Disability Images in Print Advertising:
Exploring Attitudinal Impact Issues
Zenaida Sarabia Panol
Michael McBride
Southwest Texas State University

Abstract

Using the experimental and issues approach this study evaluated the impact of advertisements featuring physically-disabled persons on perceptions, feelings, and behavior of non-disabled audiences. Except for one, no significant differences were found between responses toward disability and non-disability ads pointing to possible mainstreaming effects. However, gender and status of disabled persons in advertisements as well as subtle visual cues appeared to influence negative assessments of advertising portraying physically-disabled females with non-disabled males.

Introduction

In today's climate of inclusiveness, with businesses constantly on the lookout for new markets, disability advertising is an important topic but one that is not often discussed. This study critically explores some of the issues borne out of empirical research that advertisers and the media need to consider when planning communication campaigns involving persons with disabilities.

Central to the disability debate is the issue of economic and social consequences of being different from the majority. In examining the politics of disability Stubbins (1988) said that "changes in the relations between disabled and able-bodied persons are often brought about through a political process..." (p. 23). If that is true, passage of the Americans with Disabilities Act of 1990 should make the last decade of this past millennium the most remembered by the nation's 51 or so million people with physical and mental limitations. This legislation is a historic landmark because it: 1) guaranteed rights in employment, housing, and transportation; 2) signaled a new public awareness that people with disabilities have rights just like other Americans; and 3) spawned a new disability culture that is militant, empowering, and committed to seek fair treatment for themselves (Nelson, 1994).
 Revolutionary changes in the socioeconomic and political landscape that led to the promulgation of the Americans with Disabilities Act, however, are a far departure from centuries of negative stereotyping toward people with disabilities. Wolfe (1996) wrote that public attitudes toward the disabled generally combine sentiment, stereotype, ignorance, and curiosity.

Society's negative bias toward its members who are disabled is detrimental to the welfare and productive participation of this already marginalized and disadvantaged group. Although unfavorable attitudes are often covert, they are detectable "in the use of media stereotypes, prejudicial beliefs, derogatory labels, or lack of care for the well-being of disabled people" (Antonak and Livneh 1988, p. 14).

**Attitudes: Components and Importance**

Attitudes are complex and multidimensional constructs. Triandis (1971) defined attitude as "an idea charged with emotion which predisposes a class of actions to a particular class of situations" (p. 2). Liebert (1975) concurs with the tripartite differentiation of attitudes as consisting of cognitive, affective, and behavioral components. The cognitive domain consists of beliefs or mental predispositions acquired through information given to the individual. The affective aspect is based on emotional reactions to a stimulus while the behavioral element refers to the action prompted by the cognitive and affective spheres of attitudes.

For advertising and media practitioners, knowledge of attitudes are particularly advantageous because of its predictive qualities. Being able to ascertain a person's attitudes toward a given object, phenomenon, individual, or social group may be helpful in better understanding, explaining, and ultimately predicting behavior. Shaw and Wright (1967) even suggest that predicting complex social behaviors will be difficult or impossible without prior knowledge of existing attitudes.

**Sources of Disability Attitudes**

Although Shaw and Wright (1967) identified six sources of negative attitudes toward individuals with disabling conditions, this paper is mainly interested in the socio-cultural factors, particularly mass-mediated sources.

Some socio-cultural contributors to disability attitudes that are perpetuated by the media including advertising are society's emphasis on physical integrity, "body beautiful," personal appearance, health, athletic prowess, etc. (Roessler and Bolton 1978; Wright 1983). Other examples include the value attached to personal achievement, competitiveness, and gainful employment (Safilios-Rothschild, 1970).

Indeed, the mass media as purveyors of information and transmission belts for social and cultural norms are found to have both negative and positive impact on disability attitudes. Movies and television, for instance, have stigmatized the disability population (Leonard 1978). In tracing a legacy of media negativism, Nelson (1994) determined seven major stereotypes of the disabled that dominated film and television, namely: the disabled person as pitiable, superhero, sinister, better off dead, maladjusted, a burden, and unable to succeed.
Leonard's study (1978) also showed that disabled characters in U.S. television were usually children of low social and economic status. Elliott and Byrd (1982), in their work that included film, literature, and television during the late 1970s, found either an absence of portrayals of the disabled or a preponderance of negative images of beggars, mental patients, and menacing villains. These studies tend to confirm lingering suspicions of society's generally unfavorable attitudes toward the disabled and the media's role in maintaining or reinforcing such attitudes (Donaldson, 1981; Longmore, 1985).

However, in the last few decades, several improvements in the media portrayal of persons with disabilities began to surface. Recent popular movies such as Coming Home, Children of a Lesser God, My Left Foot, and Forrest Gump, apart from getting critical acclaim and box-office success, also told stories of the disabled as human beings with hopes, talents, feelings, and personalities.

The trend toward realistic depictions of people with disabilities highlights the media's role in positive intervention or in reversing the tide of negative stereotyping that fosters unfavorable attitudes. Early studies imply that the mass media can play a pivotal role in developing informed and positive attitudes by accurately portraying people with disabilities (Byrd and Elliott, 1988).

**Disability Advertising**

The advertising field has shown sensitivity to disability issues. Advertising Age asserts that it simply makes good business and economic sense to use disabled people in commercials. Williams (1999) reported that more than 100 corporations are including the disabled in their television advertising. The benefits advertisers derive are monetary and image-enhancement.


The 1990s saw a growing trend toward realistic, positive, more varied, and even humorous depictions of the disabled (Nelson, 1996). These ads, Longmore (1987) wrote, reached out to disabled Americans as a market and audience. More importantly, the current crop of advertising rejects "the fear that non-disabled consumers will be distressed or offended" (p. 77).

Meeks (1994) stated that the inclusion of people with disabilities in advertising is not only a recognition of the need to represent and appeal to all consumers, but also of the increasing importance of this market segment. The hope is that the increasing trend toward featuring people with disabilities in mainstream media will help dispel stereotypes and make disability part of the social and mental landscape. The question is - is this really happening? As the "invisible minority" becomes more visible, what is the impact of this trend on the attitudes of the non-disabled public?

**Literature Review**
To distinguish foregoing discussion of media trends in the portrayal of the disability population and actual studies that scientifically tested the impact of advertising images of the disabled on public perceptions, this review focuses on empirical research measuring the effects of advertising on public attitudes.

Farnall (1996) examined the influence of positive television advertising images on previously held attitudes toward the disabled. No significant changes overall were indicated although differences were determined based on degree of familiarity and previous exposure to television and film portrayals.

In a much earlier study that attempted to directly measure the impact of advertising messages about the disabled on public attitudes, Haefner (1976) found that 10 different prime time television spots did encourage employers to hire and train persons with disabilities. Not only were there higher recall and comprehension rates than are usual for information campaigns, the treatment groups showed greater willingness to hire applicants that were disabled. Other research also suggests that greater familiarity and acceptance by non-disabled audiences result from increased exposure of disabled people especially in roles that show they can function in society (Hopkins and Nestleroth 1991).

In a two-part case study undertaken to develop a consumer/market profile of a disabled person, Ganahl and Kallem (1998) found a considerable under-representation of persons with disabilities in current advertising. The self-interview also showed that physically-impaired individuals have similar backgrounds, lifestyles, and purchasing habits as those without disabilities. Since being inclusive of physically-impaired models in the media has demonstrated positive value, the researcher concluded that it makes sense to include the disabled in advertising for all types of products.

Theoretical Framework

Because advertising is a form of persuasive communication, any study that deals with it would find relevance in theories about attitude development and change as well as mass communication theories.

Of several media effects theories, the limited effects model (Klapper 1960) serves as the umbrella theory and main organizing principle in the succeeding discussion of various attitude formation and attitude change theories. The model states that mediating factors such as selective perception, exposure, and retention; group processes and norms; and opinion leadership typically render mass communication a "contributory agent, but not the sole cause, in a process of reinforcing the existing conditions..." (p. 8). One key study that led to the view of mass communication as having minimal effects was Hovland's Army research showing that films were effective in transmitting information, but not in altering attitudes (Severin and Tankard 1992).

Donaldson (1981) used the media exposure and attitude change framework to support the claim that even neutral portrayals of the disabled can lead to perceptual changes and reduce feelings of discomfort among the non-disabled.

In Farnall's investigation (1996), Berkowitz's (1973) priming effects model was chosen to explain the influence of advertising depictions of the disabled. This model
postulates that mass media stimuli can activate related events or meanings in people's minds. Hence, advertising 'primes' the recall or access of associated phenomena.

Various theoretical perspectives were advanced by Moriarty (1996) to drive the importance of coordinating and integrating advertising messages for maximum audience impact or synergy. For instance, the idea that advertising uses the concept of perceptual maps to identify the location of a product in people's minds has roots in Tolman's (1932) expectancy value theory. The principle posits that audiences develop cognitive maps and expectations of their world based on how they have organized information about it and past experiences with it that are stored in their minds.

Advertising's ultimate goal is to influence people's perceptions or knowledge structures about products and services in order to persuade them to try, buy, or continue use of these products/services. Preston (1982) and Preston and Thorson (1984) proposed the associative or conditioning model as a general theory to explain how advertising works. At the crux of this model is the social learning principle which predicts that once a stimulus evokes a particular response, a similar pattern of stimulus and response will occur.

Cognitive response theorists suggest that persuasive messages like advertising are mediated by the thoughts and feelings generated by the receiver as the communication is processed (Mehta and Davis, 1990; Ostrom, Petty and Brock, 1981). These mediators may or may not be reflected in the advertising material because anything and everything that has registered in the past about a product or company could surface in a particular communication situation.

Mention of consistency theories (Heider's Equilibrium, Rosenberg's Consistency, and Festinger's Cognitive Dissonance) is imperative because attitudes are constructed on the integration of cognitive and affective responses to information which in this study is advertising depicting the disabled. There is a complex matrix of thoughts consisting of likes or dislikes, knowledge, and feelings organized as an attitudinal structure. Because aspects of this matrix are interdependent, a change in one can affect the others (Moriarty, 1996).

Of related interest is Fishbein's and Ajzen's (1975) multivariate model of attitude formation which supposes that people perceive products or companies as "bundles of attributes" that are accumulated over time. Such attributes have various dimensions that include salience or strength, direction (positive or negative), and scope or degree of involvement. All tend to intervene or mediate advertising effects on public attitudes.

The foregoing theories reflect the prevailing three-pronged view of attitudes as a complex concept consisting of a cognitive, affective and behavioral elements. Since this paper explores the effect of advertising on attitudes, the theory of reasoned action (Fishbein and Ajzen, 1975; Ajzen & Fishbein, 1980; and Ajzen, 1988) and theory of planned behavior (Ajzen, 1985, 1987, 1991) are relevant and applicable. The central premise of the theory of reasoned action (TORA) is that people do not make spontaneous behavioral decisions, but instead people deliberate and systematically consider information available to them. According to this deliberative processing model, the
causal antecedents of behavior are a logical sequence of cognition and the person's intent to perform it.

Extending TORA, the theory of planned behavior proposes that perceived behavioral control will have both indirect (through intentions) and direct effects on behavior. In other words, if a person perceives an action as within his or her control, said person will likely be motivated to perform the behavior.

While these theories give compelling explanations and predictions about people's attitudes and behaviors, other social scientists criticize the individual bias or asocial context and linearity of these models (Kippax and Crawford, 1993). Cognizant of these flaws and the complexity of an audience's attitudinal and behavioral processes involved in any communication encounter, the researchers in this study deliberately choose not to anchor the study on a single theory. It is submitted that many theories presented will be useful in explaining or understanding the effects of print advertising that includes disabled models on the attitudinal structure of respondents.

Problem and Hypotheses

This research attempts to evaluate the impact of print advertising containing visually-detected disabilities on the attitudes of non-disabled audiences. Adopting Triandis' (1971) and Liebert's (1975) proposition that attitudes have three components, this study investigates the effects of disability advertising on the cognition, affect, and behavior of message recipients.

Clearly, past research that investigated the impact of mass media or advertising portrayals of the disabled did not explore all three dimensions of attitudes. Some dealt with either just the cognitive or affective aspects or both. One study assessed behavioral intention (Haefner, 1976), but none covered all attitudinal aspects. Most studied television or film which have strong affective elements as a medium (Wilcox, Ault and Agee, 1998).

Very scant attention was given to print, much less print advertising. This study attempts to fill in these research gaps and hopes to contribute to the growing literature on persuasive communication, attitude formation and change and to the body of knowledge on advertising effectiveness and consumer behavior. Most importantly, it should be an evaluative addition to the emerging body of disability research.

In this study, core interests are in a) institutional advertising using the print medium, b) variations in the presentation of disabled characters by gender, and c) the influence of these stimuli on different attitudinal dimensions of viewers. The primary research question is: When a non-disabled person is shown a print advertisement that depicts a disability, what are the effects on his/her perceptions, emotion, and behavior?

It is hypothesized that:

1) There are differences in cognition, affect, and behavior of non-disabled audiences that were shown print ads with no disabled characters compared to those who saw ads portraying models with visually-detected disabilities.
2) The gender of the disabled character in the print advertisements will have an effect on viewer attitudinal constructs.

3) There are differences in advertising impact of ads with or without portrayals of disabled characters on male and female respondents.

Methodology

For purposes of this study, disability is defined as a visually-detected physical impairment that leads to a lack of function as a result of having a limb, organ or mechanism of the body that is defective or missing. A disabled person therefore is any individual with a major difference from the average character portrayed in print advertisements other than racial and socioeconomic differences.

Four print advertisements of Motorola, a technology company based in Austin, Texas, were shown to a convenience sample of 83 undergraduate students of a large southwestern university. These corporate advertisements were modified to exhibit spokespersons with a physical disability and variations in gender composition of the models depicted in the disability ads. These ads were then randomly shown to four different groups of college students who were attending upper-level mass communication classes. A control group was shown ads that did not have a disabled person. The other three groups were shown ads depicting a disability. Although a convenience sample was used that explains the variance in group size, attention was given to relative homogeneity in terms of age and gender distribution of the class chosen for the study. The black-and-white ads containing both verbal and non-verbal elements were projected on a screen for student viewing. The aim of this experiment was to compare the differences in impact between an advertisement showing persons with and without disabilities.

Participants were then asked to complete a questionnaire to discern the direction of the advertisement's effect (whether positive or negative) on their perceptions, feelings, and purchase intention and behavior. A 7 point scale was used, where "1" was most positive and "7" most negative. The median "4" was the neutral position.

Motorola's four advertisements consist of one without a disability (Ad1) and three with various disability combinations (Ad2, Ad3, and Ad4). One ad (Ad4) presented both mobility-impaired characters. Portrayals of the disabled in the ads were intended to be positive.

Research participants were informed that their participation was purely voluntary. Of total respondents, 53 were female and 30 male. Ninety-seven percent of the participants were between the age of 19 and 29. The other three were 30-41.

Statistical analysis of response data using Microsoft Excel 5.0 was performed. Means of Motorola's Ad1 were compared with corresponding means of Ad2, Ad3, and Ad4. The effect of the disabled person's gender on receivers' cognition, feeling, and purchase intention or behavior was also evaluated.

ANOVA and MANOVA were initially considered as analytical tools. But since the requirement for equal variances by these statistical tests was not met due to the wide
disparity in responses and group size, a t-test for two samples of unequal variance was used. The t-test also satisfies the requirements of normal distribution and random sampling. Because the question being asked is whether the means differ significantly, a two-tail t-test was applied.

To determine whether gender differences exist, the means of male respondents for each type of ad were compared with those of the females. The same t-test for unequal variance was used.

Results and Discussion

Table 1 summarizes mean response scores to advertisements featuring persons with and without disabilities. Results of statistical analysis are presented in Table 2. Among the disability ads, Ad3 emerged as the most negative (mean score 4.24) while Ad2 was the least negative, followed by Ad1, and then Ad4.

When the non-disability ad (Ad1) was compared with each of the disability ads (Ad 2, Ad3, and Ad4), no significant differences were found for all attitudinal dimensions except in two cases. The t-statistics were generally lower than t-critical at the 95% confidence level. Exceptions are the means of Ad3 (5.05 and 5.24) in the behavioral component measured by purchase or use/try intention which had scores significantly higher than the corresponding scores of 3.87 and 4.38 for Ad1.

The overall lack of significant difference in the direction of the effect of the ads that showed persons with and without disability on participants’ perception, affect, and purchase behavior (intention to use/try and intention to buy/own) was expected and may be interpreted in various ways. Past attempts to capture shifts in attitude as a result of exposure to communication material depicting disabled individuals yielded similar results (Farnall, 1996; Hafer and Narcus, 1979; Westervelt and McKinney, 1980). It appears that while researchers have indicated the possibility of altering disability-related

Table 1
Summary of Mean Responses

Motorola Disability and Nondisability Ads

<table>
<thead>
<tr>
<th>Attitudinal Dimension</th>
<th>Ad1</th>
<th>Ad2</th>
<th>Ad3</th>
<th>Ad4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>2.72</td>
<td>1.73</td>
<td>2.54</td>
<td>1.15</td>
</tr>
<tr>
<td>Feelings</td>
<td>3.68</td>
<td>0.74</td>
<td>3.51</td>
<td>1.74</td>
</tr>
<tr>
<td>Behavior:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>Try/Use</th>
<th>Behavior</th>
<th>Purchase</th>
<th>Behavior</th>
<th>Intention</th>
<th>Intention</th>
<th>Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Try/Use</td>
<td>Purchase</td>
<td>Intention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad1 vs Ad2</td>
<td>0.72</td>
<td>0.64</td>
<td>0.07</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.01</td>
<td>2.02</td>
<td>2.01</td>
<td>2.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad1 vs Ad3</td>
<td>0.63</td>
<td>0.36</td>
<td>3.73*</td>
<td>2.39*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.02</td>
<td>2.02</td>
<td>2.03</td>
<td>2.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad1 vs Ad4</td>
<td>0.28</td>
<td>1.22</td>
<td>1.75</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.01</td>
<td>2.07</td>
<td>2.02</td>
<td>2.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad2 vs Ad3</td>
<td>1.18</td>
<td>0.85</td>
<td>3.17*</td>
<td>2.18*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.02</td>
<td>2.01</td>
<td>2.02</td>
<td>2.02</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Ad1 = Nondisability ad; Ad2, Ad3, Ad4 = Disability ads

Table 2
Summary of Test Statistics of Difference in Mean Response
Motorola Disability and Nondisability Ads
Attitudinal Dimension

<table>
<thead>
<tr>
<th>Ads Compared</th>
<th>Perception</th>
<th>Feelings</th>
<th>Intention</th>
<th>Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad1 vs Ad2</td>
<td>0.72</td>
<td>0.64</td>
<td>0.07</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>2.01</td>
<td>2.02</td>
<td>2.01</td>
<td>2.01</td>
</tr>
<tr>
<td>Ad1 vs Ad3</td>
<td>0.63</td>
<td>0.36</td>
<td>3.73*</td>
<td>2.39*</td>
</tr>
<tr>
<td></td>
<td>2.02</td>
<td>2.02</td>
<td>2.03</td>
<td>2.03</td>
</tr>
<tr>
<td>Ad1 vs Ad4</td>
<td>0.28</td>
<td>1.22</td>
<td>1.75</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>2.01</td>
<td>2.07</td>
<td>2.02</td>
<td>2.02</td>
</tr>
<tr>
<td>Ad2 vs Ad3</td>
<td>1.18</td>
<td>0.85</td>
<td>3.17*</td>
<td>2.18*</td>
</tr>
<tr>
<td></td>
<td>2.02</td>
<td>2.01</td>
<td>2.02</td>
<td>2.02</td>
</tr>
</tbody>
</table>
Ad2 vs Ad4

t-stat         0.88        0.21      1.51       1.21

t-crit         2.02        2.03      2.03       2.02

Ad3 vs Ad4

t-stat         0.83        1.37      1.99       2.22*

t-crit         2.02        2.04      2.02       2.02

Note: * Significant at 95% confidence level.

attitudes through the media (Bernotavicz, 1979) and while the relationship between attitude change and positive media exposure is well grounded in communication theory, communication alone may not be a sufficient condition to effect a change. Innovations and diffusion studies (Rogers, 1995) offer many instructive cases highlighting the need for other infrastructure support. Hence, it is rather premature and unwarranted to say that print advertising depicting positive images of disability has no value in spite of this study's results.

It is of course possible that these results were skewed because the ad used in the experiment did not depict a product or service. Granting that Motorola automatically brings to mind electronic products that students use or buy such as cellular phones, the concept of volitional control over purchase action as predicted by the theory of planned behavior may come into play.

**Mainstreaming Effects**

The absence of a difference between the treatment groups may point to a mainstreaming effect. American society and consequently the research participants have seen an increasing number of positive disability images in the media during the past decade. This may have led to a generally more tolerant and accepting public attitude.

Another factor that could have reinforced the mainstreaming impact is the use of persons in wheelchairs in this research's experimental ads. The 1991 National Organization on Disability (NOD) survey reported that the public is most comfortable with two types of disabilities - people in wheelchairs and people who are blind.

It is also relevant to mention that this study's sample group consisting of undergraduate college students has been rated by the 1991 NOD survey as the age group most likely to have a positive image of individuals with disabilities. Moreover, the survey found that better educated and younger Americans know much more about disabled people and are most supportive of steps to increase their participation.

Given the lack of significant differences among treatment conditions, as a whole, there is basis to partially reject the hypothesis. The study's hypothesis 1 predicted a change in advertising impact on people's attitudinal constructs based on the presence or absence of disability portrayals in the print commercials. But since a few exceptions were
found where differences were statistically significant in one attitudinal dimension, i.e. behavior, the hypothesis cannot be fully rejected.

**Gender Issues**

Grouping a non-disabled man and a disabled woman in a wheelchair in an ad (as in the case of Ad3) produced a negative effect on the behavioral aspects of both buying and trying/using intentions with mean differences that were both statistically significant (Tables 1 and 2). Moreover, in a comparison under the same behavioral attributes (trying/using and buying) between Ad2 (non-disabled woman together with disabled man) and Ad3 (non-disabled man together with disabled woman), Ad3 evoked a higher degree of negative impact that was also statistically significant. Ad3 means for the two behavior components (5.05 for try/use and 5.24 for buy) exceed the median value of 4.

Comparing Ad3 with Ad4 (both characters display mobility disability) also yielded a significant difference in mean values for the buying attribute and near significance for trying/using intention. This implies that the impact on the trying/using and buying behavioral aspects of Ad3 showing a disabled woman in a wheelchair together with a man without a disability was stronger than Ad4 where both the woman and the man were disabled. There was no significant difference found in all attitudinal dimensions between Ad2 and Ad4.

Negative findings on Ad3 are interesting because of the issue of gender and status differences. This treatment ad was the only one that had the potential of testing the gender variable specified in hypothesis 2. Since the gender of the disabled person, in this case a woman, made a significant difference in advertising impact on the behavioral element of attitudes, the hypothesis is accepted.

a) Gender of Disabled Person

The stereotypical perceptions of women as care-givers and nurturers may have driven respondents, albeit unconsciously, to view Ad3 in a very negative manner. Also the portrayal in the ad of a not-so-young, rather heavy woman directly contradicts conventional advertising wisdom that defines advertising appeal in terms of young, thin, and beautiful female models.

This result prompts the need to revisit an earlier discussion on the socio-cultural sources of unfavorable attitudes toward disability. Society puts a high premium on physical integrity, personal appearance, and beautiful, athletic and non-disabled bodies. To deviate from this ideal, especially when the subject is a woman, will expectedly generate certain undesirable effects. Spillman and Everington (1989) wrote that the mass marketing of body images has been a powerful, determining force in creating the 1990's perception of the tall, thin, and toned archetype.

b) Gender of Respondents

Overall, there was no statistically significant difference in responses between male and female participants in the study, hence hypothesis 3 is not supported. Table 3 provides mean values for the gender issue. Also, gender did not appear to be a factor in
the disability ads that showed significant differences in the cognitive and behavioral components, as was the case for Ad3.

There were three instances, however, where female mean scores were higher than the male although these did not test significantly at the 95% confidence level. They were Ad2 under affect, Ad3 under behavior or purchase intention, and Ad4 under feeling. This finding seems to refute previous disability investigations that suggested females tend to be more responsive to positive attitude change (Yuker, Block and Campbell, 1966) or have favorable predispositions toward disabled people (Hannah, 1988).

Table 3
Male-Female Responses to Disability and Nondisability Ads

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Try/Use</td>
<td>Purchase</td>
</tr>
<tr>
<td>Perception</td>
<td>Feelings</td>
</tr>
<tr>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Ad1</td>
<td>Mean</td>
</tr>
<tr>
<td>Ad2</td>
<td>Mean</td>
</tr>
<tr>
<td>Ad3</td>
<td>Mean</td>
</tr>
<tr>
<td>Ad4</td>
<td>Mean</td>
</tr>
</tbody>
</table>

Note: None significant at 95% confidence level.

While several studies point to a general tendency for women to have positive cognitions and be more accepting or tolerant of people with disabilities, a few studies, including this one, have found nonsignificant differences between the genders. Hannah (1988) concluded that "it seems premature to associate women with positive beliefs about, or a greater willingness to interact with, persons with disabilities" (p. 163). When gender differences do occur, as Yuker (1976) has noted, they may be attributed to the influence of other variables such as information or contact.

**Status Issues**
Motorola's Ad3 seems to present a convincing case for a discussion of status issues in disability advertising. One plausible explanation for the significant negative results of Ad3 that is difficult to ignore is the relative status of the disabled person depicted in the ad which in this case was a woman shown with an able-bodied man.

In terms of status, Donaldson (1980) declared that the disabled person must share equal status with the non-disabled to influence positive attitudes. The idea of equal status appears to be an operative concept in this study because, despite affirmative action, women still have a long way to go to achieve equal status with men.

Yuker (1988) explains the situation further: "If disabled persons are perceived as having a status equal to or superior to the status of the person with whom they are interacting (in this case a non-disabled male) positive attitudes tend to result. Inferior status is apt to engender negative attitudes" (p. 270).

Aside from gender-related status issues, Livneh (1988) mentioned that, "socio-cultural norms also attach, overtly or covertly, a status degradation to being disabled. Such degradation may be inferred from the social deviance and stigma associated with being disabled, different, or an outsider. Similarly, the status of the person with disability is often equated with that of ethnic, racial, or religious minority groups in terms of marginality of status and stereotyped perceptions" (p. 36).

Taking this into account, it is no wonder that Ad3 produced a strong negative effect on the attitudes of message recipients. What the ad conveyed was an unwitting combination of a woman's lower social status relative to a man with the already degraded status of disabled people.

Additionally, there also seems to be a disparity in occupational or employment status that can be inferred from the attire of the models used in the advertisement. In Ad3 the able-bodied man is wearing a more business-looking attire compared with the disabled woman's rather informal garb which inadvertently sends the message that in the workplace the man may be occupying a higher rank.

Since Motorola is a technology company, it may be relevant to mention the pervasive stereotypical images of male and female roles in technology ads. Knupfer (1998) remarked that "most advertising makes it seem natural for men to dominate the scene and for women to be subordinate within it, both within the audio and visual modes" (p. 56). Moreover, in print-based technology ads, men are typically shown as more competent and successful than women who are usually depicted in subordinate roles and often wearing casual dress.

Advertising research literature offers empirical evidence that an egalitarian approach works. Jaffe and Berger (1994) concluded in their study using print ads for food products that an "egalitarian image" of the genders is the most effective role portrayal.

**Advertising Effectiveness**

In all ads, a similar pattern exists of increasing resistance or absence of intention to try and buy the product or service. In both perception and feeling components, not one
of the mean responses to any ads exceeded the median value. Under the trying/using attribute, responses to two of four ads surpassed the median. This pattern increased to include all four ads in the buying category. It may be important at this time to remind readers that the experimental ads were of the institutional advertising type and did not specifically promote a product which may account for some of the results.

Nevertheless, getting people to act is not a simple process. While advertising may create favorable cognition and feelings, it does not always translate into purchase behavior as this study and related research have shown. A number of intervening influences make behavioral change complex, time-consuming, and difficult. In explaining the "limited effects" model of mass media, Joseph Klapper (1960) wrote, "Mass media ordinarily does not serve as a necessary and sufficient cause for audience effects, but rather functions among and through a nexus of mediating factors and influences" (Wilcox p. 212). Peer influence, past experiences, and individual differences in processing information are but some of the intervening variables.

**Subtle Visual Cues**

Despite the upbeat mood of both disabled and non-disabled characters portrayed in the ads, some subtle visual cues would tend to elicit negative feelings or perceptions. While several studies on persuasive communication address the verbal aspects, a body of research on the important role of visuals in advertising is emerging. Accordingly, advertising visuals perform three roles: appeal to emotions, provide a photographic proof of something, and establish an implicit link between the product and some other image (Knupfer, 1998).

In the case of Ad3, for instance, the non-disabled male is shown in white shirt with a lighter background while the disabled female has a totally dark backdrop and is wearing a dark attire. This disparity may have induced negative emotions from the audience that could have led to unfavorable reactions toward the ad. Furthermore, the close-up image of the able-bodied male is in sharp contrast with the smaller, long-shot view of the disabled female. The dissimilarity in photographic treatment may have signaled a more positive and confident image of the non-disabled man since size is usually associated with importance and power. And this pictorial inequality may have led audiences to view the disability ad negatively.

Also, the relative placement of the models' pictures in the ad where the non-disabled man's photograph is slightly higher than that of the disabled woman may have magnified the inequality of the characters. This again could have contributed to the overall unfavorable assessment of the ad. It appears that disability, unequal gender and status depictions in advertising, combined with subtle negative visual cues can produce a decidedly negative response.

**Conclusions**

This exploratory research did not seem to produce radically different results from previous studies that measured the impact of positive advertising portrayals of the disabled on the attitudes of non-disabled publics. However, the study appeared to have
confirmed the inherent challenges in designing advertising campaigns, particularly those depicting people with disabilities. The results suggest the necessity of carefully evaluating the combined influence, intended or not, of such elements as content and manner of portrayal, verbal and nonverbal context, gender and status issues as well as subtle mood-inducing visual cues in disability ads. As such, the study attests to the need for a sensitive, critical development of creative and message strategy.

Because this research used controlled laboratory setting, a small convenience sample of college students, and advertising of a single corporation, generalization of findings is limited. This does not diminish, however, the value of using an issues-oriented approach in evaluating the attitudinal effects of disability advertising. This study can serve as a springboard for a more comprehensive research delving into the various issues that have emerged.

References


Meeks, N. N. (1994). Model opportunity - advertising is reaching out to put people with disabilities in the picture. The Dallas Morning News, (July 5), C1-3.


Zenaida Sarabia Panol, B.J., M.A Ed.D. Originally from the Philippines, Z. S. Panol is an associate professor at Southwest Texas State University. She completed her bachelor's in journalism at Silliman University, her master of arts in communication from the University of the Philippines and her doctorate in mass communication from Oklahoma State University. Her research and teaching areas include advertising, public relations and international communication.

Michael McBride is professor of Mass Communication at SWT, specializing in advertising. He was a Fulbright Scholar at the American University in Bulgaria during 1994-95. Also, he holds degrees from Angelo State University and Texas Tech University.