a pretest assessment of body image and internalization variables. Irving and Berel (2001)

found that media literacy can effectively teach critical thinking toward the media and that a longer-term study should be instigated to intervene with women's negative body-image and internalization of the thin-ideal (p. 110).

Dissatisfaction with the limited effectiveness of eating disorder prevention programs led Stice and Ragan (2002) to a more intense psychoeducational approach. In contrast to Irving and Berel (2001), who focused on the role of media in sociocultural factors that influenced internalization of the beauty ideal, media literacy was merely a part of this broader intervention. Two key elements that differed from Irving and Berel (2002) are scope and time, focusing on broader socio-cultural factors (family, friends) and lasting for four months rather than 45 minutes. The method for the study included a sample of 88 female college students who had enrolled in upper division psychology courses. Participants completed a pretest and posttest survey. The intervention was a seminar on eating disorders that met two times per week for a 15-week semester. The meetings involved presentations, class discussions, a guest lecture, and student presentations at the end of the semester. Measures included the thin-ideal internalization, measured by the Ideal-Body Stereotype Scale-Revised (IBSS-R; Stice and Agras, 1998); body dissatisfaction, measured by an adapted form of the Satisfaction and Dissatisfaction with Body Parts Scale (Berscheid, Walster, and Bohrnstedt, 1973); dieting, measured by the Dutch Restrained Eating Scale (DRESS; van Strien, Frijters, Van Staveren, Defares, and Deurenberg, 1986); depressive symptoms, measured by the Beck Depression Inventory (DBI-II; Beck, Steer, and Garbin, 1988); eating pathology, measured by the Eating Disorder Diagnostic Scale (EDDS; Stice, Telch, and Rizvi, 2000); fat consumption, measured by the Fat-Related Diet Habits Questionnaire (Kristal, Shattuck, and Paterson,

1999); and body mass, measured by the Body Mass Index (BMI; Garrow and Webster, 1985). The resulting analyses revealed that participants decreased their scores in thin-ideal internalization, body dissatisfaction, dieting, eating disorder symptoms, and body mass while the control group did not (p. 167). The researchers admitted these four limitations: the lack of random assignment, the lack of a placebo-controlled condition, lack of follow-up to see if effects are lasting, and the lack of a large sample size (p. 169). Looking ahead, the authors suggest a larger randomized sample size and a placebo-controlled treatment for further research.

The concern about girls' eating disorders carried over to boys as Wilksch, et al (2006) studied the effectiveness of school-based media literacy lessons in lowering the internalization of the media ideal, a risk factor in eating disorders. Internalization, the extent to which an individual buys into the ideal body type typified by the media (thinness for girls, muscularity and athleticism for boys and increasingly for girls) was measured by the SATAQ-3 (Thompson, et al., 2004). Eating disorders are increasingly found among boys, who suffer body dissatisfaction and stress as their bodies deviate from the media ideal of muscularity (Cohane, 2001). In this study, Wilksch, et al, (2006) selected eleven classes of 8th grade students from three different private schools who agreed to participate in this study. There were 237 students (100 females and 137 males) with an average age of 13.79 years (SD=.42). The classes randomly received one of six 50-minute media literacy lessons given during the time normally devoted to the subjects of religion, science and physical education. The students filled out baseline questionnaires during the class before the media literacy lesson began. Questionnaires concerning eating disorders included the following: the Eating Disorders Examination (EDE-Q), the Eating Disorders Inventory

(EDI), the Self-Perception Profile-Adolescents; and the Dutch Eating Behaviour Questionnaire- Revised (DEBQ-R). Depression was measured by the Children's Depression Inventory-Short Form (CDI-S). Pressure to have the ideal body was measured by the Perceived Sociocultural Pressure Scale, adapted to include male participants. After the media literacy lesson internalization was measured by the SATAQ-3. Statistical analyses included the tests for main effects and for interactions of gender and time using a mixed between-within analyses of variance (ANOVAs). At baseline, girls showed more risk for eating disorders than did boys and scored higher on the SATAQ-3 on four of the five subscales than did boys. Boys also had lower scores on the subscales than did girls at post-intervention and a reduction of their scores of the information, internalization-general, internalization-athlete, and internalization-total subscales. On the other hand, the score of girls' internalization was reduced. For both male and female the internalization-general subscale score reductions had the largest effect size (males: $t(95)=3.68$, $p<.001$; females: $t(78)=2.39$, $p=.019$ (Wilksch, et al., 2006). Perhaps the most striking finding is that there were no significant differences in scores among the nine classes that received a single media literacy lesson and the two classes that received two media literacy lessons. The study was limited by the following deficiencies: an absence of a control group and a follow-up measurement, the limited sample size and the exclusive use of private schools (Wilksch, et al., 2006). However, this study seems to warrant the inclusion of males in future eating disorder curriculum.

Watson and Vaughn (2006) tested the length and effectiveness of a media literacy intervention, measuring awareness and internalization of sociocultural ideals as well as body dissatisfaction. Using two classes at two private universities they assigned a total of

54 female students into four conditions, based upon the availability of the subjects: a video-only treatment (n=12); a single-lesson treatment (n=12); a longer, multi-session treatment (n=16) and a control group with no treatment (n=14). Two questionnaires were used. The Body Esteem Scale (BES; Francois and Shields, 1984) measures body dissatisfaction through a five point rating of 35 aspects of one's body. The Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ; Heinberg, et. al., 1995) measures awareness of the media ideal and internalization of the media ideal. The interventions occurred at the same time relative to the pretest. The short-term intervention occurred four weeks after the pretest: subjects watched the 34-minute film, *Killing Us Softly III* by Jean Kilbourne (1998) and then participated in a nearly hour-long discussion that addressed external factors (media content) and internal factors (thoughts leading to body dissatisfaction). The long-term intervention began one week after pretest, lasting one and one-half hours per week for four weeks for a total of six hours. The same film was viewed and the same issues were covered (external and internal factors) as were in the short-term intervention, although the lessons were structured differently. The video-only intervention occurred four weeks after the pretest; subjects viewed the video, took the posttest and were dismissed. Finally, the subjects of the no-treatment intervention merely took a posttest four weeks after pretest. The long-term intervention was the only treatment to produce a significant difference on awareness of the sociocultural ideal from pretest to posttest, and this change was a decrease in the awareness score. Thus, Watson and Vaughn have concluded that "neither long-term nor short-term media literacy interventions have the potential" to increase sociocultural ideals awareness (p. 395), that internalization of the media ideal can be reduced by either long-term or short-term interventions and that body

dissatisfaction can be reduced more effectively using long-term rather than short-term media literacy interventions. The authors admit the several obvious limitations to their study. First, the sample size was small (n=54); second, the groups were of unequal size (n=16, 12,12, 19); third, the sample was not random, as students chose the condition that was convenient for them, and finally, there was no follow-up measurement to determine effects. The results were mixed: body dissatisfaction is best handled or treated by a longer term media literacy treatment but the internalization of the sociocultural ideals can be helped by both long and short-term interventions. Byrne (2008) investigated the length of effective media literacy treatments through a study of 199 4th and 5th grade students' response to violence intervention. The children were randomly assigned to one of three treatments or a control. The children were tested at four different times to measure their aggressive tendencies. The treatments were either a lecture only, a lecture with a cognitive activity or a third type of lesson. The results were surprising: although the lesson with cognitive activity reduced the participants' willingness to engage in aggressive behavior, the lesson without the cognitive activity increased it.

Negative body image is contextually influenced (Cash, 2002). Yamamiya, et.al (2004) built upon this notion through a psychoeducational approach to media literacy that accounted for the negative body image state according to internalization tendencies. This study was based on two previous studies: one was a psychoeducational study that used messages critical of the media before exposure to moderate internalization of the media ideal (Posavac, Posavac and Weigel, 2001) and the other study was an intervention to interrupt the social comparison process through dissonance-inducing exercises (Stice, Chase, Stormer, and Appel, 2001). Their study involved 123 white female college

students who were between 18 and 29 years old ($M=21.4$, $SD=2.86$). Non-whites were excluded from the study because the visual materials depicted only white women. The intent was to insure that any social comparison process would not be contaminated by a race effect. The Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ-3; Thompson et. al., 2004) was given a few days prior to the intervention. Participants were randomly assigned to four groups. The experimental group was shown twenty photos of thin white models from magazines while the control group was shown photos of automobiles. Each slide was shown for 15 seconds followed by a blank slide for 15 seconds to allow response time. In addition to slides, the experiment tested the effect of information given to participants during the experiment: the control condition utilized information about parenting, while the experimental conditions contained informational psychoeducational material adapted from interventions in Prosavac, et. al., (2001). Thus, the four groups used these conditions: Media information/model slides ($n=28$), media information/dissonance-induction/ model slides ($n=32$), control information/model slides ($n=33$), control information/control slides ($n=30$). The study was presented to participants as a research study on consumer preferences about model's clothes or automobiles. Participants then received control information or psychoeducational information by audiotape and then completed an evaluation of the audiotape. In the dissonance condition the participants listed persuasive arguments. Finally the participants completed the Body Image States Scale (BISS; Cash, et.al., 2002), a six-item questionnaire that measures one's current rating of body appearance. This questionnaire had an internal consistency of .87 in this study. Four hypotheses were tested. First, exposure to the thin media ideal had an adverse effect on body image for high internalization women. Second, media literacy

information given before exposure to the media-ideal images reduces the negative impact on body image. Third, the combination of media literacy and dissonance-inducing activities reduces the negative impact of exposure to the media ideal on body image when internalization is high. Finally, the BISS scores in both groups did not differ significantly regardless of internalization.

College women at high risk for eating disorders were compared to low-risk women in a media literacy prevention intervention by Coughlin and Kalodner (2006). The study focused on the effectiveness of the ARMED (Acknowledging and Rejecting the Media's influence on Eating and body image Disturbance) curriculum as prevention for eating disorders. The experimental group consisted of high risk persons (n=19) and low risk persons (n=26) and the control group consisted of high risk persons (n=16) and low risk persons (n=31). Recruitment came from four undergraduate classes and excluded males. The study consisted of two media literacy interventions lasting 90 minutes each. To determine which participants were high-risk, the Questionnaire for Eating Disorder Diagnosis (Q-EDD; Mintz et al., 1997) was administered one week prior to the first media literacy treatment. The results of this study were that women who had tested to be at high risk for eating disorders reported changes in scores that were statistically significant in the categories of body dissatisfaction, internalization of the ideal beauty standard, desire to be thin and feelings and self-esteem as compared to the high-risk control group. However, these high-risk participants did not report changes in awareness of the beauty ideal, in perfectionism or in physical beauty comparison.

Media literacy interventions take a variety of forms: printed material, oral presentation, media presentation (audio-visual), or a combination. Bissell (2006) examined the effect of visual literacy on the desire to be thin and the tendency toward eating disorders. It was hypothesized that subjects who were exposed to statements explaining the manipulations of media images to portray thin models would experience a reduction in body image distortion and a reduction in desire to look like the model shown. This study involved 124 college women from several communications classes, who were randomly assigned to one of three groups. In the first condition, subjects were shown models from magazines and then given a media literacy treatment that consisted of statements describing the practice of digital manipulation, and then answered a questionnaire. The second condition was a control group wherein the visual literacy treatment was omitted. The third condition omitted both the visual stimulus and the visual literacy statement.

Despite the research on social comparison theory (Festinger, 1954) that skepticism would likely disrupt the social comparison process between the viewer and the image of the media ideal, the intervention failed to significantly reduce participants' desire to look like the media ideal. This occurred despite prior knowledge of digital image manipulation. The author faults the robustness of the visual literacy statement and the participants' processing of it, and offers cultivation theory as the explanation, noting that respondents who scored higher on media exposure were more likely to have higher scores on the eating disorder subscales. Cultivation theory states that greater exposure of media leads to increased similarity between the viewer's perception of reality and media content

(Gerbner, 1998). Further research is suggested that a different visual literacy statement or visual stimulus might have more of an impact.

Choma, et al. (2007) used objectification theory to explore the inconsistency of media literacy to reduce the risk of eating disorders. Objectification is the negative effect of viewing oneself from the third person and is situational, occurring most strongly in certain situations. If the media is seen as a pervasive influence that induces self-objectification, then media literacy treatments that call attention to appearance may actually increase feelings of objectification. Two studies were conducted. The first study was qualitative and involved 50 college undergraduate women who viewed a media literacy video called *Slim Hopes* (Kilbourne, 1995) then completed three open-ended questions about it. The popular 30-minute video focused on the thinness obsession in advertizing. The data was initially analyzed through “open coding” (Strauss and Corbin, 1998) to allow thematic categories to formulate. Four general themes emerged: “critical thinking, positive emotions, no change, and negative emotions” (Choma, et.al, 2007, p. 583). The open-ended answers were also coded for state objectification classified as such when participants made comments about their bodies (Fredrickson, et. al., 1998). Almost one-half of the participants (48%) wrote comments about their bodies suggesting that Slim Hopes can induce self-objectification (p. 585). The second study was a quantitative study to identify the relationship of trait self-objectification (TSO; the permanent tendency to view self as a sexual object) to state self-objectification (SSO; the temporary situation inducing self-objectification). In this study, 366 undergraduate women aged 17-25 years ($M=18.65$, $SD=.88$) were randomly assigned to two groups. Each group completed a questionnaire measuring TSO before watching the video. The experimental group watched

the *Slim Hopes* video (Kibourne, 1995) and the control group watched a wildlife video. After viewing the video, participants in each group completed a questionnaire that measured SSO, esteem concerning body, performance and social situations as well as positive and negative affect. The results indicated that the media literacy treatment *Slim Hopes* increased SSO and induced negative moods more than the control video. However, the positive effect of the experimental video was increased awareness of the slim ideal of the media messages. Performance esteem was also increased, but no differences between the experimental and the control groups were detected in measurements of body esteem and self-esteem. The authors admit several limitations: the lack of generalisability to non-white, non college students; the population not being at risk for eating disorders; and the small effect sizes for performance esteem, awareness and affect. Future research was suggested to focus on the affect of state self-objectification (SSO).

The majority of research suggests that body dissatisfaction is often the result of exposure to media content that depicts the sociocultural ideal of attractiveness, especially in females (Green & Pritchard, 2003; Hargreaves & Tiggemann, 2002; Ogden & Munday, 1996). This relationship is moderated by the tendency to make social comparisons (Shaw and Waller, 1995) and the tendency to internalize the sociocultural ideals of attractiveness (Heinberg, et. al., 1995).

Theoretical Framework

Social Comparison Theory explains our tendency to draw conclusions about ourselves after comparing ourselves with others (Festinger, 1954). Social comparison can be made with others who are superior or inferior (Wood, 2000) and even fictional persons (Wood, 1996). Upward comparisons are made with those perceived to be higher in social status and serves as an incentive to make self-improvements. These upward comparisons tend to depress mood while downward comparisons serve to enhance self-esteem (Wills, 1991).

Three sociocultural factors are associated with negative body image: awareness of the thin ideal, internalization of the thin ideal and perceived pressures to achieve a thin ideal (Cafri, et al., 2005). The majority of media images represent the media ideal (Watson and Vaughn, 2006) so that media exposure increases awareness and is related to eating disorder symptoms (Stice, Schupak-Neuberg, Shaw and Stein, 1994). Not all women are so directly affected by media images (Bessenoff, 2006) but those who internalize the thin-ideal portrayed by the media are likely to suffer body dissatisfaction (Stice, Nemeroff and Shaw, 1996). Sociocultural pressure to be thin is experienced by preadolescent girls, who then suffer from body dissatisfaction (Blowers, et.al. (2003). The Sociocultural Attitudes Toward Appearance Questionnaire (SATAQ-3; Thompson, 2004) assesses these three measures.

An important product of socialization is skepticism toward the media. In Mangleburg and Bristol's (1998) socialization model of skepticism toward the media, skepticism is developed through interaction with parents, peers, and the media, three

socialization agents. Media skepticism is the feeling of mistrust toward the mainstream news media, and expresses itself in a general distrust of media credibility, reliability and objectivity (Tsfati and Cappella, 2003). In the business of advertizing, consumer trust is a valuable but sometimes elusive commodity. In the pharmaceutical industry, consumers are skeptical toward prescription drug advertizing occurs despite the believability of the advertisements (Diehl, Mueller, and Terlutter, 2008).

Skepticism can work well if it diverts consumer attention to a course of action desired by the advertiser. Dove Soap Company commissioned an advertising agency to produce a short film exposing the techniques in advertizing that result in images that are unattainable. The Dove Evolution film was launched on the Internet as part of the Dove Campaign for Real Beauty to induce skepticism in the media ideal of thinness and beauty. Through a high-speed demonstration of makeup techniques and digital manipulation followed by an invitation to support Dove's self-esteem workshop the film may be a successful intervention by implicitly teaching at least four of the core concepts: all media messages are constructed; media messages are created using a creative language with its own rules; different people view the same message differently; media have embedded values and points of view; and most media messages are constructed to gain profit and/or power (Center for Media Literacy, n.d.c.). The popularity of this video, as evidenced by the record number of hits, indicates that it is at least memorable. Will this attribute translate into an effective media literacy intervention?

Summary

A review of research literature has been presented in this chapter to inform the present study. A description of the field of media literacy as a convergence of three main ideas was discussed. Prior empirical studies of media literacy as interventions have demonstrated that media literacy concepts can be applied to effect positive results in measures concerning such health issues as alcohol use, violence, sexual objectification and eating disorders. More work needs to be done on discovering the affect on behavior.

The next chapter will discuss the research methods used to implement this study, including the design, sample, and treatment. Chapter Four will discuss the results of the data analysis. Finally, Chapter Five will discuss the conclusions of this study, the limitations of this study, the recommendations and the implications for future research.

CHAPTER THREE: METHODS

Introduction

The purpose of this chapter is to provide information about the methodology and procedures used to obtain data for this study. Information collected involved college students at the University of Central Florida during the fall 2008 semester. Chapter Three is organized into the following sections: population, treatment, measurements, factor analysis, and procedure. These sections are discussed below.

A Solomon four-group design with random assignment to the different conditions was used to test the effectiveness of a one-shot media literacy treatment. The purpose of the Solomon four-group design is to control for the effects of pretesting and for the effects of the interaction of intervention and pretesting (Dureya, et.al., 1988).

Methodology

Population and Design

In an attempt to find samples that would be identical in condition, a search was made of the communication classes at the University of Central Florida. Four communication classes were found meeting on the same day, taught by the same instructor, in the same classroom, with the same number of students enrolled per class. With cooperation from the instructor and permission received through the Institutional Review Board at the University of Central Florida, the four sections were randomly assigned to one of four treatments: condition one consisted of a posttest; condition two

consisted of a pretest, no treatment and a posttest; condition three consisted of treatment followed by posttest; and condition four consisted of a pretest, treatment, and posttest.

The subject matter was identical in the four classes on the day of the survey. The course was entitled, “Fundamentals of Speech Communication” and the topic on the day of the research was “communication anxiety” as scheduled in the course syllabus. Specifically, the causes of communication anxiety, the manifestations of it, and strategies to reduce it were covered.

Treatment

The media literacy treatment was Dove’s film, called “Evolution,” a fast-paced depiction of the transformation of a plain young woman with normal facial blemishes into a glamorous model. In “Evolution,” there are three time-lapse sequences. In the first sequence a four-hour cosmetic makeover of the young woman is compressed into a sequence lasting 17 seconds. In the second sequence a simulated magazine photo shoot of the woman is compressed into two seconds. In the third sequence, one of the multiple images of the woman’s new, almost-perfect look is then digitally manipulated: her neck is lengthened, then reshaped; her eyes are enlarged; her head shape is altered, her right ear is reduced and her skin is further retouched in a sequence compressed to 10 seconds. The now-perfect image is then seen on a billboard advertizing makeup as passers-by take notice. “Evolution” ends with a trailer: a white-lettered caption on a black screen states, “No wonder our perception of beauty is distorted” followed by “take part in the Dove Real Beauty Workshop for Girls.” The final image is the Dove logo and the caption “the dove self-esteem fund” on a bright background. Dove is a subsidiary of Unilever, which

manufactures the Axe line of men's personal care products (Unilever.com). In contrast to the plea for real beauty of the Dove commercial, the advertisements for Axe men's products are so sexualized that they are not seen on broadcast television (theaxeeffect.com).

Measurements

Permission was given by the author of the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3; Thompson et. al., 2004). The SATAQ-3 is a 30-item questionnaire that measures one's attitude toward appearance as portrayed in the media through internalization, felt pressure, importance of the media for beauty information and desire to have an athletic body (See Appendix A.). It uses a 5-point Likert Scale with responses ranging from Strongly Disagree (1) to Strongly Agree (5). Higher scores indicate greater agreement with the media ideal of thinness and beauty, with the exception of eight reverse-keyed items. The SATAQ-3 has an overall excellent reliability (Cronbach's $\alpha=.95$) (Thompson et. al., 2004).

In this study, a modified version of the 30-item SATAQ-3 was used by paring down the items into ten pretest questions and ten posttest questions. Four subscales of the SATAQ-3 were represented: Awareness of the importance of the media ideal (questions 1,7,9 on pretest and 1,7, 9 on posttest); Internalization of the media ideal (questions 2,4,6,8,10 on the pretest and 2,4,6,8,10 on the posttest); Pressures to be thin (question 3 on both the pretest and the posttest) and Athleticism (question 5 on both pretest and posttest). Reverse coded questions were questions 6 and 8 on the pretest and questions 3,5,6,7 on the posttest (See Appendix B.).

The modified scale, called “The Media and You” was tested for reliability. In the current study, The Cronbach’s alpha coefficient was .875 for the pretest and .855 for the posttest (see below).

Factor Analysis of “The Media and You” Pretest

Eight of the ten items of “The Media and You” Pretest were analyzed through principal components analysis (PCA) using SPSS version 16.0. Items #3 and #5 were omitted because each was a single component of the *pressures* and *athlete* subscales, respectively. The majority of coefficients were above .3 in the correlation matrix. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was .795, above the recommended threshold of .6 (Kaiser, 1974), and the Barlett’s Test of Sphericity (Bartlett, 1954) value was significant ($p=.000$). Thus, the use of factor analysis was supported.

Principal component analysis revealed two components with eigenvalues greater than one, explaining 51.45% and 19% of the variance. The screeplot depicted a clear break after the second component. Cantell’s (1966) scree test confirmed the decision to retain only two components.

The two-component solution explained a total of 70.45% of the variance. Oblimin rotation was performed and the rotated solution revealed a simple structure (Thurstone, 1947) with strong loadings on both components, and every variable loading on a unique component.

Table 1 Rotated Component Matrix of the "Media and You" Pretest

	<i>Internalization</i>	<i>Importance</i>
Comparison to TV & movie stars (Pre2)	.903	
Comparison to people in magazines (Pre4)	.820	.321
No comparison to people on TV (Pre6)	.820	
No comparison of bodies of people in magazines (Pre8)	.672	
Comparison of bodies of people on TV (Pre10)	.748	
Importance of magazine ads for fashion and attractiveness info (Pre1)		.874
Importance of TV programs for fashion and attractiveness info (Pre7)		.899
Importance of movies for fashion and attractiveness info (Pre9)		.761

Factor Analysis of "The Media and You" Posttest

Eight of the ten items of "The Media and You" Posttest were analyzed through principal components analysis (PCA) using SPSS version 16.0. Items #3 and #5 were omitted because each was a single component of the *pressures* and *athlete* subscales, respectively. The majority of coefficients were above .3 in the correlation matrix. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was .818, above the recommended threshold of .6 (Kaiser, 1974), and the Barlett's Test of Sphericity (Bartlett, 1954) value was significant ($p=.000$). Thus, the factorability of the correlation matrix was supported.

Principal component analysis revealed only two components with eigenvalues greater than one, explaining 48.6% and 18.4% of the variance. The screeplot depicts a clear break after the second component. Cantell's (1966) scree test confirmed the decision to retain only two components.

The two-component solution explained a total of 67.0% of the variance. Oblimin rotation was performed and the rotated solution revealed a simple structure (Thurstone, 1947) with strong loadings on both components, and every variable loading on a unique component.

Table 2 Rotated Component Matrix of the Media and You Posttest

	<i>Internalization</i>	<i>Importance</i>
Comparison of body to magazine models' (Post 2)	.727	
Comparison to music video models (Post 4)	.878	
No comparison of body to bodies on TV (Post 6)	.634	
Comparison of body to bodies in movies (Post 8)	.796	
Comparison to people on TV (Post 10)	.824	
Importance of magazine pictures for fashion and attractiveness info (Post 1)		.866
Unimportance of movie stars for fashion and attractiveness info (Post 7)		.788
Importance of TV ads for fashion and attractiveness info (Post 9)		.786

Procedure

The instructor allowed time within the class for the treatment and survey instrument. As agreed, the experiment took no more than 15 minutes out of the total class time of 75 minutes. At the beginning of class, the instructor introduced the researcher and then left the room during the test. The survey was distributed in brown envelopes, along with the required information about the experiment from the Institutional Review Board. All students had to be 18 years old or above to participate. Participation in the survey implied that a student was of age to consent. One student admitted being too young and did not participate. In two sections, conditions two and four, the participants were administered the pretest at the beginning of class and instructed to place the survey back in the envelope until later. The two sections that watched the film (conditions three and

four) saw it at the end of class, just before the posttest was administered. The design of the study was to put as much class time as possible between the pretest and posttest (approximately one hour) and as little time as possible between the treatment and the posttest (one minute). At the end of each condition, the survey was placed inside the unmarked brown envelope and placed randomly in a pile in the front of the class.

The survey data was coded by two volunteers. The volunteers input the data into a spreadsheet as recorded on the survey sheet. Open comments were also recorded for use in the discussion of the significance of the research. In cases where a participant filled out the wrong side of the survey (i.e., pretest instead of posttest), the participant's numeric data was omitted from the analysis. Although the enrollment for each of the four classes was 32 students, the final sample size for the four groups was $n=30$ for group one and $n=26$ for groups two, three and four.

For analysis, the data was imported from the Excel worksheet into the statistical program Statistical Package for the Social Sciences (SPSS, version 16).

Summary

This chapter presented the methodology of this study, including a discussion of the population, data collection, and data analysis procedures in detail. The next chapter will discuss the results of the data analysis. Chapter Five will then conclude the study by discussing the findings and recommending suggestions for future research.

CHAPTER FOUR: RESULTS

Introduction

The previous chapters have served to explain the preparation for this study. Chapter One gave an introduction of the problem of living in a media saturated society and the promise of media literacy in dealing with it. Chapter Two presented the review of the related literature, focusing on empirical studies of media literacy as intervention for health related issues. Chapter Three outlined the methodology used to obtain and analyze data. The purpose of Chapter Four is to report and analyze the data collected.

Analysis

The scores of *The Media and You Survey* which is the modified Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3; Thompson, et al., 2003) were analyzed through the Statistical Package for the Social Sciences (SPSS Grad Pack, version 16.0). The items that were negative statements (i.e., containing “not”) were reverse coded. The comments entered in the comments section of the questionnaire were collected as well.

Hypothesis 1

In order to test hypothesis 1, *The treatment of the Dove Evolution video will increase awareness of the media ideal*, a univariate repeated measures analysis of variance with one between factor was conducted on the pretest and posttest importance scores of groups two and four. There was a statistically significant change from pretest ($M=3.14$, $s=.78$) to posttest ($M=2.65$, $s=.98$) and a significant main effect for importance $F(1,50)$

=6.402, $p < .05$. Over 11% of the variance was explained by the change in importance scores from pretest to posttest. (See Table 3).

There was no difference in score between the control and experimental groups $F(1,50) = .359, p > .05$, suggesting no difference in the treatment between groups. Only .7% of the variance was explained by the difference in score between groups.

There was a statistically significant interaction between group and change in importance scores, $F(1,50) = 5.186, p < .05$. Over nine percent of the variance in importance scores was explained by the interaction between group and importance.

Table 3 Results of the Repeated-Measures Analysis of Variance of Importance Scores

Source	<i>df</i>	<i>F</i>	<i>Sum of Squares</i>	Partial η^2
Within Subjects Effects				
Importance	1	6.402*	1.709	.114
Interactions				
Change in Importance by Group	1	5.186*	1.385	.094
Error (Importance)	50			
Between Subjects Effects				
Group	1	.359	.615	.007
Error	50			

Note. * $P < .05$, ** $P < .01$

The mean scores of the experimental group four decreased from 3.14 to 2.64 from pretest to posttest, as indicated by the rectangular markers. The mean scores of the control group

remained relatively unchanged from pretest to posttest, as indicated by the diamond-shaped markers as displayed in Figure 2.

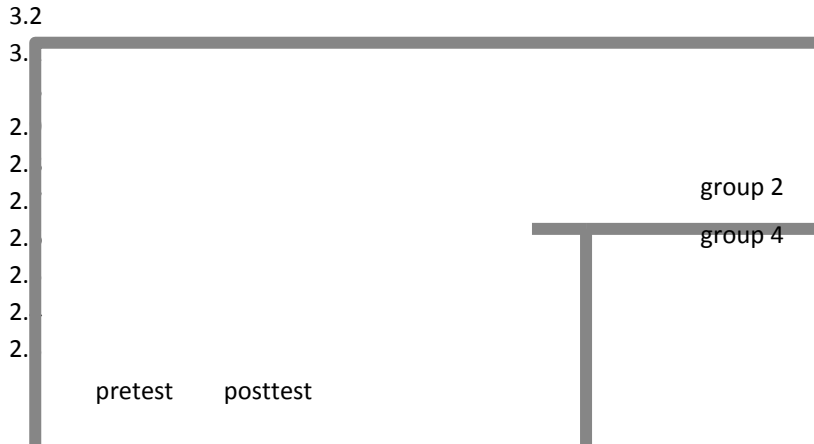


Figure 2: Importance (awareness) scores for groups 2 and 4 pretest and posttest

A one-way analysis of variance (ANOVA) was conducted to compare the Importance score at posttest across groups. The means and the standard deviations for each group are listed in table seven. There was no statistically significant difference across groups for the mean scores of the importance measure, $F(3,104)=.427, p>.05$.

Hypothesis 2

In order to test hypothesis 2, *The Dove Evolution film will decrease internalization of the media ideal*, a univariate repeated measures analysis of variance with one between factor was conducted on the pretest and posttest internalization scores of groups two (pretest, posttest) and four (pretest, treatment and posttest). There was no statistically significant change from pretest ($M = 2.94, s = .94$) to posttest ($M = 2.70, s = .80$),

$F(1,50) = .091, p = .764$. Only .2% of the variance was explained by the change in internalization scores from pretest to posttest. (See Table 4).

There was no difference in score between the control and experimental groups $F(1,50) = .146, p = .704$, suggesting no difference in the treatment between groups. Only .03% of the variance was explained by the difference between groups.

There was no significant interaction between group and *internalization*, $F(1,50) = 3.474, p = .068$. Over six percent of the variance can be accounted for by the interaction of group and internalization.

Table 4 Results of the Repeated-Measures Analysis of Variance of Internalization Scores

Source	<i>df</i>	<i>F</i>	<i>Sum of Squares</i>	Partial η^2
Within Subjects Effects				
Internalization	1	.091	.028	.002
Interactions				
Change in Internalization by Group	1	3.474	1.060	.065
Error (Internalization)	50			
Between Subjects Effects				
Group	1	.146	.231	.003
Error	50			

Note. * $P < .05$, ** $P < .01$

A one-way analysis of variance (ANOVA) was conducted to compare the Internalization score at posttest across groups. The means and the standard deviations for

each group are listed in table seven. There is no statistically significant difference across groups for the mean scores of the importance measure $F(3,104)=.643, p=.589$).

Hypothesis 3

In order to test hypothesis 3, *The Dove Evolution film will decrease pressure to obtain the media ideal*, a univariate repeated measures analysis of variance with one between factor was conducted on the pretest and posttest pressure scores of groups two and four. There was a statistically significant change from pretest ($M=2.19, s=1.13$) to posttest ($M=2.92, s=1.16$) for pressure, $F(1,50)=14.09, p<.01$. Twenty-three percent of the variance was explained by the change in pressure scores. (See Table 5.)

The main effect comparing the two groups was not significant, $F(1,50) = .083, p=.775$, suggesting no difference in the treatment between groups. Only .2% of the variance was explained by the difference in groups.

There was no significant interaction between group and pressure, $F(1,50) = .135, p=.715$. Only .3% of the variance was explained by the interaction of group and pressure score.

Table 5 Results of the Repeated-Measures Analysis of Variance of Pressure Scores

Source	<i>df</i>	<i>F</i>	<i>Sum of Squares</i>	Partial η^2
Within Subjects Effects				
Pressure	1	14.09**	16.962	.230
Interactions				
Change in Pressure by Group	1	.135	.154	.003
Error (Pressure)	50			
Between Subjects Effects				
Group	1	.083	.154	.002
Error	50			

Note. * $P < .05$, ** $P < .01$

A one-way analysis of variance (ANOVA) was conducted to compare the pressure score at posttest across groups. The means and the standard deviations for each group are listed in table seven. There was no statistically significant difference across groups for the mean scores of the pressure measure, $F(3,104)=.902, p=.443$.

Hypothesis 4

In order to test hypothesis 4, *The Dove Evolution film will decrease the desire to be athletic*, a univariate repeated measures analysis of variance with one between factor was conducted on the pretest and posttest athlete scores of group four. There was no statistically significant change from pre test ($M=3.27, s=1.37$) to posttest ($M=3.15,$

$s=1.08$), $F(1,50) = .267$, $p=.608$. Only one-half of one percent of the variance was explained by the change in athlete scores. (See Table 6.)

There was no difference in score between the control and experimental groups, $F(1,50) = .745$, $p=.392$, suggesting no difference in the treatment between groups. Less than two percent of the variance was explained by the difference in athlete scores across groups.

There was no significant interaction between group and athlete, $F(1,50) = 1.290$, $p = .261$. Less than three percent of the variance was explained by the interaction between group and athlete scores.

Table 6 Results of the Repeated-Measures Analysis of Variance Athlete Scores

Source	<i>df</i>	<i>F</i>	<i>Sum of Squares</i>	Partial η^2
Within Subjects Effects				
Athlete	1	.267	.240	.005
Interactions				
Change in Athlete by Group	1	1.290	1.163	.025
Error (Athlete)	50			
Between Subjects Effects				
Group	1	.745	1.625	.015
Error	50			

Note. * $P < .05$, ** $P < .01$

A one-way analysis of variance (ANOVA) was conducted to compare the athlete score at posttest across groups. The means and the standard deviations for each group are listed in table seven. There was no statistically significant difference across groups for the mean scores of the athlete measure, $F(3,104)=1.052, p=.373$).

Table 7 Results of the One-Way Analysis of Variance

		<i>Sum of Squares</i>	<i>df</i>	<i>F</i>	<i>P</i>
Post Importance	Between groups	1.328	3	.427	.734
	Within groups	107.745	104		
	Total	109.073	107		
PostInternal	Between groups	1.830	3	.643	.589
	Within groups	98.719	104		
	Total	100.549	107		
PostPressure	Between groups	4.354	3	.902	.443
	Within groups	167.313	104		
	Total	171.667	107		
PostAthlete	Between groups	4.259	3	1.052	.373
	Within groups	136.255	101		
	Total	140.514	104		

Note. * $P < .05$, ** $P < .01$

Table 8 Descriptives of Pretest and Posttest Scores

	<i>Group</i>	<i>N</i>	<i>Pretest</i>		<i>Posttest</i>	
			<i>Mean</i>	<i>S</i>	<i>Mean</i>	<i>S</i>
Importance	1	30			2.89	1.08
	2	26	2.76	1.12	2.74	1.06
	3	26			2.60	.93
	4	26	3.14	.78	2.65	.98
	TOTAL	108	2.95	.98	2.73	1.01
Internalization	1	30			2.72	1.02
	2	26	2.83	1.01	3.00	1.10
	3	26			2.94	.95
	4	26	2.94	.94	2.70	.80
	TOTAL	108	2.89	.97	2.84	.97
Pressure	1	30			2.87	1.36
	2	26	2.19	1.23	3.08	1.35
	3	26			3.39	1.17
	4	26	2.19	1.13	2.93	1.16
	TOTAL	108	2.19	1.17	3.06	1.27
Athleticism	1	29			3.21	1.26
	2	26	3.30	1.40	3.62	1.14
	3	24			3.54	1.15
	4	26	3.27	1.37	3.15	1.08
	TOTAL	52	3.29	1.35	3.37	1.16
				2.70	.80	
				2.84	.97	

Summary

This chapter focused on the analyses of the data. It addressed each research individually. None of the four hypotheses were supported. However, there was a statistically significant difference found in the measures of awareness (importance) and perceived pressure. These surprising findings will be discussed in the next chapter, Chapter Five. In addition, Chapter Five will discuss the limitations of the study and recommendations for future research.

CHAPTER FIVE: CONCLUSION

Introduction

This chapter will discuss and interpret the data analyses presented in Chapter Four. This chapter will briefly review the problem and the purpose of the study, discuss the key issues that emerged in the literature, briefly review the hypotheses and share a summary of findings and conclusions. Each hypothesis will be discussed individually. A summary of findings and limitations of the study will follow. Chapter Five will conclude with recommendations for future research.

Discussion

As the reach of media extends around the globe, the quantity and quality of media content necessitates that we become critical media consumers. Although there are adverse effects of the media, media literacy is preferred to media abstinence. Media literacy is the ability to access, analyze, evaluate and create media in various forms (Aufderheide, 1993). Media literacy draws from three main bodies of knowledge: education, communication and psychology. A search of the literature demonstrated a paradigm shift from the critical analysis of the media to intervention for health related issues. A total of 25 studies met the research review criteria of a peer-review empirical study of media literacy as intervention. Studies were found as interventions for decision-making for alcohol use, violence and aggression, youth smoking, body image, acquisition of critical thinking skills and eating disorders. Media literacy treatments vary in length but one-shot treatments are rare. The survey of the media literacy literature is still under-developed with no overarching

theoretical framework. However, the critical pedagogy of Freire justifies the critical thinking approach of media literacy and the intent to use media literacy for social and personal improvement. The Social Comparison Theory of Festinger (1954) explains the need for intervention in the specific health related matter of body image, attitudes towards appearance and even eating disorders. In an effort to enhance self-esteem among women who might compare themselves with the media ideal of thinness and beauty, Dove Soap launched its Campaign for Real Beauty by producing a short film called Dove Evolution. The purpose of this study was to determine the effectiveness of the Dove Evolution film as a one-shot media literacy treatment to change sociocultural attitudes towards appearance as measured by the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3; Thompson, et.al., 2003).

As revealed in the media literacy literature, media literacy treatments are usually multiple sessions, and studies accepted for review (Bergsma and Carey, 2008) that consist of one-shot treatments are much longer in length, based on the assumption that an extremely short media literacy treatment is not long enough to teach the various media literacy skills. Media literacy skills have been based on the five core concepts of media literacy as defined by the Center for Media Literacy. The research question was to what extent can the Dove Evolution film implicitly teach media literacy skills and it was hypothesized that the Dove Evolution film could change sociocultural attitudes toward appearance as measured by the Media and You Survey. The four hypotheses, based on four measures of the questionnaire, are discussed below.

Data Analysis

This study was guided by the following five research hypotheses.

H1: The Dove Evolution video as one-shot media treatment will increase awareness of the media ideal.

H2: The Dove Evolution video as a one-shot media literacy treatment will decrease internalization of the media ideal.

H3: The Dove Evolution video as a one-shot media literacy treatment will decrease pressure to obtain the media ideal.

H4: The Dove Evolution video as a one-shot media literacy treatment will decrease the desire to be athletic.

Hypothesis 1

Hypothesis 1, *the Dove Evolution video as one-shot media treatment will increase awareness of the media ideal* was not supported. The concept of media awareness was assessed by the importance scores on the “Media and You Survey.” However, when the importance (awareness) scores from pretest to posttest were analyzed, there was a statistically significant *decrease* from pretest ($M=3.14, s=.78$) to posttest ($M=2.65, s=.98$) and a significant main effect for importance $F(1,50) = 6.402, p < .05$. Over 11% of the variance was explained by the change in importance scores.

There was a significant interaction between group and importance, $F(1,50) = 5.186, p < .05$. Over nine percent of the variance was explained by the interaction between group and importance.

The goal of testing Hypothesis 1 was to determine if awareness of the media ideal would increase. The measure reflects the individual awareness of what the standard of

beauty and thinness that is considered normal (Thompson, et al, 2004). Awareness of the media ideal is an important part of reducing internalization and thus, reducing body dissatisfaction, which may lead to eating disorders. Since the film explicitly states at the end that “our perception of beauty is distorted,” the effect on the importance score may have been affected by the interpretation of the question. Importance can mean important *to me* or important *to society*, two different issues. If importance means importance to *me*, this would reflect an internalization issue. The Dove film may have increased skepticism, which would have impacted internalization. Interpreted in this way, the awareness scores worded “importance” would be expected to decrease. If importance means important *to society*, the cause for the decrease might be related to the context of the study.

It is possible that the reduction in importance scores after the treatment may be related to the wording of the items regarding media type. The three questions that make up the pre-test and the post-test importance (information) subscale each specify a different medium: “Magazine advertisements,” (pretest) vs. “pictures in magazines,” (post-test) “are an important source of information about fashion and "being attractive;” “TV programs” (pre-test) vs. “TV commercials” (post-test) are an important source of information about fashion and "being attractive.”; and “Movies” (pre-test) vs. “Movie stars” (post-test) are an important source of information about fashion and "being attractive.”

The context of the treatment may have affected the interpretation by college students, who are adept at new media. The Dove Evolution film was delivered to the participants via the website YouTube. This may have affected the interpretation of the survey questions to imply a contrast between old media (television, magazines and movies) and new media (the Internet). The medium might have become the message

(McLuhan and Gordon, 2003) in declaring that the traditional media are no longer as relevant as the Internet as information sources for fashion and beauty, since today's youth are heavy Internet users.

The Internet facilitates both content creation and the discussion of that content. Almost two-thirds (64%) of Internet users aged 12-17 have posted photos, videos or blogs (Pew Internet). Girls dominate blogging and posting photos, while boys dominate the posting of videos. Nearly one-half of teen Internet users have posted photos and nearly nine of ten of the photo posters report that others comment on the images. With this type of social activity online it is intuitive to conclude that young people would consider the Internet more important than non-interactive media for information for beauty, especially when the Internet was used in to deliver the treatment in the current study.

Hypothesis 2

Hypothesis 2, *the Dove Evolution film as a one-shot media literacy treatment will decrease internalization of the media ideal* was not supported. Internalization, the extent to which an individual accepts society's norms of thinness and beauty and modifies behavior to achieve it (Thompson, et. al., 2004) was measured by the scores from pretest to posttest on the "Media and You Survey."

There was no statistically significant change from pretest to posttest, $F(1,50) = .091$, $p = .764$. Contrary to expectations, the internalization scores were not statistically significant, and therefore, no decrease in internalization measure can be concluded from this study.

Although the brief film demonstrated explicitly that a photo of a model may be a drastic manipulation of a very ordinary looking person, the implication that one should not admire a fake image may not be strong enough to make a difference in overall internalization scores. One female who appreciated the overt intent of Dove's campaign for "real beauty" commented, "Although I want my body to look like the manipulated ones I love this Dove campaign for real beauty." The short film did not contain negative consequences for internalization of this media ideal. Such can be found in Jeane Kilborne's "Killing Us Softly" a much longer film that shows the consequences of body image distortion, such as depression and eating disorders.

Hypothesis 3

Hypothesis 3, *the Dove Evolution film as a one-shot media literacy treatment will decrease pressure to obtain the media ideal* was not supported. The perceived pressure was measured by the pressure scores from pretest to posttest on the Media and You Survey. Contrary to expectations, the pressure scores increased.

There was a statistically significant increase from pre test ($M=2.19, s=1.13$) to posttest ($M=2.92, s=1.16$) and significant main effect for pressure, $F(1,50) = 14.09, p < .01$, Twenty-three percent of the variance was explained by the change in pressure scores.

The items related to pressure on The Media and You Survey were "I've felt pressure from TV or magazines to change my appearance" (pre-test) and "I do not feel pressure from TV or magazines to look attractive" (reverse-coded post-test). Since the question dealt with outside pressures, the wording in verb tense was changed from past tense for the pre-test to present tense for the post-test. The study occurred in one setting so

there would be no opportunity for outside pressures from pretest to posttest. This study demonstrated that increased awareness may not lead to decreased pressure. Although the film increased awareness for a Hispanic female who commented, “This video showed me that it is impossible to look like the people on TV because they are made up,” pressure to obtain that ideal may not be alleviated. A white female wrote, “I understand I will never look like people in the movies, but I get lots of pressure from the media.” One reason for this may be the perception of realism despite the knowledge of manipulation. As an Asian female wrote, “Most people portrayed in the video have been altered but doesn’t [sic] mean they are unrealistic to others.” A Hispanic female commented, “Even though you know that people don’t look that way, because you are constantly exposed to it, it is still looked to as a standard of beauty.”

One participant, a white female, reported feeling pressure from the media after viewing the film: “Although I try to be an individual, it is still difficult to disregard media because it is everywhere.” But apparently, pressure can come from the research study itself. A white female in group one who did not watch the treatment apparently felt pressure from merely taking the posttest and reported, “I feel ugly now.”

Pressure can come from past teasing about one’s looks, one’s body, or felt pressure from the media (Thompson, 2004). Perceived pressure does not automatically lead to internalization. A black female, apparently large sized, reported confidently, “Sometimes I am pressured, but then again I love myself for who I am--thickness and all.”

Hypothesis 4

Hypothesis 4, *the Dove Evolution film as a one-shot media literacy treatment will decrease the desire to be athletic* was not supported. The desire to be athletic as a result from exposure to media images was measured by the athlete scores from pretest to posttest on the Media and You Survey.

There was no statistically significant change from pre test to posttest, $F(1,50) = .267, p = .608$. No conclusion can be drawn about the reduction in score from pretest to posttest.

The film did not address the issue of being athletic; the transformation focused on the model's face. It is possible that some individuals might infer that athleticism is as unattainable as the media ideal of thinness and beauty. However, one respondent in this study considered being physically fit as being preferred to the media ideal of beauty:

“Be YOU regardless, not someone else. You can be you; and have a healthy perfect [sic] body.”

Limitations of the Study

A study's usefulness cannot be properly evaluated without due consideration to its validity. Cook and Campbell (1979) describe conditions that threaten validity and these are divided into the categories following categories: statistical conclusion validity, internal validity, construct validity and external validity (pp. 37-94). Statistical conclusion validity answers the question, “Is there a relationship between variables?” The threats to this type of validity include low statistical power, violations of assumptions of statistical tests,

increased likelihood of Type I error as more comparisons are made, measure reliability, treatment administration reliability, distractions in the experiment setting and random heterogeneity of respondents. Internal validity answers the question, “If there is a relationship, is it causal from one operational variable to another?” The threats to internal validity include history, maturation, testing, instrumentation changes, statistical regression, selection of groups, mortality, interactions with selection, ambiguity about the direction of causal inference, diffusion or imitation of treatments, compensatory equalization of treatments, compensatory rivalry by respondents’ receiving less desirable treatments and resentful demoralization of respondents receiving less desirable treatments. The construct validity of putative causes and effects answers the question, “What are the particular cause and effect constructs involved in the relationship? The threats to construct validity include: inadequate preoperational explication of constructs, single operational definition bias, single method, bias, hypothesis guessing within experimental conditions, evaluation apprehension, experimenter expectancies, confounding constructs and levels of constructs, interaction of different treatments, interaction of testing and treatment, and restricted generalizability across constructs. Finally, external validity answers the question, “How generalizable is this relationship across persons, settings and times?” The threats to external validity include the interactions of selection and treatment, setting and treatment, and history and treatment.

The limitations of this study are the sample size, the treatment, the context, and the degree of complexity of this study. These limitations are discussed below.

The design of the study was a Solomon four-group design with identical sample sizes in each condition. Enrollment for each of the four classes was 32 students. The sample size (n=108) may have had an impact on statistical significance, especially on the internalization scores. Although the enrollment for each of the classes was 32, the actual number of respondents after eliminating those cases with missing was 30 for group one and 26 for groups two, three and four.

The study did not control for demographics. Because participants were students enrolled in a daytime speech class and the study occurred in the early part of the school year it was assumed that the modal age for these participants would be eighteen and the age range would be the typical age for undergraduates (18-22 years). This study did not ask for age, and therefore, no conclusions can be drawn about the effectiveness of the Dove Evolution film as a one-time media literacy treatment based upon age. Several variables could have been extracted and controlled for, including demographics of sex, or physical characteristics such as weight and height. Cook and Campbell (1979) refer to “selection” as a threat to internal validity—that unless subjects are randomly assigned to experimental and control groups, the differences in group measures may be due to the groups rather than the treatment (p. 53). In the present study, the treatment was assigned randomly to groups of convenience—speech communication classes of the same size and conditions—that were assumed to be similar in makeup.

Other threats to internal validity—history and maturation—relate to events occurring between pretesting and post testing that might influence outcome (Cook and

Campbell, 1979, p. 51-52). The intent of the one-shot treatment with pretesting and post testing during the same class period was to minimize such a threat.

Future research

One of the core concepts of media literacy is that people receiving the same messages experience them differently (Center for Media Literacy). The effects of the Dove Evolution film should be studied in terms of demographics and individual attributes of the receiver. Demographics include such variables as sex, race, and religiosity and individual attributes germane to this study including physical characteristics and the individual tendency toward social comparison. These demographic and individual differences are discussed below.

The majority of media literacy education is directed toward young people (Potter, 2004). Bergsma and Carey's (2008) review of empirical media literacy research studies revealed three age categories: children, adolescents and college students. Adults were not included in any of the media literacy intervention studies. However, in the UK, adult media literacy merits its own report. Future studies should study the media literacy of older people, taking care to define media literacy in terms of critical appraisal of the media text, rather than defining media literacy as the ability to access and create media.

It would be interesting to see the results by race. The media literacy core concept that people process the same message differently was illustrated vividly by the accusations of racism against a New York Post cartoonist critical of President Barak Obama's stimulus

bill. The cartoon depicted a wild chimp being shot to death by a police officer (an allusion to a recent news story) who said to another police officer, “They’ll have to find someone else to write the next stimulus bill.” While it was meant to satirize the ineptitude of the stimulus bill, it was taken as a thinly veiled reference to President Obama being African-American. The Post issued an apology to those who were offended but defiantly claimed the incident was being exploited by those who had a vendetta against the newspaper (Chan and Peters, 2009). More pertinent to the relationship of race and beauty is the controversy that surrounded the on-air reference of veteran radio talk show host Don Imus to the all-black Rutgers University Women’s Basketball team as “nappy-headed hos” (New York Times, April 10, 2007). Despite the apologies from Imus he was fired after thirty years as host of “Imus in the Morning.” Needless, unwanted controversies could be avoided if this concept of media literacy (i.e., different people have different perceptions of the same message) were heeded. In addition, media images could be chosen to enhance positive media consumer response.

The model in the Dove Evolution video was white, but 31.5% of the total participants in this study were non-white. The largest non-white race reported by respondents is black (n=14 or 13%). Research on how media might impact non-white participants is limited (Schooler, et. al., 2004). However there is speculation that media use might disturb the body image of black women more than white women due to typically larger body size (Perkins, 1996). A future experiment could compare a black model, a Hispanic model, an Asian model and a white model using a larger sample size to control for the race effect.

It would also be interesting to see the results by sex. In the current study, there were 66 females (61.1%) and 42 males (38.9%). Most studies on self-esteem and body image target women and it is asserted that women are more susceptible to self-esteem issues related to body image than men. Since men contribute to the pressure on women to achieve the media ideal, men should be included in future studies but the study should differentiate between the sexes. In addition, a similar type of film could be produced to show how men are also depicted unrealistically in certain magazines.

Conclusions

Media literacy is the ability to access, analyze, evaluate and create media in various forms (Aufderheide, 1993). Acquisition of media literacy skills involves asking five key questions for deconstruction of a text: “Who created this message? What creative techniques are used to attract my attention? How might different people understand this message differently? What values, lifestyles and points of view are represented in or omitted from this message? Why is this message being sent?” (Center for Media Literacy, n.d.b.). If the Dove Evolution film were itself viewed through the critical thinking lens of media literacy the following questions and answers would be discovered.

Key question #1 is “Who created this message?” A subsidiary of famed Madison Avenue advertising firm Ogilvy and Mather created this film at the request of Dove Soap Company. In fact, the center subject of the film, Stephanie Betts, is not a model, but a producer who works for the agency. The film is not a record of an actual advertizing campaign; however the film has become the centerpiece of the Dove Real Beauty Campaign. Dove has produced another film, Onslaught, in which an innocent little girl is

seen as a potential victim of sexualized advertizing designed to seduce her into being a lifelong consumer of beauty products. Unfortunately, this film that seems to decry the sexualization of advertizing is itself sexualized.

The answer to “Who is responsible for this message?” is Unilever, the parent company of Dove. Unilever is also the parent company of Axe men’s products (unilever.com). Many of the Axe advertisements, although distributed in other countries are too sexually charged to be shown on U.S. network television. Knowing that the creator of “real beauty” messages is also the creator of prurient advertizing makes one a little skeptical about real intent.

Key Question #5 relates to intent: “Why is this message being sent?” On one level it is to induce skepticism in the media ideal of thinness and beauty, and to invite women to join Dove’s campaign for real beauty by visiting its website. On another level the answer is to make ordinary women feel good about their ordinary looks and to build self-esteem. However, the recognition that Dove Soap is a company subsidiary of a corporation whose other subsidiary, Axe men’s products use sexual advertizing leads one to the conclusion at yet another level: that the purpose of the Dove Evolution film is to make a profit for the company. By appealing to customers who perceive themselves as ordinary-looking women, Unilever can sell beauty products to a wider-range of customers. Understanding the profit motive behind a message should heighten critical thinking about the message.

This study did not prove the Dove Evolution Film to be effective as a one-shot media literacy treatment. In their review of media literacy studies, Bergsma and Carney (2008) describe such effectiveness as teaching the core concepts of media literacy. In this

study, the treatment did not result in uniformly predictable, statistically significant changes in the scores of the Media and You survey. Perhaps media literacy is a skill that takes longer than 75 seconds to learn. As intriguing as this film is, its usefulness in media literacy education may be as an attention-getter to a media literacy curriculum.

Media literacy, then, has far-reaching applications, including (but not limited to) recognizing commercial advertising disguised as a public service. Semali's (2000) media education approach is worth remembering:

Critical media literacy education is not an antidote to help students liberate themselves from texts that are designed to dupe them. Rather the broader goal is to cultivate systematic methods of inquiry, models of critique, and analytical ways of reading visual images and messages embedded in both print and electronic texts. (p. ix).

Although the United States is far behind other countries in media education (Potter, 2004), there is optimism that media literacy is such a worthwhile goal with such widespread contexts that media education can be incorporated across the school curriculum. If fully developed in the next few years, media literacy can become useful in each of the broad areas of ideas of communication, psychology and critical thinking (Potter, 2004). The issue, then, will not be whether media literacy is framework, filter or vaccine. Media literacy will be pervasive enough to be seen as all three.

**APPENDIX A: THE SOCIOCUTURAL ATTITUDES TOWARDS
APPEARANCE QUESTIONNAIRE (SATAQ-3)**

SOCIOCULTURAL ATTITUDES TOWARDS APPEARANCE SCALE - 3 (SATAQ-3)

The Sociocultural Attitudes Towards Appearance Questionnaire 3 is a revision of our first two scales (Heinberg & Thompson, 1995; Thompson et al., 1999). It has subscales that assess internalization (general, athlete), pressures, and information. Reliability and validity information are contained in Thompson et al., 2004. See also Calogero et al, 2004 for data with an eating disordered sample. Both of these articles are downloadable from this website (see recent publications in *VITA*). This scale is provided free of cost to those who wish to use it for non-commercial (i.e., you make no money) purposes.

Internalization-General: Items: 3, 4, 7, 8, 11, 12, 15, 16, 27

Internalization-Athlete: Items: 19, 20, 23, 24, 30

Pressures: Items: 2, 6, 10, 14, 18, 22, 26

Information: Items: 1, 5, 9, 13, 17, 21, 25, 28, 29

Reverse-keyed items: 3, 6, 9, 12, 13, 19, 27, 28

Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

Definitely Disagree = 1

Mostly Disagree = 2

Neither Agree Nor Disagree = 3

Mostly Agree = 4

Definitely Agree = 5

1. TV programs are an important source of information about fashion and "being attractive." _____
2. I've felt pressure from TV or magazines to lose weight. _____
3. I do not care if my body looks like the body of people who are on TV. _____
4. I compare my body to the bodies of people who are on TV. _____
5. TV commercials are an important source of information about fashion and "being attractive." _____
6. I do not feel pressure from TV or magazines to look pretty. _____
7. I would like my body to look like the models who appear in magazines. _____
8. I compare my appearance to the appearance of TV and movie stars. _____
9. Music videos on TV are not an important source of information about fashion and "being attractive." _____
10. I've felt pressure from TV and magazines to be thin. _____
11. I would like my body to look like the people who are in movies. _____
12. I do not compare my body to the bodies of people who appear in magazines. _____

13. Magazine articles are not an important source of information about fashion and "being attractive." _____
14. I've felt pressure from TV or magazines to have a perfect body. _____
15. I wish I looked like the models in music videos. _____
16. I compare my appearance to the appearance of people in magazines. _____
17. Magazine advertisements are an important source of information about fashion and "being attractive." _____
18. I've felt pressure from TV or magazines to diet. _____
19. I do not wish to look as athletic as the people in magazines. _____
20. I compare my body to that of people in "good shape." _____
21. Pictures in magazines are an important source of information about fashion and
"being attractive." _____
22. I've felt pressure from TV or magazines to exercise. _____
23. I wish I looked as athletic as sports stars. _____
24. I compare my body to that of people who are athletic. _____
25. Movies are an important source of information about fashion and "being attractive." _____
26. I've felt pressure from TV or magazines to change my appearance. _____
27. I do not try to look like the people on TV. _____
28. Movie stars are not an important source of information about fashion and "being attractive." _____
29. Famous people are an important source of information about fashion and "being attractive." _____
30. I try to look like sports athletes. _____

APPENDIX B: THE MEDIA AND YOU SURVEY

Side A—beginning of class
Thank you for your assistance in research

The Media and You Survey

Please select one:

Sex:

Male ___ female _____

Race or Ethnicity:

Asian ___ Black ___ Hispanic ___ White ___

Other _____

Please read the following statements and circle the number that best indicates your feeling or agreement with the statement.

		Strongly Disagree	Somewhat disagree	Neutral	Somewhat Agree	Strongly agree
1	Magazine advertisements are an important source of information about fashion and "being attractive."	1	2	3	4	5
2	I compare my appearance to the appearance of TV and movie stars.	1	2	3	4	5
3	I've felt pressure from TV or magazines to change my appearance.	1	2	3	4	5
4	I compare my appearance to the appearance of people in magazines.	1	2	3	4	5
5	I compare my body to that of people who are athletic.	1	2	3	4	5
6	I do not try to look like the people on TV.	1	2	3	4	5
7	TV programs are an important source of information about fashion and "being attractive."	1	2	3	4	5
8	I do not compare my body to the bodies of people who appear in magazines.	1	2	3	4	5
9	Movies are an important source of information about fashion and "being attractive."	1	2	3	4	5
10	I compare my body to the bodies of people who are on TV.	1	2	3	4	5

YOUR COMMENTS: _____

Side B—end of class
Thank you for your assistance in research
The Media and You Survey

Please select one:

Sex:

Male ___ female ___

Race or Ethnicity:

Asian ___ Black ___ Hispanic ___ White ___
 Other _____

Please read the following statements and circle the number that best indicates your feeling or agreement with the statement.

		Strongly Disagree	Somewhat disagree	Neutral	Somewhat Agree	Strongly agree
1	Pictures in magazines are an important source of information about fashion and "being attractive." .	1	2	3	4	5
2	I would like my body to look like the models who appear in magazines.	1	2	3	4	5
3	I <u>do not</u> feel pressure from TV or magazines to look pretty.	1	2	3	4	5
4	I wish I looked like the models in music videos.	1	2	3	4	5
5	I <u>do not</u> wish to look as athletic as the people in magazines.	1	2	3	4	5
6	I <u>do not</u> care if my body looks like the body of people who are on TV	1	2	3	4	5
7	Movie stars are <u>not</u> an important source of information about fashion and "being attractive."	1	2	3	4	5
8	I would like my body to look like the people who are in movies.	1	2	3	4	5
9	TV commercials are an important source of information about fashion and "being attractive."	1	2	3	4	5
10	I wish I looked like the people on TV	1	2	3	4	5

YOUR COMMENTS: _____

APPENDIX C: PERMISSION TO USE THE SATAQ -3

Permission was granted by Dr. Thompson in his email before research commenced.

Dan Wheeler <dwheeler1600@gmail.com>

Fri, Mar 27, 2009 at 11:49 AM

To: thompsonjk2003@yahoo.com

Dear Dr. Thompson,

About a year ago, you emailed me permission to use your SATAQ-3 scale in my dissertation research on "the Effectiveness of the Dove Evolution Film as a One-shot Media Literacy Treatment." I have looked for this archived email and cannot locate it.

May I trouble you again to send permission to use the SATAQ-3 scale? I would be truly grateful.

Thank you,

Dan Wheeler
University of Central Florida

--

"No good thing will He withhold from those who walk uprightly" --Psalms 84.11

Joel Thompson <thompsonjk2003@yahoo.com>

Mon, Mar 30, 2009 at 11:52 AM

Reply-To: thompsonjk2003@yahoo.com

To: Dan Wheeler <dwheeler1600@gmail.com>

Sure, you have my permission, let me know what you find out...

Kevin

For articles and scales, go to my website below:

J. Kevin Thompson, Ph.D.
Department of Psychology
USF
4202 E. Fowler Avenue
Tampa, FL 33620-8200
813 974-0367

[Quoted text hidden]

Dan Wheeler <dwheeler1600@gmail.com>

Mon, Mar 30, 2009 at 12:16 PM

To: thompsonjk2003@yahoo.com

Thank you. I will!

APPENDIX D: INSTITUTIONAL REVIEW BOARD



University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Notice of Expedited Initial Review and Approval

From : UCF Institutional Review Board
FWA00000351, Exp. 6/24/11, IRB00001138

To : Daniel Wheeler

Date : September 03, 2008

IRB Number: SBE-08-05789

Study Title: **The Effectiveness of the Dove Evolution video as a One-shot Media Literacy Treatment.**

Dear Researcher:

Your research protocol noted above was approved by **expedited** review by the UCF IRB Vice-chair on 9/3/2008. **The expiration date is 9/2/2009.** Your study was determined to be minimal risk for human subjects and expeditable per federal regulations, 45 CFR 46.110. The category for which this study qualifies as expeditable research is as follows:

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

A **waiver of documentation of consent** has been approved for all subjects. Participants do not have to sign a consent form, but the IRB requires that you give participants a copy of the IRB-approved consent form, letter, information sheet, or statement of voluntary consent at the top of the survey.

All data, which may include signed consent form documents, must be retained in a locked file cabinet for a minimum of three years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained on a password-protected computer if electronic information is used. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personnel.

To continue this research beyond the expiration date, a Continuing Review Form must be submitted 2 – 4 weeks prior to the expiration date. Advise the IRB if you receive a subpoena for the release of this information, or if a breach of confidentiality occurs. Also report any unanticipated problems or serious adverse events (within 5 working days). Do not make changes to the protocol methodology or consent form before obtaining IRB approval. Changes can be submitted for IRB review using the Addendum/Modification Request Form. An Addendum/Modification Request Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at <http://iris.research.ucf.edu>.

Failure to provide a continuing review report could lead to study suspension, a loss of funding and/or publication possibilities, or reporting of noncompliance to sponsors or funding agencies. The IRB maintains the authority under 45 CFR 46.110(e) to observe or have a third party observe the consent process and the research.

On behalf of Tracy Dietz, Ph.D., UCF IRB Chair, this letter is signed by:

Signature applied by Janice Turchin on 09/03/2008 04:12:12 PM EDT

IRB Coordinator

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