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CONTENTS

LETTER FROM THE EDITORS

Welcome to the third volume of the *Academy of Marketing Studies Journal.* The Academy of Marketing Studies is an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *AMSJ* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to publish empirical and theoretical manuscripts which advance the discipline, and applied, educational and pedagogic papers of practical value to practitioners and educators. We look forward to a long and successful career in publishing articles which will be of value to the many marketing scholars around the world.

The articles contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

As editors, we intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

The Editorial Policy, background and history of the organization, and calls for conferences are published on our web site. In addition, we keep the web site updated with the latest activities of the organization. Please visit our site and know that we welcome hearing from you at any time.

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MANUSCRIPTS

THE INFLUENCE OF PRODUCT PUBLICITY ON PRODUCT SALES IN A NONCOMPETITIVE ENVIRONMENT

Richard A. Heiens, University of South Carolina Aiken

ABSTRACT

In an effort to more fully integrate publicity into the marketing and promotion mix, the present study examines the influence of product-related newspaper, television, and radio publicity on Lotto sales in the state of Colorado. The results of the present study indicate that in addition to Jackpot size, television publicity has a statistically significant positive impact on Lotto sales, whereas newspaper and radio publicity do not. Consequently, in their efforts to generate favorable publicity, lottery managers should emphasize the dissemination of jackpot size information via the television medium. Moreover, considering the observed 90% duration interval of .8651 weeks for the influence of marketing variables on sales, a continuous media placement schedule is suggested.

The neat and tidy divisions separating marketing and public relations are breaking down. It may be that the best way to solve a marketing problem would be through public relations activities *(Kotler & Mindak 1978).*

INTRODUCTION

Academics and practitioners have recently begun to expand the domain of marketing communications, effectively bringing the role of public relations to the fore in a marketing context. Known as integrated marketing communications, this trend has been described as one of the most important marketing developments of the 1990s (Shimp, 1997).

Integrated Marketing Communications (IMC) may be defined as the process of strategically developing and controlling or influencing all messages used to build and nourish relationships with customers and other stakeholders (Hutton, 1996). Hutton (1996), however, views this definition as simply a description of what public relations is and has been doing for at least a half-century. According to Hutton (1996, p. 160), "public relations practitioners have long dealt with issues that marketing is now targeting for its own future- relationships, organizational equity (as well as brand equity), and a variety of issues pertaining to the organization's environment and its ability to function efficiently in that environment."

Because of its increasing effectiveness and importance as a component of the marketing mix, the public relations industry has also begun to think in marketing terms by considering the contribution of publicity to marketing objectives (Hartman & Brokaw, 1988; Humer, 1989; Oliver, 1988). As such, it has been suggested that the measure of success for any particular public relations campaign should be related to specific marketing objectives, such as an increase in sales or market share (Hartman & Brokaw, 1988; Nakra, 1991; Oliver, 1988; Wyatt, 1991). Unfortunately, there have been few studies which empirically demonstrate the influence of product publicity on product sales.

Recognizing the need to more fully integrate publicity into the marketing mix, the present study is an attempt to bridge the gap between public relations and marketing research by directly examining the influence of product publicity on product sales. Specifically, the present study focuses on the unique influence of newspaper, television, and radio publicity on Lotto sales in the Denver area of dominant influence (ADI) in the state of Colorado.

PUBLICITY

According to Edward L, Bernays, the history of public relations can be traced as far back as ancient Babylonia, where image conscious kings frequently commissioned artists and historians to sculpt and paint favorable images of them (Kotler & Mindak, 1978). In the United States, public relations can be traced back to the revolutionary war period, when publicity stunts such as the Boston Tea Party were used to swell the ranks of patriots dedicated to the revolutionary war cause (O'Neill, 1991).

Despite the historical significance of publicity, the value of product publicity, or "media coverage of a product or service that aids in reaching marketing goals," only gradually became recognized as a useful marketing tool by the business community as the effectiveness of mass media generated publicity began to increase in the latter part of the twentieth century (Williams, 1988). Today, however, the high cost of television advertising and the clutter of messages in that medium make public relations an increasingly important component of the marketing and promotion mix (Grunig & Grunig, 1991).

Perhaps one reason why marketing managers have begun to develop an interest in public relations is that publicity has two distinct advantages over the other forms of promotion: (1) low cost and (2) high credibility (McIntyre, 1989; Williams, 1988). According to Trent (1991), if potential clients learn about a product from a credible source, their buying decision time will be greatly reduced. Thus, the low cost and high credibility of publicity can serve to extend the reach and create greater impact for an advertising campaign (Wylie, 1991).

HYPOTHESES

In analyzing the impact of marketing mix variables on product sales, competitive activity is often difficult to include in the analysis. Yet without this information, there is a much greater likelihood of obtaining spurious results. As a state sponsored monopoly, the Lotto game is an excellent product with which to analyze the impact of publicity on product sales because no direct competitive marketing activity exists within the state. Consequently, Lotto sales can be expected to primarily depend on the managerially controlled variables included in the present study.

Newspaper Publicity

When people think of publicity, they instinctively think of newspaper publicity. According to Shimp (1997), newspapers reach approximately 60 million households during the week and nearly 63 million on Sundays. As a component of the marketing mix, newspaper publicity has several advantages. Because newspapers are published in local communities, they allow the publicist to precisely pinpoint the targeted audience on a geographic basis (Cutlip, Center & Broom ,1985; Shimp, 1997). Also, because they reach most of their readers daily, newspapers are the most acceptable medium for a cumulative publicity build-up (Cutlip, Center & Broom, 1985; Shimp, 1997). Consequently, the first hypothesis is proposed:

H1: Newspaper publicity has a statistically significant positive impact on product sales.

Television Publicity

According to Shelby (1986), information is most persuasive when the evidence used to support a given argument is delivered well. In the case of television publicity, the combination of sight, sound and movement, and the use of experienced journalists can be said to enhance the evidential content and hence the credibility of the message, making television publicity a particularly powerful source of persuasive information. Consequently, the second hypothesis is proposed:

H2: Television publicity has a statistically significant positive impact on product sales.

Radio Publicity

Finally, in addition to newspaper and television publicity, product publicity achieved via the other major broadcast medium, radio, is also likely to influence product sales. In fact, according to Arens (1996), the average adult listens to more than three hours of radio a day. Consequently, the third and final hypothesis is proposed:

H3: Radio publicity has a statistically significant positive impact on product sales.

STUDY AND DATA COLLECTION

In order to test the hypotheses presented, data were collected for the Colorado Lotto game. In the state of Colorado, Lotto is a game in which players are required to choose six numbers between 1 and 49. Players who correctly select all six winning numbers are Lotto grand prize winners. There are two Lotto draws per week.

In the present study, a total of 57 weekly observations for the jackpot drawings from the week of Saturday, June 1, 1991, to the week of Saturday, June 27, 1992, were employed. Moreover, given that Colorado Lotto drawings are held twice weekly, (Wednesdays and Saturdays), the sales and jackpot data were aggregated into a weekly format in order to remain consistent with the level of aggregation of the other variables included in the present study.

The geographic region examined in the present study included the Colorado area of dominant influence (ADI) encompassing the Denver area. Data concerning each of the variables was provided by the Colorado Lottery Commission.

A multiple-regression equation was calculated incorporating each of the independent variables likely to have an impact on Lotto sales, as well as the dependent variable, weekly Lotto sales. Consequently, for the present study, the form of the regression equation is as follows:

$$S = \beta O + \beta 1X1 + \beta 2X2 + \beta 3X3 + P4X4 + \beta 5X5 + \beta 6X6 + \beta 7X7 + \beta 8X8 + e$$

where: S = sales in period t
XI = newspaper publicity in period t
X2 = television publicity in period t
X3 = radio publicity in period t
X4 = television advertising in period t
X5 = radio advertising in period t
X6 = distribution in period t
X7 = jackpot size in period t
X8 = sales in period t-1
βn = standardized regression coefficients
e = error term associated with sales in period t

Because current sales depend not only on current marketing efforts, but on marketing efforts in previous periods as well, the lag with which marketing effects sales is distributed over a number of periods (Maddala, 1977). Recognizing the need to easily estimate the number of lagged periods for distributed-lag equations, the Dutch economist, L.M. Koyck, proposed a regression equation in which the influence of the independent variables on the dependent variable decays geometrically with time (Koyck, 1954). The Koyck distribution requires us to lag the independent variable, sales. With the parameter estimate for lagged sales, Λ, one can calculate the 90% duration interval, or the period of time in which 90% of the effects of the independent variables are felt, $\ln(1-.9)/\ln \Lambda$.

VARIABLES

Independent variables in the present study include equivalent dollar-value measures for newspaper publicity, television publicity and radio publicity, as well as summary variables for television and radio advertising, number of distributors, and jackpot size. All variables are estimated on a weekly basis, with weekly sales serving as the dependent variable.

Newspaper Publicity

Traditionally, newspaper-generated public relations success has been measured by counting publicity clips and the size of the clips in column-inches (Lindenmann, 1988). The column-inch is a space one inch high and one newspaper column wide. In recent years, the column-inch measurement has become the standard measure for determining newspaper advertising rates (Jugenheimer & White, 1991). Consequently, the independent variable representing newspaper publicity in the present study is calculated for each week by adding the total column-inches of Lotto-related newspaper publicity achieved in each of the 16 daily newspapers and 20 weekly newspapers operating in the Denver ADI.

The old public relations dictum: "It matters not whether they think well of you or ill of you so long as they remember your name" suggests that all forms of publicity, both positively and negatively slanted, are equally desirable. The body of research concerning "mere exposure effects" may provide some support for this view. Mere exposure refers to a positive repetition-affect relationship that results from exposure alone (Obermiller, 1985). Applied to publicity, the mere exposure phenomenon could suggest that regardless of the actual content of an article (whether favorable, unfavorable, or neutral) the fact that newspaper-generated publicity may increase consumer exposure to a product could serve to enhance the overall positivity with which the product is viewed by the consumer, and hence stimulate sales.

Because the vast majority of the total newspaper publicity concerning the Colorado Lottery during the period analyzed is in fact favorable or neutral (1062 favorable or neutral articles v. 59 unfavorable articles), it is reasonable to include all newspaper publicity in the present study. Consequently, the independent variable representing newspaper publicity in the present study is calculated by adding the total column-inches of all Lotto related newspaper articles, positive, negative, and neutral appearing in the Denver ADI during the period analyzed.

Television and Radio Publicity

While newspaper-generated publicity is available in archival data from clipping services, the publicity achieved via radio and television is much more difficult to quantify. However, the Colorado Lottery has diligently documented radio and television publicity in terms of the number of seconds of air time achieved by the Lottery, as well as the equivalent dollar value of the achieved publicity. In other words, if the channel 7 six o'clock news airs a five minute news report on the Lotto game, television publicity would be measured by the cost of five minutes of commercial time on that given television station during that given time block.

Additional Variables

When attempting to model the unique influence of newspaper, radio, and television publicity on Lotto sales, it is important to recognize and account for the presence and potential interaction of several additional marketing variables. Specifically, the present study incorporates not only newspaper, radio, and television publicity, but also television advertising, radio advertising, distribution, and jackpot size in the analysis of Lotto sales in the state of Colorado.

The television advertising variable is measured in the form of total gross rating points (GRP= percentage of the market reached x frequency) achieved each week among the four major network-affiliated television stations operating in the Denver ADI. Similarly, radio advertising is measured by total weekly gross rating points achieved each week among the six major radio stations operating in the Denver ADI. Distribution includes the total number of Lotto distributors each week located in the Denver ADI, while jackpot size consists of the combined weekly jackpots of the Wednesday and Saturday drawings for the Lotto game in the state of Colorado.

Finally, previous period sales are included in order to assist in the calculation of the 90% duration interval. If the calculated duration interval is less than 1.0, it can be assumed that the effects of the independent variables are not felt in subsequent weeks. Therefore, it would be reasonable to conclude that there is no significant marketing mix carry-over effect for the present product category.

RESULTS

In order to test each of the three hypotheses, the regression equation specified in the methodology section was calculated. According to Johnston (1972), if the model has been specified correctly, ordinary least-squares will produce the best linear unbiased estimates.

Consequently, OLS is employed in the present study, and the results of the regression analysis are provided in Table 1:

Table 1: Regression Results
Dependent Variable: Sales

Variable	Parameter Estimate:	T for H0: Parameter = 0	Prob>[T]
Newspaper publicity	-840.5930	-2.370	0.0218
Television publicity	11.93345	6.602	0.0001
Radio publicity	1168.900	1.316	0.1944
Television advertising	-50.6521	0.057	0.9550
Radio advertising	-263.5390	-0.201	0.8418
Distribution	-899.8170	-0.63	0.5316
Jackpot size	159849	18.816	0.0001
Sales (t-1)	0.069844	1.960	0.0558
Intercept	1540046	0.908	0.3685
R-square: .9723		Durbin-Watson: 1.9040	

In addition, Table 2 presents a series of descriptive statistics and Table 3 presents a correlation matrix for each of the variables in the present study.

Table 2
Descriptive Statistics

Variable	Mean	Std. Dev.
Newspaper Publicity	116.28	214.52
TV Publicity	26,652	56,150
Radio Publicity	31.93	57.02
Distribution	1,166.28	33.21
Jackpot Size	9,189	6.72
Sales	2,350,066	1,619,377

Table 3
Correlation Analysis

		TV		TV	Radio		Jackpot	

	Newspaper	Pub.	Radio Pub.	Adv.	Adv.	Distribution	Size	Sales
Newspaper	1							
TV Pub.	0.8130	1						
Radio Pub.	0.5204	0.6158	1					
TV Adv.	0.0506	0.0228	-0.056	1				
Radio Adv.	0.0594	0.0323	-0.06	0.9592	1			
Distribution	-0.072	0.1716	-0.032	-0.096	-0.034	1		
Jackpot Size	0.5226	0.6832	0.457	-0.001	-0.008	-0.095	1	
Sales	-0.641	0.8476	0.5718	-0.021	-0.024	0	0.9424	1

The first hypothesis proposed that newspaper publicity has a statistically significant positive impact on Lotto sales. As seen in Table 1, however, newspaper publicity does not appear to be significantly related to Lotto sales. Moreover, not only is the variable not statistically significant, but the parameter estimate is actually in the opposite direction hypothesized. Consequently, the first hypothesis is not supported.

The second hypothesis proposed that television publicity has a statistically significant positive impact on Lotto sales. Based on an alpha level of .05, television publicity does in fact appear to be significantly related to Lotto sales. Consequently, the second hypothesis is supported by the results of the present study.

The third and final hypothesis proposed that radio publicity has a statistically significant positive impact on Lotto sales. However, using an alpha level of .05, this relationship is not supported.

Finally, as shown in Table 3, Λ=0.069844. Consequently, in calculating the 90% duration interval, the results are as follows: 90% Duration Interval= ln(l-.9)/In Λ =.8651 weeks. Because the 90% duration interval is less than 1.0, it can be assumed that the effects of the independent variables are not felt in subsequent weeks. Therefore, it is reasonable to conclude that there is no significant marketing mix carry-over effect for the present product category.

MANAGERIAL IMPLICATIONS

When employing the column-inch measure of newspaper publicity, newspaper publicity does not appear to be positively related to product sales. Instead, newspaper publicity appears to be significantly related to Lotto sales in a negative direction. Although the original hypotheses did not include a test of this inverse relationship, and the relationship cannot be statistically supported by the present study as a consequence, the results imply that lengthy Lotto-related newspaper publicity is actually associated with lower Lotto sales.

This counter-intuitive finding may best be explained by taking the nature of the target audience into consideration. Specifically, according to Meinert, Lumpkin, and Reich (1989), frequent lottery players are more likely than non-players to have less than a High School level of education. As such, despite the widespread distribution of newspapers in America, newspaper publicity may nevertheless be ineffective in reaching the majority of Lotto players. Instead, due to their lower education, Lotto players are likely to disregard newspaper publicity and instead rely largely on television and radio for the majority of their information on current events.

Overall, the variable with the greatest correlation to Lotto sales appears to be jackpot size (R=.9424). Since jackpot size depends on whether or not a jackpot was claimed in a previous week, Lotto managers can do little to increase jackpot size. Lotto managers can, however, actively disseminate jackpot size information to their target audience. Therefore, making the target audience aware of the size of the jackpot, particularly for any unusually large sum, is the most important activity for the Lotto marketing team. Yet, in order to save on media costs, Lotto advertising is routinely purchased months in advance. However, with a 90% duration interval of only. 8651 weeks, continuous media exposure is vital to the success of this product category. Consequently, unless advertising is purchased on a week-to-week basis, it is unlikely to support and encourage the heightened consumer interest and activity which naturally results from a large Lotto jackpot.

Instead, publicity and word-of-mouth communications may be the chief means by which jackpot size information is disseminated. Given the simplicity of the message, television, with the greatest reach and frequency advantages of the major media, appears to be the best medium for the dissemination of Lotto related publicity. In fact, based on the present study, of all the marketing mix variables at management's disposal, television publicity appears to be the variable most significantly related to Lotto sales (p=.0001).

Although widely considered highly credible, publicity has frequently been neglected in the marketing mix because of the lack of empirical evidence demonstrating its effectiveness. Consequently, it is hoped that the results of the present study will alert marketers to the potential benefits of a well-planned and fully integrated public relations program for state sponsored lotteries.

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ASSESSING THE IMPACT OF 'INDIVIDUAL' AND 'COLLECTIVE' AD APPEALS: A CROSS-CULTURAL COMPARISON OF ADVERTISEMENTS IN THE U.S. AND MEXICO

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ABSTRACT

An experimental design was used to test whether advertising appeals that are consistent with the cultural values of an intended audience are more persuasive than ads that reflect inconsistent values. Results of this study suggest that the cultural value orientation, individualism-collectivism, plays an important role in the development and execution of advertisements across cultures. Individualist (self-oriented) ad appeals were more persuasive in the U.S., while collectivist (ingroup-oriented) appeals were more persuasive in Mexico. Additionally, type of product advertised appears to moderate cultural differences in attitude favorability measures. While product category effects in Mexico were fairly consistent across both shared and personal products, these effects appear to be more pronounced only for personal products in the U.S. Finally, directions for future research between individualist and collectivist cultures in the evaluation of product advertisements are offered.

INTRODUCTION

The prevalent role of values in all aspects of human life has stimulated empirical research across a number of social science disciplines including psychology, sociology and anthropology. Values are a powerful force in forming one's attitudes and behavior (Homer and Kahle, 1988; Rokeach, 1973), and generally serve as guiding principles in one's life (Schwartz, 1992). Values also play an important role in the perception and use of cross-cultural marketing communications. Consumer researchers have used values as a method for developing international advertising campaigns, as well as to differentiate consumer market segments across cultures. In developing cross-cultural advertising messages, cultural values play an important role in the perception and use of advertising appeals.

Past research efforts have shown advertising themes that are consistent with the cultural values of an intended audience are more desirable than ads that reflect inconsistent values (Belk, Bryce and Pollay, 1985; Munson and McIntyre, 1978). Pollay and Gallagher (1990) argue that cultural values are embedded within advertisements, and are manifested in advertisements in both the art and language. Because consumers in different cultures have different cultural backgrounds, dissimilar experiences and value structures, and differing goals with respect to their product choices, they may interpret and evaluate similar advertisements in very different ways. Furthermore, many of the problems that occur in advertising and communications programs are due in large part to the significant cultural differences across countries and the failure to take into consideration such differences in developing cross-cultural advertisements (Belk, Bryce, and Pollay, 1985; Gilly, 1988; Han and Shavitt, 1994; Kale, 1991).

Studies examining message content indicate that one very important dimension of culture to consider when developing advertising and promotional messages is that of individualism-collectivism (Han, 1990; Kale, 1991; Zandpour et al., 1994). Numerous past studies (primarily in social psychology) have made great strides in examining and measuring similarities and differences in social behavior (e.g., both between and within individualistic and collectivistic cultures) (Hui and Triandis, 1986; Triandis et al., 1986; Triandis, McCusker and Hui, 1990). However, marketing efforts to extend these measures when examining similarities and differences in advertising content and behavioral responses have achieved only limited success. One of the shortcomings in the marketing literature has been the operationalization of the individualism-collectivism construct. Social psychologists for years have consistently conceptualized this important construct as the normative influence to comply to ingroup (family-oriented) goals over personal (self-oriented) goals. Past marketing studies that attempt to equate individualism, for example, with number of people portrayed in each print ad often overlook the important referent influence that ingroups may have in the attitude formation process in different cultures (Frith and Sengupta, 1991; Alden, Hoyer, and Lee, 1993; Cutler, Erdem, and Javalgi, 1997). Hence, in conducting cross-cultural consumer research it may be necessary to first identify ingroups where conformity to group goals is important, and second, to determine the referent influence relative to specific norms, roles and values as they are manifested within ads.

The primary goal of this study is to examine more closely how individuals within individualistic and collectivistic cultures differ in responses to advertising appeals that contain individualistic (self-oriented) and collectivistic (ingroup-oriented) messages. By manipulating advertising appeals that vary the referent influence relative to salient ingroups the relationship between cultural orientation and attitude favorability can be determined. These relationships will also be examined across different products categories to determine whether product characteristics moderate cultural differences in the persuasiveness of ad appeals. Finally, this study represents an attempt to replicate previous studies by testing these relationships in a different cultural setting (U.S. vs. Mexico) using different types of products (Automobile and Sunscreen).

CULTURAL VALUE ORIENTATIONS AND THE COMMUNICATION PROCESS

Cultural value orientations have been described as the basis for which cultures may vary (Kluckhohn and Strodtbeck, 1961, McCarty and Shrum, 1994). Value orientations are often referred to as the basic foundation upon which a culture rests, a part of the culture that often guides individual beliefs and principles in life. Reviewing past research on dimensions of culture, individualism-collectivism is considered to be the most researched dimension of cultural variation identified by researchers across disciplines (Hofstede, 1980; Kluckhohn and Strodtbeck, 1961; Triandis, 1989). Researchers often refer to these dimensions of culture as *value orientations*.

Individualism-Collectivism and Cross-Cultural Consumer Behavior

Theoretically, the individualism-collectivism is considered a dichotomous construct, relating to the importance one places on personal versus ingroup goals (Triandis, 1989). Individualist societies (e.g., U.S. U.K., Germany) place greater emphasis on personal goals such as achievement, self-gratification, and stimulation (McCarty and Hattwick, 1992); whereas collectivist societies (e.g., Mexico, Peru, Thailand, and Chile) place greater emphasis on ingroup goals such as family security, responsibility, and conformity to familial and societal norms (Triandis et al., 1988). An important aspect of collectivist cultures is that individuals may feel pressure to conform to the goals of a collective ingroup (e.g., family, tribes, religious group). According to Triandis (1994) ingroups in collectivist societies generally demand that individuals conform to an established set of norms, roles and values. When collectivist societies contain relatively tightly knit ingroups (e.g., family) norms and values are very similar within those ingroups. Subsequently, in collectivist cultures, strict adherence to ingroup goals is dependent to a large degree on the clarity of both norms and roles and the sanctions imposed for deviant behavior (Triandis, 1989). When the norms and roles of an ingroup are clearly defined, and rewards for ingroup cooperation increase, the more likely an individual will be to forsake their own goals for those of the ingroup.

In their recent study on ingroup influence from a consumer-behavior perspective, Childers and Rao (1992) refer to the effect of the family on the individual’s norms, attitudes, and values as “intergenerational influence.” Such intergenerational influence can affect brand preferences, brand loyalties, information search and examination patterns, media reliance, price sensitivity, and adherence to price-quality beliefs (Rao, Childers, and Dutta, 1991). Consistent with previous findings by Triandis et al. (1988), Childers and Rao (1992) suggest that collectivist societies, such as Mexico, tend to place greater importance on the family as an ingroup than individualist societies, such as the U.S. This argument is based on the premise that in collectivist societies, individuals tend to identify more closely with family ingroups comprising tightly knit extended families than with loosely knit outside peer groups.

The influence and interaction with the extended family results in multiple sources of influence on the individual’s behavior. Intergenerational influences within collectivist cultures are transmitted through social norms, cultural values, and sex-role perceptions, and can be manifested through an individual’s responses to advertising and promotion (Childers and Rao, 1992). Such behavioral expectations (norms) are likely to manifest themselves through consumer behavior of members within the ingroup. This manifestation is expected to be more evident in collectivist societies such as Mexico, where there is a greater degree of conformity to ingroup goals. Hence, analysis of individualism-collectivism as depicted within advertisements should involve the study of desirable behaviors for members in society (norms), prescribed behavior of individuals relative to one another (roles), and the goals and principles that motivate individuals (values) (Triandis, 1994).

The Use of Values in Developing Cross-Cultural Ad Appeals

Research investigating the role of values in product advertising suggests that culture is important, especially since advertisements can both reflect and influence values based on one's cultural background or orientation (Pollay, 1983; Pollay and Gallagher, 1990). Most researchers agree that advertisers in different countries use values in their advertisements to increase a product's importance to the consumer (Albers, 1994; Pollay, 1983). Advertising appeals that reflect cultural values that are consistent with an individual's internal set of values (or value orientation) may be more effective in changing attitudes and behavioral intentions than those appeals that are inconsistent. Marquez (1975) and Hong, Muderrosiglu and Zinkan (1987) show that advertisements reflecting local cultural values are more persuasive than advertisements that ignore them. Belk, Bryce, and Pollay (1985, p.11) conclude: "In order to communicate successfully, advertising must appeal to values that are salient in the culture of its intended audience."

Past research has linked cultural value orientation (e.g., individualism-collectivism) and attitudinal processes. Triandis et al. (1990) suggest that members in collectivist societies tend to favor values emphasizing ingroup (or collective) obligations over members in individualist societies. In response to attitude statements rating the personal importance of cultural values, subjects in collectivist societies tend to prefer those values which are consistent with their cultural orientation over those which are inconsistent. Furthermore, Davidson et al. (1976) were able to show that perceived societal norms and roles were major determinants of behavioral intentions, especially in collectivist societies where conformity to accepted societal values is considered more important than in individualist societies.

Extending these findings to communication strategy, advertising appeals that depict value orientations consistent with those of the intended audience are likely to be more persuasive than ads that depict inconsistent values. Recent findings support the notion that persuasive advertising appeals emphasizing cultural values consistent with the intended audience's value orientation may be more effective in changing attitudes and behavioral intentions than ads emphasizing values that are inconsistent (Gregory and Munch, 1997; Han and Shavitt, 1994; Zhang and Gelb, 1997). Hoyer and Despande (1982) point out that Hispanic consumers are influenced by family members to a greater extent than Anglo consumers. Because members of collectivistic cultures tend to identify more closely with their family and conform to ingroup goals, marketing programs may need to consider such reference group influences in the development of international ad appeals. Based on this discussion, the following general set of hypotheses are offered:

H1: There will be a significant *culture* by *advertising appeal* interaction for attitude favorability measures.

H1$_a$: Overall, subjects in the individualistic culture (U.S.) will have more favorable attitudes toward advertising claims that emphasize an individualistic (self-orientation) appeal than toward advertising claims that emphasize a collectivistic (ingroup-orientation) appeal.

H1$_b$: Overall, subjects in the collectivistic culture (Mexico) will have more favorable attitudes toward advertising claims that emphasize a collectivistic (ingroup-orientation) appeal than toward advertising claims that emphasize an individualistic (self-orientation) appeal.

Influence of Product Category on the Culture-Ad Appeal Match

Although differences in cultural value orientations are important in forming attitudes and behaviors toward advertising appeals, a product's perceived value in meeting particular goals may be a function of societal or cultural definitions of the product (Shavitt, Lowrey and Han, 1992). Han and Shavitt (1994) provide compelling evidence that in general, individualistic advertisements are more effective in the U.S. and collectivistic advertisements are more effective in Korea. Further analysis, however, shows that this overall pattern was not uniform across product categories, suggesting that product category may moderate the relative effectiveness of certain appeals. While shared products (where purchase decision and usage are likely to include family members or friends) were more likely to be promoted using a collectivistic appeal in a collectivistic culture, personal products (where purchase decision and usage are done by a single individual) were promoted using an individualistic appeal *equally* in both individualistic and collectivistic cultures. These results indicate that matching advertising appeal to cultural orientation may be more important for shared products than for personal products.

Zhang and Gelb (1997) further tested the persuasiveness of ad appeals in the individualistic country (U.S.) and collectivistic country (China). Their overall results were consistent with those of Han and Shavitt (1994); individualistic ad appeals were preferred to collectivistic appeals in the U.S., and collectivistic appeals were preferred to individualistic appeals in China. The results also showed that the pattern of results was inconsistent for different product categories. For a socially-visible product (e.g., Camera), individuals in China preferred the collectivistic appeal over the individualistic appeal. Interestingly though, the results for the privately-used product (e.g., toothbrush) showed that the Chinese subjects were indifferent to the use of either the individualistic or collectivistic ad appeals. For a privately-used 'utilitarian' product such as a toothbrush, where the primary interest of the consumer centers around the personal goals (or functional aspects) of cleaning one's teeth, the individualistic advertising appeal may actually be a more appropriate appeal, regardless of one's cultural value orientation. Finally, a recent study found that product category advertised appears to be a good moderator of cultural role and norm effects on persuasion measures in Mexico (Gregory and

Munch, 1997). Their results were attributed to the severity of the consequences of violating roles and norms between two products that varied in the degree of sharedness (e.g., automobiles vs. gelatine products). Although the authors looked at differences in the degree of decision risk associated with these two products, their results further suggest that the importance of roles and norms may differ even within the *shared* product category.

Together these studies suggest that it is more important to match cultural orientation with ad appeal for products that are socially visible (Zhang and Gelb, 1996), shared by family and friends (Han and Shavitt, 1994), or for shared products that involve higher decision risk (Gregory and Munch, 1997). To gain a better understanding of the influence of product category, it is necessary to determine whether the importance in conforming to ingroup goals is greater for some products than it is for others. Based on the argument that product characteristics moderate cultural differences in the persuasiveness of ad appeals, the following hypothesis is offered:

H2: Culture and advertising appeal effects on attitude favorability measures will *vary as a function of product category*. Specifically, culture and ad appeal effects will be stronger for a shared product than for a personal product.

METHOD

Design

A 2 (individualist/collectivist) culture X 2 (individualist/collectivist) advertising appeal X 2 (product category) three-factor experimental design was utilized in which the first two factors were between-subjects factors, and the third factor was a within-subjects factor.

Subjects

One-hundred and twelve subjects from a university in the Southwestern U.S. and seventy-three subjects from a Mexican university participated in the study. All subjects were undergraduate students enrolled in the business school and had the following demographic features: 48 (43%) males and 64 (57%) females in the U.S., and 21 (29%) males and 52 (71%) females in Mexico; 2-4 years of university education in both cultures; 48 (43%) had 0-2 siblings, 53 (47%) had 3-5 siblings, and 11 (10%) had 6-9 siblings in the family unit in the U.S.; while 17 (23%) had 0-2 siblings, 43 (59%) had 3-5 siblings, and 13 (18%) had 6-9 siblings in the family unit in Mexico. Because of missing data, one subject was dropped from the Mexican sample, yielding a final sample size of 184.

Development of the Advertisements

Four professional magazine type advertisements were created for the study. The development of ads focused on the manipulation of individualistic and collectivistic ad appeals for two categories of products (shared vs. personal). Each subject responded to two advertisements (one ad for each product category) that used either an individualistic *or* collectivistic advertising appeal. Subjects were exposed to only one of the two manipulated experimental conditions.

As suggested by Lee and Green (1991) the products selected were products that are familiar in each of the cultures under investigation, are readily available in each culture, and have been used in previous studies examining cross-cultural consumer behavior (Han, 1990; Zhang and Gelb, 1997; Lee and Green, 1991). According to Han and Shavitt (1994) *shared* products include cameras, automobiles and hotel accommodations; whereas *personal* products include suntan lotion, perfume, and fashion apparel. Based on past research, the products selected for this study included an automobile (shared product) and sunscreen (personal product). A General Motors sedan automobile ad and a Hawaiian Tropic sunscreen ad were used because of the relative familiarity and availability of both product brands in each country. The ad copy (text) and portrayal of characters in each of the original product advertisements was modified to incorporate either an individualistic or collectivistic appeal. Real advertisements were chosen over fictitious ads (and brands) so as to increase the realism and external validity of the experiment. Because actual brand names were used, it was necessary to test for possible brand effects in the evaluation of attitude favorability measures.

‘Individual’ vs. ‘Collective’ Ad Appeal Manipulations

Techniques for manipulating advertising appeal focused on making salient different reasons for evaluating and purchasing a product. The individualist ads focused on the benefits of the product in maximizing one’s personal needs, wants, or desires. The advertisement headline for the individualist ad supported the development and formation of attitudes that allows one to maximize personal needs and interests. The text for the individualistic auto ad read, “There’s a Company that’s Making Cars SAFER FOR YOU. So You Can Enjoy the Feeling of Owning the BEST!” Whereas the text for the individualistic sunscreen ad read, “Be Sun Smart! Tough Enough for the Sun’s Strongest Rays . . . Yet Gentle enough for YOUR SKIN.” Furthermore, only a single individual was present in the individualist ads (a male in the automobile ad and a female in the sunscreen ad). The collectivist ads focused on attributes of the product that help individuals gain social acceptance, foster identification with familial ingroups, and allow one to gain approval from other family (ingroup) members. The headline for these ads focused primarily on making salient reasons for wanting to maximize social acceptance relative to the family ingroup. The collectivistic auto ad read, “There’s a Company that’s Making Cars SAFER FOR YOUR FAMILY. So Your Family can Enjoy the Feeling of Owning the BEST!” Whereas the text for the collectivistic sunscreen ad read, “Be Sun Smart! Tough Enough for the Sun’s Strongest Rays . . . Yet Gentle enough for YOUR BABY’S SKIN.” In the collectivist ad a father, mother and child were shown together along with the product for the automobile ad; the mother was depicted holding her child in the sunscreen ad. In sum, the manipulation of headline text (self vs. ingroup orientation) and use of characters (individual vs. family orientation) was done to reinforce either an individualistic or collectivistic ad appeal. A pilot study of the four different advertisement scenarios for each product category was conducted on a small representative Mexican student sample to assure clarity and logic. The feedback was used to refine the advertisements for use in the study.

Dependent Measures

Multiple-item questions regarding attitude toward the ad, attitude toward the product and attitude toward the company (brand) were asked for each copy ad. Two additional purchase intention measures were generated to determine the influence of ad copy and portrayal of characters on purchase intention for the product. Past research has found that Hispanic and non-Hispanic subjects differ in their extreme response style when using traditional 5-point scales, but are equally likely to use extreme responses for 10-point scales (Hui and Triandis, 1989). In an attempt to reduce the possible effects of extreme response style on attitude favorability measures 9-point scales were used. In the U.S. subjects' attitude toward the ad, product, and company (brand) was measured with three 9-point semantic differentials: from "dislike" to "like," "negative" to "positive" and from "bad" to "good" (Cronbach's alpha = .92, .93, .87; and .88, .88, .95, for the auto and sunscreen ads, respectively). Additionally in the U.S., two purchase intention items (based on ad copy and portrayal of characters) was measured with two 9-point semantic differentials: from "absolutely impossible" to "very much possible" and "definitely not purchase" to "definitely purchase" (Pearson's correlation = .78, .80; and .82, .81, for the auto and sunscreen ads, respectively). In Mexico, subjects' attitude toward the ad, product, and company (brand) was measured using the same 9-point semantic differentials (Cronbach's alpha = .92, .87, .77; and .90, .92, .89, for the auto and sunscreen ads, respectively). The two purchase intention items based on ad copy and portrayal of characters was also measured using the same two 9-point semantic differentials (Pearson's correlation = .88, .78; and .92, .87, for the auto and sunscreen ads, respectively).

Translation and Administration Procedures

The instrument used in this study was first written in English, then translated into Spanish by a native Mexican, fluent in both Spanish and English. The instrument was then back translated to English by a second translator, fluent in both Spanish and English, to assure that a proper translation has taken place (Brislin, 1980). The back translated version was then compared to the original English version, and any differences were corrected by making slight modifications in terminology. The modified instrument again went through translation until the two translators agreed that the meaning behind each original item was translated to an identical or equivalent meaning for the Mexican population. The instrument was then pretested on a small Mexican (Spanish speaking) population to assure clarity and consistency in the items presented. The feedback from the pilot study was incorporated into the development of the final instrument used in the study.

A trained facilitator guided the subjects through the exercise. The facilitator read through an explanatory letter and asked each subject to turn over the cover letter when finished reading. Together, each subject was then instructed to take out the first of two advertisements, carefully examine it, and to place the advertisement face down on top of the cover letter when instructed. Subjects then completed dependent measures for the first ad. The same procedure was followed for the second ad. The presentation of the ads was counterbalanced in order to test for possible order effects. In the final section demographic questions were answered. The purpose in following this procedure was so that each subject went in sequential order through the instrument, had ample time to examine the advertisements and complete the materials, and that the administration of the instrument was consistent between cultural groups.

RESULTS

Manipulation Checks

To assess the degree to which an advertisement focuses on an individualistic (self-orientation) appeal or collectivistic (ingroup-orientation) appeal, subjects in each culture were asked to rate, on a 9-point scale (where 1 = ‘strongly disagree’ and 9 = ‘strongly agree’) the following manipulation check items for each of the product categories: (1) The (product) ad focused primarily on the benefits the individual consumer alone would receive; and, (2) The (product) ad focused primarily on the benefits that the family together would receive.

A one-way ANOVA showed that both the self-orientation and ingroup-orientation manipulations were successful in each culture. In the U.S. the mean response value for the *individualistic appeal item* in the self-orientation condition was 5.05 and 6.81, whereas the mean response value in the ingroup-orientation condition was 4.07 and 5.22, for the auto and sunscreen ads, respectively. While these differences were only marginally significant for the first manipulation check item in the auto ad ($F = 3.25$, $p < 0.07$) they were statistically significant for the sunscreen ad ($F = 13.80$, $p < 0.001$). In the U.S. the mean response value for the *collectivistic appeal item* in the self-orientation condition was 3.82 and 5.69, whereas the mean response value in the ingroup-orientation condition was 6.74 and 7.54, for the auto and sunscreen ads, respectively. These differences were statistically significant for the second manipulation check item in both ads ($F = 66.54$, $p < 0.001$; $F = 31.45$, $p < 0.001$).

In Mexico the mean response value for the *individualistic appeal item* in the self-orientation condition was 5.41 and 5.57, whereas the mean response value in the ingroup-orientation condition was 2.83 and 3.97, for the auto and sunscreen ads, respectively. These differences were statistically significant for the first manipulation check item in both ads ($F = 13.96$, $p < 0.001$; $F = 4.04$, $p < 0.05$). In Mexico, the mean response value for the *collectivistic appeal item* in the self-orientation condition was 4.73 and 3.59, whereas the mean response value in the ingroup-orientation condition was 7.00 and 6.36, for the auto and sunscreen ads, respectively. Once again, these differences were statistically significant for the second manipulation check item in both ads ($F = 15.20$, $p < 0.001$; $F = 52.40$, $p < 0.001$).

In sum, the results indicate that the manipulations were successful in each culture under investigation. Seven of the eight comparisons were statistically as predicted. Although the results for the first item of the auto ad in the U.S. were only marginally significant, it is important to note that the means were in the predicted direction. Overall, the findings demonstrate the successful manipulation of individualistic (self-orientation) and collectivistic (ingroup-orientation) ad appeals.

Culture by Ad Appeal Interaction

To test Hypothesis 1, multivariate analysis of variance (MANOVA) was performed on attitude favorability measures with two between-subjects factors--cultural orientation (individualist vs. collectivist), and advertising appeal (individualist vs. collectivist) separately on each of the product categories. Results for the *shared product* (auto) revealed a significant culture effect on attitude toward the ad ($F(1,180) = 6.06$, $p < .05$) and purchase intention based on ad copy and portrayal of characters in ad, ($F(1,180) = 7.99$, $p < .01$; $F(1,180) = 14.59$, $p < .001$), respectively (see Table 1). There were no main effects of culture on attitude toward product or brand. A significant ad appeal effect was found for attitude toward the ad ($F(1,180) = 8.63$, $p < .01$), attitude toward product ($F(1,180) = 24.37$, $p < .001$), and portrayal of characters ($F(1,180) = 4.66$, $p < .05$); no effects were found for attitude toward brand or ad copy. More important, significant culture by ad appeal interaction effects were found on attitude toward the ad ($F(1,180) = 151.49$, $p < .001$), attitude toward product ($F(1,180) = 155.49$, $p < .001$), and both purchase intention measures (ad copy and portrayal of characters) ($F(1,180) = 21.37$, $p < .001$; $F(1,180) = 13.60$, $p < .001$) but NOT on attitude toward the brand.

TABLE 1
MANOVA Summaries of Culture and Ad Appeal Effects for Automobile Ad

Source of variance	*df*	Sum of Squares	*F*	Prob. >*F*
Attitude Toward the Advertisement				
Culture	1	14.38	6.06	.015
Ad Appeal	1	20.47	8.63	.004
Culture X Ad Appeal	1	359.32	151.49	.000
Attitude Toward the Product				
Culture	1	3.53	1.55	.215
Ad Appeal	1	55.73	24.37	.000
Culture X Ad Appeal	1	355.54	155.49	.000
Attitude Toward Company (Brand)				
Culture	1	.76	.66	.419
Ad Appeal	1	1.16	1.00	.318
Culture X Ad Appeal	1	2.98	2.57	.111

Purchase Intention (Ad Copy)				
Culture	1	32.74	7.99	.005
Ad Appeal	1	7.26	1.77	.185
Culture X Ad Appeal	1	87.49	21.37	.000
Purchase Intention (Portrayal of Characters)				
Culture	1	57.98	14.59	.000
Ad Appeal	1	18.53	4.66	.032
Culture X Ad Appeal	1	54.03	13.60	.000

Results for the *personal product* (sunscreen) revealed a significant culture effect on attitude toward the ad ($F(1,180) = 7.54$, $p < .01$) and purchase intention based on portrayal of characters in ad ($F(1,180) = 7.07$, $p < .01$) (See Table 2). There were no main effects of culture on attitude toward product, attitude toward the brand or purchase intention based on ad copy. A significant ad appeal effect was also found for attitude toward the product ($F(1,180) = 12.80$, $p < .001$), while no effects were found for the remaining attitude favorability measures. Significant culture by ad appeal interaction effects were again found on all four of the following dependent measures: attitude toward the ad ($F(1,180) = 162.21$, $p < .001$), attitude toward the product ($F(1,180) = 309.89$, $p < .001$), and purchase intention (ad copy and portrayal of characters)($F(1,180) = 57.02$, $p < .001$; $F(1,180) = 12.26$, $p < .001$). Similar to the results for the shared product, no interaction effects on attitude toward brand were found.

TABLE 2

MANOVA Summaries of Culture and Ad Appeal Effects for Sunscreen Ad

Source of variance	*df*	Sum of Squares	*F*	Prob. >*F*
Attitude Toward the Advertisement				
Culture	1	19.60	7.54	.007
Ad Appeal	1	.27	.10	.747
Culture X Ad Appeal	1	424.29	163.21	.000
Attitude Toward the Product				
Culture	1	.55	.33	.568
Ad Appeal	1	21.35	12.80	.000
Culture X Ad Appeal	1	516.98	309.89	.000
Attitude Toward Company (Brand)				
Culture	1	5.75	1.77	.185
Ad Appeal	1	1.25	.39	.535

Culture X Ad Appeal	1	.01	.01	.949
Purchase Intention (Ad Copy)				
Culture	1	.01	.01	.951
Ad Appeal	1	.15	.04	.851
Culture X Ad Appeal	1	239.06	57.02	.000
Purchase Intention (Portrayal of Characters)				
Culture	1	29.75	7.07	.009
Ad Appeal	1	14.55	3.46	.065
Culture X Ad Appeal	1	51.57	12.26	.001

Testing for Additional Effects

Before interpreting these results, it was necessary to test for possible *ordering effects* due to ad placement in the instrument. To test whether placement of an advertisement had a differential affect on attitude favorability measures, multivariate analysis of variance (MANOVA) was performed on attitude favorability measures with three between-subjects factors--cultural orientation (individualist vs. collectivist), advertising appeal (individualist vs. collectivist), and order of ads (auto-sunscreen vs. sunscreen-auto) separately on each of the product categories. The findings indicated that there were no main or interaction effects for either product category; thus, providing sufficient evidence that culture and ad appeal effects were not necessarily due to ordering of advertisements within the instrument.

Similarly, if *brand name (company image) effects* confounded attitude favorability measures, such effects most likely would be seen in either main or interaction effects for attitude toward the company (brand). Multivariate analysis of variance (MANOVA) results indicated that there were no main or interaction effects for attitude toward the company (brand). Since this pattern was consistent across product categories, using actual brand names is thought to have had only a minimal influence (if any) on the other attitude measures. Hence, based on these additional analyses, further discussion of results will be limited to the remaining four attitude favorability measures.

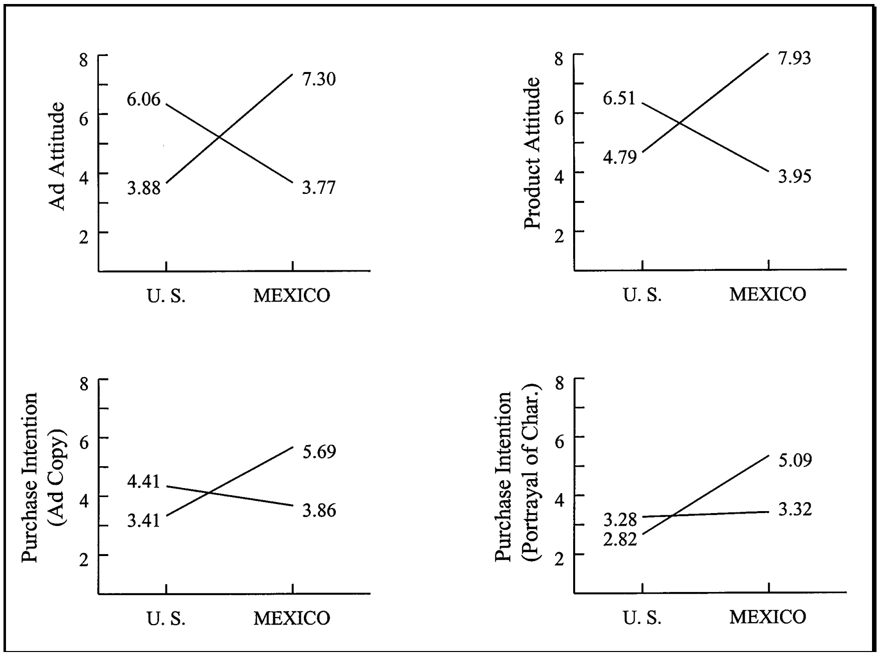
Finally, since the manipulation of individualist appeals involved a single male in the automobile ad and a single female in the sunscreen ad, it was necessary to test for possible *gender effects*. Multivariate analysis of variance (MANOVA) was performed on attitude favorability measures with three between-subjects factors--cultural orientation (individualist vs. collectivist), advertising appeal (individualist vs. collectivist), and gender (male vs. female) separately on each of the product categories. The overall results suggests that there was no consistent pattern of main or interaction effects for either product category. Interestingly, however, there was a culture by ad appeal by gender effect for purchase intention (portrayal of character) for the automobile ad ($F(1,180) = 5.17$, $p < .05$) and for attitude toward the product for the sunscreen ad ($F(1,180) = 4.05$, $p < .05$). A closer examination showed that in both product ads Mexican females had more favorable attitudes toward the collectivist (family-oriented) ad appeals than Mexican males. Although important, such findings were not consistent across products or attitude measures, and are not believed to have significantly affected the findings of this study.

Pattern of Culture and Ad Appeal Effects

The pattern of means for culture and ad appeal effects on the remaining four attitude favorability measures can be seen in Figures 1 and 2. Figure 1 illustrates the results on ad attitudes, product attitudes and purchase intention (ad copy and portrayal of characters) for the shared product (automobile). Paired comparisons t-test of cell means revealed significant differences between ad appeal conditions for all four attitude favorability measures in Mexico, and all but the purchase intention measure based on portrayal of characters in the U.S. (see Table 3 for cell means and standard deviations).

Figure 2 indicates a similar pattern for the personal product (sunscreen). T-test comparisons again showed significant differences between ad appeal conditions for all attitude favorability measures in Mexico, and all but purchase intention based on portrayal of characters in the U.S.

These findings suggest that subjects in the U.S. have greater attitude favorability toward the individualistic (self-oriented) ad appeal; whereas subjects in Mexico had greater attitude favorability toward the collectivistic (ingroup-oriented) ad appeal. The culture by ad appeal interaction effects appear to be consistent for both the shared and personal product categories. Although mean ratings were higher for individualistic appeals, purchase intention responses based on portrayal of characters did not significantly differ between ad appeals in the U.S. In sum, the overall pattern of results for each product category provides sufficient evidence to support both Hypothesis 1a and 1b.



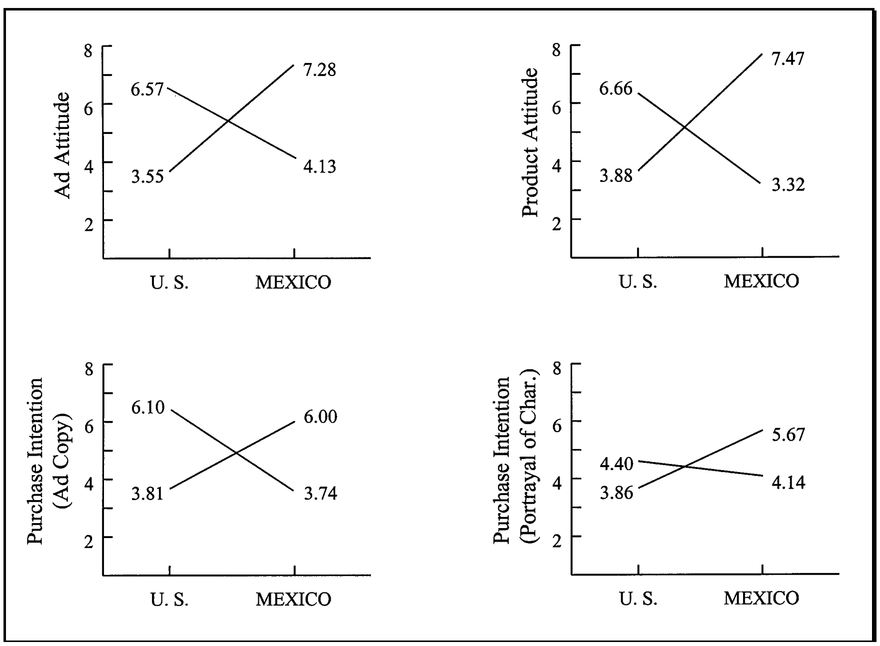


TABLE 3
Cell Means and Standard Deviations

	Individualist (U.S.)		Collectivist (Mexico)	

	Individualist Ad Appeal		Collectivist Ad Appeal		Individualist Ad Appeal		Collectivist Ad Appeal	
Measure	Auto	Sunscreen	Auto	Sunscreen	Auto	Sunscreen	Auto	Sunscreen
Ad	6.06	6.57	3.88	3.55	3.77	4.13	7.30	7.28
Attitude	(1.86)	(1.57)	(1.25)	(1.22)	(1.19)	(2.14)	(1.64)	(1.55)
Product	6.51	6.66	4.79	3.88	3.95	3.32	7.93	7.47
Attitude	(1.92)	(1.40)	(1.36)	(1.07)	(1.14)	(1.05)	(1.28)	(1.62)
Brand	6.61	6.45	6.19	6.64	6.22	6.83	6.31	6.93
Attitude	(1.39)	(1.79)	(1.01)	(1.75)	(.87)	(2.04)	(.72)	(1.63)
Purchase	4.41	6.10	3.41	3.81	3.86	3.74	5.69	6.00
Intention (Ad Copy)	(2.49)	(2.45)	(1.31)	(1.47)	(1.72)	(1.63)	(2.33)	(2.53)
Purchase	3.28	4.40	2.82	3.86	3.32	4.14	5.09	5.67
Intention (Port. of Char)	(2.39)	(1.74)	(1.34)	(1.71)	(1.60)	(1.54)	(2.45)	(2.08)

Note. Standard deviations are in parentheses

Shared vs. Personal Product Category Effects

To test product category effects (Hypothesis 2), a repeated measure analysis of variance with two between-subjects factors -- cultural orientation (individualist vs. collectivist), and advertising appeal (individualist vs. collectivist) -- and one within-subjects measure (product category) was used. Results revealed a significant *product category effect* for subjects' repeated exposure to different product ads on attitude toward the product ($F(1,180) = 11.99$, $p < .001$) and purchase intention measures based on ad copy ($F(1,180) = 7.99$, $p < .01$) and portrayal of characters ($F(1,180) = 27.43$, $p < .001$) (see Table 4.).

No product effects on attitude toward the ad occurred. A culture by product category interaction was found on purchase intention (ad copy) only ($F(1,180) = 6.33$, $p < .05$), while no ad appeal by product category effects occurred for any of the attitude favorability measures. Finally, significant culture by ad appeal by product category interaction effects occurred for attitude toward the product ($F(1,180) = 4.46$, $p < .05$) and purchase intention based on ad copy ($F(1,180) = 4.49$, $p < .05$).

TABLE 4: Repeated Measure MANOVA Summaries for Attitude Measures

Source of variance	*df*	Sum of Squares	*F*	Prob. >*F*
Attitude Toward the Advertisement				
Between Subjects				
Culture	1	32.01	12.85	.000
Ad Appeal	1	12.03	4.83	.029
Culture X Ad Appeal	1	780.30	313.25	.000
Within Subjects				
Product Category	1	1.56	.64	.426
Culture X Product Category	1	.13	.05	.820
Ad Appeal X Product Category	1	8.26	3.36	.068
Culture X Ad Appeal X Product	1	1.20	.49	.486
Attitude Toward the Product				
Between Subjects				
Culture	1	4.22	1.84	.176
Ad Appeal	1	74.26	32.42	.000
Culture X Ad Appeal	1	878.73	383.65	.000
Within Subjects				
Product Category	1	19.75	11.99	.001
Culture X Product Category	1	.76	.46	.498
Ad Appeal X Product Category	1	4.87	2.96	.087
Culture X Ad Appeal X Product	1	7.34	4.46	.036
Purchase Intention (Ad Copy)				
Between Subjects				
Culture	1	12.19	2.42	.121
Ad Appeal	1	2.70	.54	.465
Culture X Ad Appeal	1	292.49	58.13	.000
Within Subjects				
Product Category	1	26.71	7.99	.005
Culture X Product Category	1	21.17	6.33	.013
Ad Appeal X Product Category	1	4.70	1.41	.237
Culture X Ad Appeal X Product	1	15.01	4.49	.035
Purchase Intention (Portrayal of Characters)				
Between Subjects				
Culture	1	83.57	14.72	.000
Ad Appeal	1	30.46	5.36	.022
Culture X Ad Appeal	1	103.59	18.25	.000
Within Subjects				
Product Category	1	71.04	27.43	.000
Culture X Product Category	1	2.65	1.02	.313
Ad Appeal X Product Category	1	.32	.12	.724
Culture X Ad Appeal X Product	1	.05	.02	.893

A preliminary examination of overall effect sizes for each product category shows that ad appeal and culture *main effects* are stronger for the shared product (auto) than for the personal product (sunscreen) (ω^2 = .17 vs. ω^2 = .10; ω^2 = .11 vs. ω^2 = .08) respectively. Culture by ad appeal *interaction effects*, however, are stronger for the sunscreen product than for the auto product (ω^2 = .72 vs. ω^2 = .58). A closer examination of interaction effect sizes for specific attitude favorability measures indicate that similarities exist between auto and sunscreen products on attitude toward the ad and purchase intention based on portrayal of characters (ω^2= .46 vs. ω^2= .47; ω^2 = .07 vs. ω^2= .06), respectively. However, effect sizes appear to be greater on attitude toward the product (ω^2 = .46 vs. ω^2 = .63) and purchase intention based on ad copy (ω^2 = .11 vs. ω^2 = .24) for the sunscreen product.

In summary, significant product category effects occurred on three of the four attitude favorability measures. Interaction effects of culture and ad appeal with product category indicate that attitude toward the product and purchase intention (ad copy) measures vary as a function of shared vs. personal product category. Although culture and ad appeal main effects appear to be greater for the shared product (auto), culture by ad appeal by product category interaction effects are greater for the personal product (sunscreen); thus, providing only partial support for Hypothesis 2.

DISCUSSION

The purpose of this research was to compare persuasion measures in different cultures toward individual and collective ad appeals. Additionally, this study looked at how the matching of ad appeal with culture varied by product category. Overall findings indicate that matching advertising appeal with cultural orientation leads to greater attitude favorability (or persuasion) for cultures that vary on individualism-collectivism. Subjects in the individualist culture (U.S.) preferred individualistic (self-oriented) ad appeals; whereas subjects in the collectivist culture (Mexico) preferred ads emphasizing a collectivistic (ingroup-oriented) appeal. Furthermore, the pattern of effects varied as a function of shared vs. personal product categories.

Development of Ad Appeals Based on Culture

Recently, researchers have devoted considerable attention to examining similarities and differences in cultural value orientation and the impact on attitudes and persuasion measures cross-culturally. In an attempt to further explore how differences in individualism-collectivism affect perceptions of individual (self-oriented) vs. collective (ingroup-oriented) ad appeals, the findings of this study support previous research that matching advertising appeal with culture may lead to greater levels of persuasion (Gregory and Munch, 1997; Han and Shavitt, 1994; Zhang and Gelb, 1997).

Although individualism-collectivism is only a general measure of a culture, it serves as an important framework in determining how individuals relate to one another and their socialization process. One goal of this study was to look beyond basic differences in individualism-collectivism and to determine *how* this important construct can be more precisely operationalized in an advertising context. Knowing that certain cultures may be more collectivistic in nature is not enough. Researchers need to explore how cultural value orientations is manifested in ad appeals and whether matching cultural orientation with ad appeal does indeed lead to more persuasive communications. At the heart of the individualism-collectivism construct is the emphasis on personal goals vs. ingroup goals. Operationalizations of this construct must focus on the salient ingroups of a culture, as well as capture the relative influence these ingroups have on attitudes and behavior. More specifically, parents that emphasize the importance of tight-knit relationships within the family unit may be implicitly encouraging their children to evaluate their actions on the basis of their perceived effects on others (Moore and Moschis, 1981; Moschis and Moore, 1979). For cultures such as Mexico, where there is greater importance placed on intra-familial relationships, advertisements that emphasis the benefits the family ingroup will receive may actually be more persuasive. Whereas in individualistic culture such as the U.S., marketing communications often focus more on the functional aspects of a product and the benefits that individuals themselves would receive.

Whether or not marketers need to develop advertisements that solely reflect the value orientations of a culture is a much debated issue. Past findings indicate that 'actual' ads shown within a culture may not always reflect the overall cultural orientation of a society (Belk and Pollay, 1985; Pollay and Gallagher, 1990). Factors such as peer influence, changing values and lifestyles, and within-culture variation based on demographic, socioeconomic, or sub-cultural differences can also influence the development of advertisements within a culture. If it is decided to market a product or service within a country, then an understanding of the underlying influence of individualism-collectivism and its affect on marketing strategy is necessary.

Product Characteristics and the Influence of Culture

Consistent with findings by Han and Shavitt (1994), type of product advertised appears to moderate cultural differences in attitude favorability measures for individual vs. collective ad appeals. Although culture and ad appeal effect sizes are greater for the shared product, culture by ad appeal by product category interaction effects indicate that differences in the persuasiveness of ad appeals are greater for the personal product. A closer look at Figures 1 and 2 shows that overall, there appears to be greater differences between ad appeal ratings in Mexico than in the U.S. Though not conclusive, this finding suggests that matching ad appeal with culture may be more important in a collectivist culture than in an individualist culture. In Mexico, this pattern appears to be consistent across product categories, while in the U.S., the consistency of effects is to a lesser degree. Similarly, Childers and Rao's (1992) study comparing familial and peer-based influence showed that family influence was greater for the collectivist culture, Thailand, than for the individualist culture, U.S. The authors further suggest that when compared to nuclear family cultures (U.S.), influence in extended family cultures (Thailand) is fairly consistent between necessities and luxuries, as well as between private and public consumption goods. Conversely, in the U.S., the distinction between family vs. peer-based influence for private and public consumption goods was more pronounced. Perhaps the varying influence in each culture that the family as a reference group has on different products can partially explain the moderating role of product category in the persuasion process.

In sum, the findings indicate that the cultural value orientation (individualism-collectivism) may be important when developing international advertisements. The development of international advertisements should consider the cultural values and the importance individuals place on self vs. family ingroup orientation in the evaluation of specific product advertisements. Further research investigating specific purchase situations and/or family and peer influence may be necessary across a variety of products.

Limitations

Not unlike most research, this study has several characteristics that limit the generalizability of its findings. First, a broader range of product categories may provide additional insight into how culture and ad appeal effects interact for shared and personal products. Whereas this study investigated shared and personal products only, perceived differences in product consumption and usage for public/private, luxury/necessity, or high/low decision risk could have also accounted for additional effects. Differences in product involvement and price levels of the two products may also have accounted for differences in effect sizes between the shared and personal products. Second, although the use of real ads with existing product brands did not result in brand effects, this does not necessarily eliminate possible effects that well-established brands may have had on attitude favorability measures. The decision to maximize realism *and* internal control over extraneous variables is not an easy one, especially when using an experimental design approach. Third, due to expected perceived differences with the consistency and inconsistency of cultural value orientations, the generalizability of the findings is limited in scope. Realistically, there are numerous ways in which individualism-collectivism could have been portrayed within the advertisements. Lastly, as with any society, there is much within-culture variation in values, depending perhaps on socioeconomic, demographic, and/or regional variables. The sample size and limited geographical regions within each country certainly restrict making inferences regarding these findings across entire cultures.

DIRECTIONS FOR FUTURE RESEARCH

Marketers developing advertising messages need to be aware of the cultural value orientations within foreign markets, and how advertising appeals portray local values. The fact that such differences exist is not in question, but rather *how* such differences affect the development of marketing communication programs. An important and often debated issue in international marketing is whether or not to standardize or customize advertisements based on type of culture, ad appeal, or product category. Before such decisions can be made, a number of relevant issues must first be considered. For example, whether a culture, in general, leans more toward values based on individualism (e.g., achievement, independence) or collectivism (e.g., tradition, conformity) may be important initially in determining the type of ad appeal to be used. The presence of within-culture variation, however, along with other elements within the ad itself such as ad claims, perceived uses of a product, etc., warrant examination of more finely-tuned measures of consumer behavior. Factors such as product use conditions, believability of different ad claims, persuasiveness of the ad, and appropriateness of ad copy used may also play an important role in designing and using certain types of ad appeals. This may be especially true when considering how each of these factors operate in other cultures.

One approach to determine how cultural aspects affect attitudes and behavior is through attitudinal models that separate the attributes of the person and attributes of the social environment (i.e., Theory of Reasoned Action). This approach allows researchers to address issues dealing with the attitudinal and normative effects within one model. Furthermore, it seems logical that when examining attitudes and behaviors that deal with influences based on societal values (i.e., individualism-collectivism), attitudinal models that are capable of capturing affective and normative influences would be of particular interest.

Researchers further suggest that future efforts investigate not only the observable differences in decision processes between individualistic and collectivistic cultures, but also to examine whether such differences are greater for some products than for others (Han and Shavitt, 1994; Shavitt et al., 1992; Gregory and Munch, 1997). Although this research study attempts to explore these relationships, additional research efforts should continue to examine whether these relationships apply to other cultural dimensions (e.g., Power Distance, Uncertainty Avoidance, etc.) or can be extended to other cultural domains (e.g., Latin American countries, other collectivist societies). Future research should also consider specific areas of consumption, additional populations, and additional methods of measuring cultural values to increase our understanding of the link between values and consumer behavior both at the cultural and the individual level. Based on the premise that societal values (i.e., as reflected within advertising appeals) may not always reflect individual-level consumer behavior, further research is necessary to determine similarities and/or differences in specific motivational value types and the degree to which common norms, tastes, and values justify a globalized or customized approach to marketing communications.

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GIRLS' RESPONSES TO ADVERTISEMENTS FEATURING ACTIVE, PASSIVE, AND PRODUCT-ALONE VISUAL PORTRAYALS

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ABSTRACT

This research studied the issue of how girls responded to ads that featured visuals of girls in indoor, passive settings; in outdoor, active settings; and of visuals featuring the product alone. Attitude toward the ad results showed no significant differences between the most preferred indoor, passive setting and the outdoor, active setting. Ads featuring the product-alone scored lower on measures of attitude towards the ad. No significant differences were found among the three portrayals for the measure of attitude towards the brand. Mean ratings for this measure followed the same order as for attitude towards the ad, however.

INTRODUCTION

The influence of the child and teen market segments in the US will increase over the next decade just as it has over the previous one. This increase will be partly due to additional youth spending and partly due to increased influence on family spending (McNeal, 1998; Zollo, 1995). From 1991 through 1997, the typical 10-year-old child had an increase in allowance of 46% to an average of $6.13 per week. That same child had a total average income per week of $13.93, an increase from 1991 of 76%. This total increase was due to allowances in part, but more importantly to earnings from household chores and from gifts. Children aged 2 to 14 years were estimated to directly influence $188 billion in spending in the US in 1997 (McNeal, 1998). Teens aged 12 to 19 years old have nearly $100 billion in total annual spending power. Teenaged girls specifically have about $34 a week to spend and typically spend more of their family's money than do boys (Zollo, 1995).

With this additional spending from an already important market, businesses aiming at children are becoming even more interested in learning about marketing to children. McNeal (1998) reports that the most common mistakes that children's marketers commit are based in lack of credible advertising research. The first mistake is when marketers assume that their experiences rearing their own children make them experts, when in fact no one family's children is typical of all children in the US. The second mistake occurs when marketers assume that their own personal experiences growing up still hold true. Furthermore, McNeal argues that companies do substantially more marketing research on adults than they do on children. Phelps and Hoy (1996) report that the advertising industry sees children's advertising issues as one of their top concerns in this decade. This concern is evident from the amount of media buying advertisers are targeting at children. Advertising in children's programming is typically sold out, and with limited opportunities to advertise exclusively to this market, one primary goal is to spend those advertising dollars more effectively (Stipp, 1993).

One means of increasing the efficiency of advertising dollars is to study which advertising images will result in the most positive attitudes towards the advertisements themselves as well as toward the featured brands. This study looks at the target market of fourth to twelfth grade girls and explores their responses to differing visuals within the ads.

The product was a fictitious candy bar, the Confetti Bar. The study used a snack bar as its product primarily because McNeal (1998) reported that one-third of all children's income went to food and beverages, with this product category being the largest in overall spending for children. In 1997, children were estimated to have spent $7.7 million of their own money on food and beverages and to have influenced $110 million in spending on this category that year.

Girls were sampled in this study because they were the gender experiencing the most obvious changes in roles. Had these changes in roles led to new preferences among girls for how they were portrayed in advertising? Much of the research on gender stereotyping was dated, originating primarily in the 1970s (Browne, 1998). Additionally, though research on media content concerning girls and women was sometimes available, research on females' responses to media content was virtually absent. Questions arise as to whether girls identified with images presented to them. What images or portrayals did they find pleasurable (Currie, 1997)?

To increase their advertising effectiveness, children's marketers could readily adjust the type of visual portrayal their ad messages included. Would advertisements create more attention, better recognition and recall, or a higher purchase response if the ads included no models or girl models? Furthermore, would girls prefer ads in which they were pictured in active or passive roles? Earlier research indicated that children imitated same-sex models more readily than they do opposite sex models. Also, children recalled more about same-sex models than they did about opposite sex models in advertising (Courtney and Whipple, 1983). The goal of this research was to determine whether girls of this age group preferred ads that featured the product alone (no models), ads that showed girls in passive, indoor settings, or ads that portrayed girls in active, outdoor modes. Measures of preference included attitude towards the ad (Aad) and attitude towards the brand (Ab).

LITERATURE REVIEW

Girls: Behavior and Responses to Advertising

A number of research studies and reports from industry executives had indicated that girls and women were more accepting of using male-positioned brands than males were accepting of using female-positioned brands (Belizzi and Milner, 1991). Executives from Pizza Hut, Wendy's, and Burger King restaurants reported that the crossover for girls' responding to promotions targeted primarily towards boys could be substantial (Hume, 1993). But while girls used boys' products, they often used them in different ways, and they sometimes preferred products aimed specifically at their gender.

Children's behavior differences between the genders are well documented. A Mattel media spokesperson argues, "Year after year, we observe children playing, and we see that girls like dolls, they like the color pink, and they like Barbie" (Fitzgerald, 1993, p. 52). In addition to these preferences, girls' play behavior is different from that of boys. Bloch (1987) conducted detailed daylong observations of children aged infant through six years of age. Beginning at age five, girls did more responsible work at home. They also did more passive, school-related activities. Boys were more involved in gross motor play.

Aside from variations in play activities, media choices also varied. These differences emerged early in life and continued through adulthood. Media analysts attested that television show favorites varied between males and females, but genders also exhibited differences in print preferences. Boys liked comic books; girls preferred magazines. Girls sought out magazines such as Seventeen or Sassy long before they were as old as 17 years (Stipp, 1993).

In addition to behaving differently in play and in media choices, the genders responded differently to visual appeals. Industry wisdom indicated that children were attuned to advertising's role portrayals of their genders. Children appeared to be most positive about advertising that was interesting and different. They wanted to see appeals specifically designed for their age group and their sex. At the same time, parents expressed their annoyance at ads that reinforced typical gender roles (Laitner 1994). Currie (1997) conducted depth interviews of girls aged 13 to 17 concerning their interpretation and responses to a number of ads in fashion magazines. She found that adolescent girls did not passively accept images in ads; they readily selected ads they enjoyed and others they rejected. Girls in this study tended to like ads that they described as being "realistic" or as depicting the life of an "average" teenage girl, someone they could "relate to."

Though little further research exists on girls' preferences for specific role portrayals, some research on adult females has been completed. Jaffe (1991) found that sex-role identity and preferences varied based on factors such as age, martial status, and occupation. In general, older women (who were also married, with children, and in lower paying jobs) scored as more feminine on gender scales. Younger, single, professional women rated higher on masculinity scales.

Following from this changing self-evaluation on scales of masculinity and femininity, it appeared that women also varied in the types of message appeals that they favored as compared with men. In a study of adult women's responses to advertising portrayals, Jaffe (1991) showed a traditional, nurturing role in one ad and a modern, successful, employed image in another ad for a financial service offering. Measuring purchase probability, purchase intent, and information interest, she found that overall, the modern, career-oriented positioning was more successful. Analyses of past research on positioning strategies show conflicting results concerning the modern/traditional positioning for products. In many cases, no significant preferences occur for one position over another among adult women. Widgery and McGaugh (1993) found that younger adult women (aged 18 to 24) preferred to be portrayed in more active lifestyles. The authors argued that changing sex roles might determine the effectiveness of various message appeals. Would girls also exhibit a higher interest in ads featuring traditionally male orientations?

As he developed children's advertising, television executive Cy Schneider (1989) argued that boys were concerned with power and strength while girls were more involved with appearance, with being cute. Furthermore, Schneider said that girls identified most with the nurturing mother role. Clearly, disagreement among "experts" exists about how females prefer to see themselves portrayed. Some parents and child advocates argue that girls like to see more active, unusual roles. Recent research findings indicate that at least for adult females, their role portrayal preferences vary depending on their age and occupational status. Members of the advertising industry generally seem to believe that girls prefer to see themselves in more traditional roles. Evidence of the industry's leaning towards more traditionally feminine roles can be seen through content analyses of advertising.

Gender Portrayals in Media

In 1974, O'Kelly conducted a content analysis of children's television advertisements. In this era, girls' most common advertising portrayals were highly traditional. They played house, cooked, and were airline stewardesses. Only 10% of girls were portrayed doing physical activities such as gymnastics. Almost ten years later, Courtney and Whipple (1983) found girls typically playing with dolls in television commercials. Their primary goals were to be popular and beautiful. In an analysis of adult advertisements, Bretl and Cantor (1988) revealed that males appeared more frequently out-of-doors and away from home than did females. Women were generally pictured in their homes. In an analysis of prime-time television programming's pictures of youth, Peirce (1987) found that girl characters were more likely to dress-up, to play with dolls, to help in the kitchen, and to talk on the telephone. Boy characters, on the other hand, were more typically playing sports, acting as radio disc jockeys, running through households, and generally being mischievous. From this sampling of content analyses, it is evident that through the decades of the 1970's and 1980's, masculine and feminine role portrayals in the media remained fairly consistent overall. The traditional role of female as keeper of the home and nurturer prevailed as did the male role of being physically active and participating in pranks.

Research conducted during the decade of the 1990's showed that these portrayals remained fairly consistent. In a content analysis of children's advertising, Smith (1994) found that boys and girls were both pictured in passive settings about equally. For instance, they might have been reading or watching television. Boys who had traditionally been portrayed as almost consistently physically active were now shown as having quiet times as well. Girls were sometimes pictured in active roles, but not nearly as often as boys (12% as compared to 20% of ads for boys). Advertising settings were also revealing. Girls were pictured at home 71% of the time while boys were home in only 27% of the advertisements featuring them. Browne (1998) studied television ads during children's programming as well and found that boys were pictured as more knowledgeable, active, and aggressive than girls. Girls, on the other hand, were portrayed as more shy and giggly and less likely to assert control than boys.

Over a 20-year time span, few changes in gender roles as pictured in the media have occurred. The question for advertisers is whether traditional female role portrayals are still the most effective choice given the substantial changes in gender roles in the real world, such as the increasing proportion of women seeking employment and higher education (Linden, 1994). Given the roles in which daughters see their mothers participating, would these girls prefer to see more diverse, yet still realistic, media images of themselves as well? An exploration of attitudinal research helps to clarify the research approach to this question.

Attitude Toward the Ad and the Brand

Attitude toward the Advertisement (Aad) has received much research attention over the last two decades. Not surprisingly, advertisers appear to believe that a "likable" ad can create a favorable consumer impression that may affect long term attitudes toward the brand (Ab) (Burton and Lichtenstein, 1988). Lutz (1985) defined Aad as a predisposition to respond favorably or unfavorably to a particular ad on a particular exposure occasion. Following this definition, Phelps and Hoy (1996) defined Ab as the predisposition to respond favorably or unfavorably to a particular brand after a subject has been exposed to an advertisement. Advertisements create positive or negative feelings in consumers' minds; these feelings then can lead to a similar attitude toward the brand. The end result of this chain of events could be purchase of the brand. For teens, advertising is an important determinant of a brand's "coolness" according to Zollo (1995). Thirty-nine percent of teens felt that advertising contributed to their attitudes towards a brand's popularity.

It is especially important to study the concept of Aad and Ab in youth because earlier research with adults indicated that Aad was one of the factors that influenced overall brand attitude and even purchase intention. Does the same relationship exist in children (Phelps and Hoy, 1996)?

Aad has both cognitive (or information-based) and affective (or emotion-based) antecedents. Both the objective and the emotive aspects of a single ad may influence an audience. The central route to persuasion indicates that sometimes a target market may develop attitudes by learning product attributes or objective competitive advantages; in other instances, the audience may gain attitudes through feelings created by the peripheral route to persuasion. In this instance, the attitude changes are based on low elaboration or minimal cognitive processing. In the peripheral route to persuasion, a consumer associates the ad with a favorable cue such as attractive model who is participating in an engaging activity (Lutz, 1985; Petty and Cacioppo, 1986). In some instances, a consumer may be persuaded by information on a sale offered by a particular retailer (the central route). In other cases, a celebrity spokesperson may create a positive feeling by endorsing a brand (the peripheral route). To evaluate Aad, one needs to include measures of both affective and cognitive components of the message (Burton and Lichtenstein, 1988).

In research on Aad, Mitchell (1986) found that those exposed to commercial messages actively processed information and feelings provided in both the copy and photographs. The subjects relied on both verbal and visual elements of the message. Aad is a reaction to the entire ad with its many components. Copy and images both contribute to Aad and then Aad affects Ab (Derbaix, 1995). The visual elements alone in an advertisement appear to affect Ab in two ways: (1) People make inferences about the brand based on the visual information presented (Dyer, 1982). For example, a colorful ad means a colorful product. (2) If a potential buyer evaluates a visual positively or negatively, that evaluation may have an effect on Ab. In other words, the evaluation of the ad affects the evaluation of the product (Mitchell and Olson, 1981).

Research Hypotheses

To increase Aad and Ab scores, advertisers should consider the portrayals of gender roles in their visuals. Girls might find two types of positioning approaches appealing, either traditional or modern. In one sense, behavioral researchers found that girls like to mimic traditionally feminine roles. They are learning about their gender identity as females, and they often engage in what would be called traditional role behavior (Bloch, 1987; Fitzgerald, 1993; Courtney and Whipple, 1983). A conflicting force, however, is the roles they may see in their homes. Their mothers are more educated and more frequently employed than in previous generations (Linden, 1994); their parents prefer to view ads that picture their daughters' roles as interesting and different (Laitner, 1984); adult women, at least in some instances, find a modern positioning strategy more appealing (Jaffe, 1991). Because of these contrary pressures, the null hypothesis is proposed. Stated simply, some girls will prefer ads featuring passive, indoor settings (exemplifying the traditional role), and others will prefer ads featuring active, outdoor images (the modern role). Specifically:

H1: Girls' attitudes towards the advertisement will not vary significantly between passive, indoor images and active, outdoor images.

H2: Girls' attitudes toward the brand will not vary significantly between passive, indoor images and active, outdoor images.

Children enjoy imitating same-sex models, and they also exhibit their involvement with viewing these models through higher recall scores (Courtney and Whipple, 1983). Furthermore, research on adult consumers shows that people prefer ads that show other people as opposed to the product alone (Burton and Purvis, 1991). Based on these findings, the expectation for this research is that both Aad and Ab will be more positive when girls are featured in the ad than when only the product is shown.

H3: Girls' attitudes toward the advertisement will be more positive when the ad features girl models than when the ad features only the product.

H4: Girls' attitudes toward the brand will be more positive when the ad features girl models than when the ad features only the product.

RESEARCH METHODS

Advertisements

The advertisements featured a fictitious snack bar called the Confetti Bar. A general agreement exists that Aad affects Ab when unfamiliar brands are tested. Some disagreement occurs about whether Aad can further influence Ab when familiar brands are used (Phelps and Hoy, 1996). Classical conditioning explains Aad's impact on Ab for unfamiliar brands, but not for familiar brands (Derbaix, 1995). Because of the potential for the subjects to have already-established brand attitudes that would be difficult to change as a result of a single ad, a fictitious brand was used. Each advertisement used the same layout: a 4 inch by 6 inch photograph with a headline above and copy below. The headline for each ad was: "Taste a Party! Try a Confetti Bar." The body copy was as follows: "Do you need a break? Have the hungries caught up with you? Take a trip to the store to pick up a Confetti Bar. Taste the rich chocolate. The crunchy nuts. The chewy caramel. Start a party every time you open the shiny package! The Confetti Bar sells for 45 cents at most stores. You can have a party anytime - anywhere - with a Confetti Bar!" Using the Fry Readability scale, this copy rated as third grade reading level. The youngest subjects were fourth graders, and thus it was assumed that the subjects would not have difficulty reading the information.

The photographs varied in each of three different ads while headlines and body copy remained constant. The first ad featured a photograph of two snack bars, one in its wrapper and one unwrapped and cut to show the inside of the bar. This photo also included confetti sprinkled around the bars and curly ribbon beside the bars. The second ad showed three high school aged girls sitting together on a sofa in a living room. They held open books in their laps while they smiled and held up the bars. The third ad's photograph showed the same three girls outdoors in a snowy setting. One of the girls held skis, another sat on a sled, and all three held up the bars.

A candy bar was used for the featured product in the advertisements because, according to McNeal's (1992) research, the leading product category for children's spending of their own money was candy, snacks and sweets. High school aged girls were pictured because the oldest respondents would be of high school age. Younger subjects often admire or emulate older children, but adolescents do not generally find ads featuring elementary aged subjects appealing (Schneider, 1989; Zollo, 1995).

Sample

The ads and a cover letter were mailed to 225 (75 for each treatment) randomly selected parents of Girl Scouts in a three-county area of Wisconsin, including two primarily rural counties and one urban (Milwaukee) county. The Scouts ranged from fourth through twelfth grades. The cover letter requested that parents review the advertisements and questionnaires and ask their children to complete the surveys without prompting their children's responses. A University Human Subjects Committee reviewed the survey and determined that because children were an especially sensitive subject group (as is typical), parental screening prior to the children's receiving the survey was a necessity. Furthermore, the only data allowed to be collected on subjects' demographics were their ages and grade levels. A self-addressed, postage-paid return envelope was included for returning the questionnaires.

Measures

Data were collected on two dependent variables: attitude towards the ad and attitude towards the brand. Both attitude measures used a variation of Rossiter's (1977) summated rating scale in which children chose between two levels of agreement ("YES" and "yes") and two levels of disagreement ("no" and "NO"). Rossiter's scale has been validated in several other studies with children as young as second graders (Riecken and Samli, 1981; Prasad and Smith, 1994). The attitude towards the ad measure summed four statements encompassing (1) an overall liking of the advertisement; and liking of components such as (2) whether the ad made the bar look fun; (3) liking the description of the bar; and a reference to (4) the liking of the photograph (liking the way the people or the candy bar looked). Mitchell (1986) found that individuals exposed to advertisements processed information on both the verbal and the visual elements of the messages, and thus both were included here in addition to the more global measure of generally liking the ad. Derbaix (1995) argued that multi-item scales result in increased reliability when operationalizing Aad.

The attitude towards the brand measure also included four components: (1) the bar would taste bad (reversed scaling); (2) the subject would like to eat the bar as a snack; (3) the subject would ask someone in the family to buy it when shopping; and (4) the bar would taste better than other snack bars the subject had tried. Aad and Ab are related variables, but they should represent separate hypothetical constructs (Mitchell, 1986). Attitude toward the brand is a predisposition to respond favorably or unfavorably to a particular brand after a subject has been exposed to an advertisement on that brand (Phelps and Hoy, 1996).

The scale assigned four points to the most positive "YES" response, decreasing to one point for the most negative response "NO." Thus total scores for the attitude towards the ad and towards the brand could range from 4 through 16 points.

RESULTS

Subjects returned a total of 96 usable questionnaires for a response rate of 42.7 percent. To test the idea that the four individual measures whose ratings were summed to create an overall Aad score were measuring the same construct, the alpha coefficient was used. It was unreliably low (0.6638). The low alpha coefficient meant that ANOVA tests would be inappropriate for the summated Aad measure. Summary statistics for each statement can be found in Table 1. The individual statements leading to the summed score were investigated to determine if individual statement(s) resulted in significant differences among treatments. Following the completion of the Bonferroni test on each item, only one, "I liked the ad," contributed to the significant differences among visual treatments at the 0.050 level. Table 2 reports those data. The Bonferroni test revealed that significant differences occurred between the means for the indoor ad and the product alone ads. The highest mean score occurred for the advertisement featuring the girls indoors, and the lowest score occurred for the ad featuring the snack product and no people. The scores of the ads featuring the girls indoors and outdoors were not significantly different.

Hypotheses 1 and 3 both dealt with the Aad measures. Though the summated measure did not show a reliable correlation among the individual items that comprised it, both hypotheses were at least partially supported by the data. Hypothesis 1 was that girls' attitudes towards the advertisements would not vary significantly between the passive, indoor image and the active, outdoor image. The mean scores between these two ads were not the source of statistically significant differences as shown through the Bonferroni test. Rather, significant differences in "I liked the ad" scores existed because of divergent ratings for the ad featuring the girls indoors and the ad featuring the product alone. In all four statements related to Aad, however, the mean scores were consistently highest for the indoor settings and lowest for the product alone.

Table 1
Aad Individual Statements

Advertisement	Liked the ad	Ad makes the bar look fun	Liked description of bar	Liked the way the people (or bar) looked
Indoors Mean	3.54	3.32	3.43	3.18
N	28	28	28	28
Std. Dev.	.69	.67	.84	.94
Outdoors Mean	3.06	2.88	3.19	2.88
N	32	32	32	32
Std. Dev.	.91	1.04	.9	.98
Product Mean	2.97	2.81	3.14	2.86
N	36	36	36	36
Std. Dev.	.81	.92	1.02	1.05
Total Mean	3.17	3.24	3.24	2.96
N	96	96	96	96

Std. Dev.	.84	.93	.93	.94

Table 2
Bonferroni Test on Aad Individual Statements
Advertisement #1: Product featured alone (no people)
Advertisement #2: Indoor, passive setting; Advertisement #3: Outdoor, active setting

Aad Statement	Ad # (I)	Ad# (J)	Mean Difference (I-J)	Standard Error	Sig.
I liked the ad	1	2	-.56	.205	.022
	1	3	-.09	.198	1.00
	2	3	.47	.211	.082
Ad makes the bar look fun	1	2	-.52	.227	.075
	1	3	-.06	.219	1.00
	2	3	.45	.233	.175
Liked description of bar	1	2	-.29	.234	.655
	1	3	-.04	.225	1.00
	2	3	.24	.240	.954
Liked photo of bar/people	1	2	-.32	.250	.625
	1	3	-.01	.242	1.00
	2	3	.30	.257	.723

Hypothesis 3, that girls' attitudes towards the advertisement would be more positive when the ad featured girl models than when the ad featured only the product, was partially supported. The difference in scores between the indoor, passive setting and the product alone was significant and thus supported the hypothesis as shown in Table 1. The difference between the outdoor, active visual and the product alone was not a source of significant difference. The mean score, however, was more positive for the outdoor ad than for the product only ad.

The attitude towards the brand scores did not differ significantly among the treatments. Once again, the highest mean score was for the ad showing the girls indoors, and the lowest score was for the ad featuring the snack bar with no people pictured. In this instance, the summated measure for Ab proved reasonably reliable with an alpha coefficient on individual sub-items of 0.8599. Tables 3 and 4 report the ANOVA results and the individual means for each treatment.

Hypotheses 2 and 4 addressed the Ab measures. Hypothesis 2 argued that girls' attitudes towards the brand would not vary significantly between the passive, indoor images and the active, outdoor images. The data support this hypothesis, showing an F probability level of 0.1232. Hypothesis 4 suggested that girls' attitudes towards the brand would be more positive when the ad featured girl models than when the ad featured only the product. This hypothesis was not supported by the data which showed no significant differences among the scores for the three treatments.

Table 3

Oneway ANOVA: Ab Summed Measures					
Source	d.f.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	2	36.2168	18.1084	2.1427	0.1232
Within Groups	92	777.5095	8.4512		
Total	94	813.7263			

Table 4
Treatment Mean Scores for Ab

Source	n	Mean	Standard Deviation	Standard Error
Indoors	28	12.8214	2.4045	0.4544
Outdoors	31	11.6452	3.1995	0.5746
Product alone	36	11.3611	2.9967	0.4994
Total	95	11.8842	2.9422	0.3019

DISCUSSION

The basic question addressed in this research was: what type of visual portrayal in advertising will lead to the most positive Aad and Ab among girls? The results were equivocal. The most positive responses occurred for ads in which girl models appeared indoors and in a passive setting of reading a book. However, these results were not significantly different from ads in which the girl models appeared active and outdoors doing snow-related physical activities, the second highest ratings. On both Aad and Ab, the lowest scores occurred for the visual featuring the product alone. A source of significant differences in individual Aad statement scores was the indoor, book-reading treatment and the snack bar alone treatment, with the outdoor, snow scene not resulting in significant differences from either of the other two treatments.

What could not be said was that girls preferred passive more than active settings or that girls preferred seeing girl models more than the product alone. What the data supported was that girls had a more positive attitude toward an ad when the visual showed them in a passive, indoor setting than when the ad featured a product alone. Did the research indicate that girls should not be featured in active settings? No. Girls rated the active settings in both Aad and Ab measures as not significantly different from the passive setting.

What might be said is that girls liked to see themselves in a multiplicity of roles, in a variety of advertising settings. Perhaps some girls preferred to see more traditional roles while others preferred more modern roles, or perhaps girls found both roles were relevant parts of their lives. As Jaffe (1991) indicated in her earlier research, adult women have not shown consistent agreement in their preferences in role portrayals either.

Somewhat troubling in the analysis of the Aad measure was that the alpha coefficient indicated that the individual measures [(1) I liked the ad; (2) The ad made the bar look fun; (3) I liked the description of the bar; and (4) I liked the photograph] were not well correlated. The single statement, "I liked the ad," resulted in significant differences among the treatments, but the only physical difference in the ads was the photo.

Research on adults indicated that measures of Aad should be decomposed into individual elements of the ad (Burton and Lichtenstein, 1988), and that visual and verbal elements of ads should be evaluated separately (Mitchell, 1986). The child subjects in this research did not appear to evaluate these components individually but rather to use a global reaction to arrive at their Aad ratings. This reliance on the summary statement rather than using individual component statements as discriminating among ads could come from two sources. First, perhaps youth simply process material in a more global fashion than do adults. Second, because the snack bar was a low involvement product, the girls could have evaluated the ad based on a peripheral route to persuasion, developing their attitudes as a result of overall emotional responses rather than objective ad characteristics (Lutz, 1985; Petty and Cacioppo, 1986).

The Ab measures showed no significant differences among the three visual portrayals, but the order of the means remained consistent. Highest was the indoor, passive setting, second was the outdoor, active setting, and third was the product alone. Ab as a theoretical construct is known to be one generation beyond Aad. Extraneous factors such as liking or disliking for chocolate or nuts, feeling that the price was low or high, or liking or not liking sweets in general could affect Ab regardless of what the subject's rating of the ad itself was. As Phelps and Hoy (1996) argued, researchers need further study on the Aad-Ab relationship in children.

For both Aad and Ab measures, the ordering of the ads remained consistent with the most favorite being the indoor, passive ad, followed by the outdoor, active ad, and then the product alone ad. Had the sample been larger, perhaps these differences would have been statistically significant.

CONCLUSION

The results of this research gave some cautious suggestions to advertisers aiming at children. Girls appeared to feel positively about ads featuring them in traditional, passive roles as well as ads showing them in more active, physical roles. If an advertiser must make a decision between visual portrayals of girls indoors or portrayals using a product alone, the advertiser should use the girls indoors to create a more positive Aad.

The results indicated that advertisers can create positive brand attitudes with a variety of visual portrayals in ads. The ordering of the mean scores remained the same as for Aad: (1) indoors, passive; (2) outdoors, active; (3) product alone.

Most studies call for further research on the topic, and this one is no exception. Will other researchers find that the Aad-Ab relationship in children is tenuous? Replications and extensions of this study with other indoor, passive activities or outdoor, active settings would provide useful information to advertisers. Girls face more opportunities for roles than they have in years past, and advertisers need to know how to reach this growing market effectively.

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TEENS' CONSUMPTION PATTERNS: THE IMPACT OF EMPLOYMENT STATUS AND INTENSITY[1]

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ABSTRACT

Using data from the public school system, this study examines a teen profile of employment and spending. It identifies the employed and unemployed youths, the extent of their labor force participation, and how much money they earn in the labor market. The study also estimates the teens' overall purchasing power and examines how they spend their money. Teens' consumption patterns are differentiated based on their employment status and employment intensity. Major findings reveals that employed teens appeared to spend more on food, drinks and snacks and on clothing and personal care items and less on entertainment and transportation in comparison with those teens who are unemployed.

INTRODUCTION

The debate over the role and effects of the labor force participation of teens has intensified as the number of school-age adolescents joining the work force has dramatically increased in the last few decades resulting in a big boost in their purchasing power. Marketers, along with parents, schools, professionals as well as policy makers are continuously engaging in this debate to evaluate the returns of the early entry of youngsters to the adults' world of paid employment and mature and independent decision making. Never before had the teenagers so massively flocked the workplace and so impressively earned as they have been in the last few decades. Two of the authorities on adolescence warned more than a decade ago that a society may fail to note the employment of teens and its unique character or to ponder its larger economic and social significance (Greenberger and Steinberg,1986). It is therefore warranted to further study the multifaceted impact of adolescent employment for it has evolved to be such a common feature of our economic and social landscape.

There is a substantial body of research and literature on the effects of the extent, timing, and nature of adolescent employment on a variety of academic, behavioral, and socioeconomic outcomes related to those adolescents and their families (e.g., Bachman et al., 1981, 1986, 1993; Bachman, 1983; D'Amico, 1984; Hotchkiss, 1982, 1986; Greenberger and Steinberg, 1983, 1986; Greenberger et al., 1980, 1981; Mortimer and Finch, 1986; Mortimer and Yamoor, 1987; Mortimer et al., 1990, 1992; Safyer et al., 1995; Steinberg et al., 1981, 1982; Steinberg and Dornbusch, 1992; Stern et al., 1990). However, much less research has been done on the impact of the part-time jobs of teens on their decision making in the market, where they spend their money, and what they buy in comparison to their peers who do not have part-time jobs.

The enormous current and future purchasing power of children in general and teens in particular, and the timing and complexity of the market responses make it necessary to study the consumer behavior of this segment of population, especially those who hold part-time jobs and steady income. Two other facts make it important to study the employed teens and their spending habits: First, people's major patterns of spending are most likely to develop during their adolescence and continue throughout their adult life. Secondly, problems related to adolescents' money, spending, and employment are considered among the major sources of family conflict and, ultimately, among the major factors in both family well-being as well as in marketing strategies.

OBJECTIVES

In addition to identifying the employed teens and the extent of their labor force participation, this study examines how much money teens earn in the labor market, estimates their overall purchasing power and examines how they spend their money. The study further examines the effects of teen employment on the ways these teens decide on the goods and services they buy in the market, thereby, mapping their consumption patterns by differentiating their buying decisions based on their employment status and employment intensity.

TEEN EMPLOYMENT AND SPENDING

Earlier in our history, teen could not go to school when their families needed their labor for they made significant contributions to the economic welfare of their families. Children of affluent families, on the other hand, dedicated their time and energy to their school work as there was no need for their input in family business or household work. In both cases, whether children worked for their families or not, they rarely had to make decisions on their purchases since such decisions were very often exclusively for their families to make. In today's world, working and going to school are no longer mutually exclusive. It has become familiar in our society to see teenagers holding part-time jobs while simultaneously attending school. Also earning from paid employment in the labor market and deciding on own spending are no longer rare. Further, a significant portion of today's teens increasingly make purchase decisions on their families' behalf. Trachenberg (1986) estimated that at least 20 percent of families' supermarket purchases were made by teenagers. Zollo (1995) stated that when teens' purchases include what they buy for their families, their expenditures would rise to an amount equal to half of the U.S. defense budget.

Since the demand for adolescent labor is inextricably tied to economic changes, today's teen employment is qualitatively different from that of the past. The demand for farm and factory labor and skilled trades has been overwhelmingly replaced by the demand for labor in the service sector such as store clerks and fast food workers. Furthermore, the motivation of today's teen workers and their economic and social background are different from those of their earlier counterparts. Their motivation is chiefly concerned with sustaining the materialistic life-style they have become accustomed to, and their socioeconomic background is no longer defined by poverty. Bronfenbrenner (1986) stated that "not so long ago, it was the children of blue-collar families and of the poor who predominated in the teen labor force (but) today the earliest and most numerous entrants into the world of work are the children of the well-to-do and well-educated" (p. 15)

According to data collected by the National Study of Families and Households, 60 percent of both boys and girls aged 16 to 18 were employed (Mortimer et al., 1990). Guadagno (1991) estimated that 47 percent of two-parents families had at least one employed teenager. The mean annual earnings for teens living in two-earner families was estimated at $2,611, and that of teens living in one-earner families was estimated at $2,704 (Guadagno, 1992). One source of governmental statistics indicates that in 1993 almost half of the older teen students (16-19) were in the labor force (U.S. Bureau of Labor Statistics, 1995). By 1997, the labor force participation rate of teens 16 to 19 years old averaged 51.7 percent of all teenage population. However, the younger segment of teens, age 16 to 17 were less likely to be employed in comparison to the older segment, 18 and 19 Their employment rate averaged 34.7 percent (U.S. Bureau of Labor Statistics, 1998). Around 70 percent of employed teens worked 34 hours or less per week according to data by the U.S. Bureau of Labor Statistics. During the academic year, employed juniors in high schools averaged 18.6 hours per week while the employed seniors averaged 23.5 hours per week.(Williams, et. al, 1996).

The high rate of teen employment and the volume of their earnings create a large and highly specified consumer market . American teens spend over $109 billion a year (St.John,1995) which makes them a natural target for marketers and rewarding subject for more sophisticated marketing campaigns. There has been a circular feed-back effect between the teen demand on their desired goods and services and the market response to such a demand. Silberman (1978) identified this circle by noting that “the size of young people’s discretionary spending has led businessmen to direct much of their sales effort at the teen market which, in turn, has increased young people’s need for more and more discretionary income.” Higher discretionary income would more likely be obtained by seeking more employment.

In today’s market, there is a significant purchasing power of young people, particularly of teens which feeds the most lucrative businesses and industries and create more and more investment opportunities. Zollo (1995a) estimated that teens' spending was close to a staggering $100 billion a year. In 1994, teens spent $63 billion of their own money on personal needs according to Teenage Research Unlimited (1994). Teens' spending has particularly increased during the 1980s and 1990s. According to Tootelian and Gaedeke (1992), expenditures by teens increased nearly 43 percent in the 1980s despite a 15.5 percent decline in the teenage population. Furthermore, in 1991, teens spent a total of $82 billion, an increase of 3.8% over the $79 billion spent in 1990 (Bailey, 1992; O'Neill, 1992). Such an increase in one year was considerable, given the fact that during that time the economy suffered a recession and that the teen population had decreased by 300,000 between 1990 and 1991 (O'Neill, 1992). By 1994, teens had an aggregate income of $96 billion, up from $86 billion in 1993 (Zollo, 1995b). A 1994 national survey by America's Research Group (ARG) revealed that an average teen visits the shopping mall at least eight times a month and that nine out of ten teens make at least one purchase a visit, spending an average of $33. With this impressive purchasing power, and an additional estimated total of $10 billion in savings, teens may constitute a far more sophisticated set of buyers than is often thought (Tootelian and Gaedeke, 1992).

The percentage of high school students entering into the labor force is so much higher in the United States compared to other industrialized countries such as Japan and those in Western Europe. Greenberger and Steinberg (1986) attributes such differential to three major factors: (a) the educational system in those countries is more demanding than that of the United State for it is characterized by a greater emphasis on educational achievements, (b) the structure of the economies in these countries does not operate with service and retail sectors as gigantic as those of the United States. Those sectors would typically offer the most abundant opportunities for part-time employment. Moreover, it appears that young people in the United States have developed a higher interest than that of their counterparts around the world in the acquisition of expensive and luxurious goods. This, coupled with inflation, have clearly fueled teens' desire to earn their own income. Finally, (c) is the social and political priorities in those countries where the currents run strongly against practices that would permit or encourage students to hold jobs which would otherwise be needed by out-of-work adults or teen who are no longer enrolled in school.

Regarding gender differentials in the labor force participation for teenagers, Greenberger and Steinberg (1983) found that similar to the sex differences in the adult occupational structure, teens first jobs were significantly segregated by sex. Girls worked fewer hours per week than boys, they earned lower hourly wages than boys, and the hourly wages were generally higher in job types which were dominated by males. Mortimer et al. (1990) confirmed that boys received higher wages than girls but found no significant gender differences in hours of work, complexity of work, and teens' perceptions of their jobs. They, however, found that girls obtained their first jobs earlier than boys, but boys tended more than girls to increase the intensity of their employment as they moved from job to another. Yamoor and Mortimer (1990) found that although employment for both genders increased with age, boys were more likely to be employed than girls. They also found that teens' satisfaction with life appeared to be enhanced for younger boys while diminished for older girls.

There are also differentials in teenagers' employment across the family structures or household organizations. Douthitt (1991) found that teens living with one parent spent more time in paid work than their peers living with both parents. Zick and Allen (1996) confirmed this finding for female teens. They found that girls in single-mother families tended to spend more time in paid employment and boys in single-mother families tended to spend less time in school work than did their counterparts in two-parents families. They also found that both boys and girls increasingly shifted their time out of housework and school work into time for paid employment. Guadagno (1992) found that teens were more likely to work for paid employment when both parents, rather than one, were employed. Also, employed teens were more likely to be from families who are white, home-owner, and have a higher socioeconomic status.

In their study on parents' reaction to teen work, Phillips and Sandstrom (1990) found that parental views on teens' employment were generally favorable, and that mothers and fathers views were quite similar. About how prevalent teen work was, only one of four parents thought that too many teens were employed. Parents thought both boys and girls should start work at a mean age of 13.3 years. However, parents with higher educational aspirations for their children thought teenagers should start work earlier. The majority of parents thought teens' work had no effect on the school performance, teens' behavior, and their relationships with their working teens. Furthermore, only one half of the parents thought that their employed teens had become financially independent of the family. Teens' financial independence would most likely translate into independence in decision making where teens would entirely make their own buying decisions.

METHODS

Sample and Procedure

The source of data in this study was a sample of 511 teenagers, 15 to 19 years old, that was randomly drawn from high school students enrolled in the public school district in a large city of the New England region. Three different socioeconomic levels from the predominantly lower-income to the predominantly upper-income neighborhoods were represented in the sample. Survey questionnaires were distributed in selected classes with the help of teachers and a research assistant who was available in those classes at the time of administering the survey for questions and clarifications of terms and procedures. The questionnaire contained a total of 37 items with a page of instructions and explanations. Eleven items were on the individual and family demographic and socioeconomic characteristics. The rest of the items were related to teens' work and money. The questionnaire required 20-25 minutes to be completed. All completed questionnaires were collected and returned back in the same day they were administered. About 8 percent of all completed questionnaires had to be discarded for inconsistent and invalid responses.

Variables and Analysis

The characteristic variables were in two groups, teens' characteristics and family characteristics. Teen characteristics variables included age, gender, having an allowance, and income. Teen income is the total money received per week including earnings, allowances, gift money and others. Family characteristics included family type, education, marital status, race, and family income. There were two variables for teen employment, employment status which was reflected by two categories, employed (having a part-time job in the labor market) and unemployed (having no job in the labor market); and employment intensity which was also reflected by two categories, working less than 20 hours a week, and working 20 or more hours a week. Teen buying decisions were reflected by teen expenditures in five major categories of purchases (Alhabeeb, 1996, 1997). These variables were measured by the ratio of expenditures in selected categories to total income. The selected categories of Teen purchases were:

- *Food, drink and Snacks*: includes all food and beverages a teen would buy for self or others by his/her own desire, excluding what is bought by teens to help the family, and what is bought by the family for teens.
- *Clothing and personal care*: includes outerwear, underwear, shoes, jewelry, tatoos, make-up, perfume, deodorants, shampoos, hair cuts and hair products; and beauty services, supplies and accessories.
- *Entertainment*: includes movie and concert tickets; audio and video related items such as stereos, tapes, CD's, speakers (purchased or rented), dating, partying, books and magazines, toys and hobbies, games, trips, sports products and activities; and cigarettes.
- *Transportation*: includes all taxi and bus fairs plus spending on gas for own vehicle using own money.
- *Saving*: includes money spared intentionally as saving, as well as money which is simply not spent.

Descriptive statistics were used to identify the teen profile while Analysis of Variance was used to test for differences in consumption patterns among teens based on their employment status and employment intensity.

RESULTS AND DISCUSSION

The average age of the respondent teen in this study was 17.2 years. Fifty-six percent were males and forty-four percent were females. Average weekly allowance was $11.30 and average weekly earnings was $51.68. Sixty-seven percent of these teens came from dual-earner families, nineteen percent from families of single working mothers, and fourteen percent from traditional families where fathers were the only working parent. Seventy-one percent of families were white and twenty-nine percent were non-white. Seventy-two percent of parents had at least a high school or college education. Average family income was $39,117. Sixty-four percent of teens were employed and thirty-six were unemployed. Of those employed, seventy-three percent worked less than 20 hours a week while twenty-seven percent worked either 20 or more hours a week.

Table 1 shows the relationships between teen employment status and teen purchases of four categories as well as teen saving. Compared to unemployed, employed teens appeared to spend more on food, drinks and snacks and on clothing and personal care items and less on entertainment and transportation . Differences in their savings revealed to be insignificant.

Table 2 depicts the relationships between teen employment and their purchases and savings when work intensity is taking into consideration. While employed teens chose to buy more food, drinks and snacks, their purchases in this category appeared to further increase as their hours of work increased. Employment intensity, therefore, reveals a positive impact on food,drinks and snacks expenditures. This may logically be explained by the time spent outside the home which is more likely to be extended for the employed compared to the unemployed. The impact of employment intensity would become negative in the case of the expenditures on clothing and personal care. In comparison between those employed and unemployed teens, purchases of clothing and personal care would be more for the employed, but in the same time working more hours would not result in buying more of the clothing and personal care. On the contrary it would result in buying less of this category of purchases.

Table 1
Relationship of Teen Employment Status to Teen Consumption

Teen Purchases	Employment Status	M	SD	F
Food, Drink and Snacks				
	Employed	23.04	27.1	21.6*
	Unemployed	17.9	28.3	
Clothing and Personal Care				
	Employed	26.9	29.7	15.4*
	Unemployed	20.7	30.4	
Entertainment				
	Employed	39.4	35.8	17.3*
	Unemployed	44.6	30.2	
Transportation				
	Employed	0.07	0.84	19.7*
	Unemployed	0.10	0.82	
Saving				
	Employed	0.03	0.61	1.83
	Unemployed	0.08	0.55	

*p< .001

One possible interpretation of the decline in clothing and personal care purchases as work time increases would be due to the shortage of time versus the availability of money. Those teens who work more than 20 hours a week while being full time students face a notable lack of leisure time which may further reduce the need for more clothing and personal care items. This interpretation would not hold consistently with the case of entertainment spending. While unemployed teens spend more than the employed on entertainment, it appeared that those who work more than 20 hours a week spend more on entertainment than those who work less than 20 hours a week. An alternative interpretation would be based on the cost of entertainment rather than on the time available for it. Certain items of entertainment such as music products, computer supplies and related materials may become afforded by those who earn more due to working more.

Contrary to the expectations, employed teens spend less on transportation than the unemployed. This relation would still be consistent with the case of work intensity. More employed teens spend less on transportation than those who are less employed. When considering work intensity, teen saving is still insignificantly affected by the number of hours teens spend in market work. The findings of this study have implications on marketing and on consumer research. They also have implications for teen education program and public school system. Marketing strategists, parents, educators, counselors, and family practitioners should be aware of the prevalent norms in spending and saving among adolescents which are affected by their employment status and intensity. Mapping the consumption patterns and knowing the spending priorities may help identify the directions of better marketing strategies as well as for more effective consumer education and financial literacy programs for adolescents.

Table 2
Relationship of Teen Employment Intensity to Teen Consumption

Teen Purchases			
Employment Status	M	SD	F
Food, Drink and Snacks			
Unemployed	17.9	28.3	12.73*
< 20 hrs/wk	22.9	20.5	
> 20 hrs/wk	23.1	27.7	
Clothing and Personal Care			
Unemployed	20.7	30.4	10.25*
< 20 hrs/wk	27.1	30.2	
> 20 hrs/wk	26.6	29.2	
Entertainment			
Unemployed	44.6	30.2	9.11*
< 20 hrs/wk	39.2	35.6	
> 20 hrs/wk	39.6	36.0	
Transportation			
Unemployed	0.10	0.82	17.47*

	< 20 hrs/wk	0.08	0.88	
	> 20 hrs/wk	0.06	0.80	
Saving				
	Unemployed	0.08	0.55	1.65
	< 20 hrs/wk	0.04	0.66	
	> 20 hrs/wk	0.03	0.56	
*p< .001				

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AD POD EFFECTS IN TV ADVERTISING: ORDER, ADJACENCY, AND INFORMATIONAL\EMOTIONAL APPEAL

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ABSTRACT

This study examines context effects on the recall and recognition of ads and on attitudes toward brands. The study focuses, in particular, on the ad pod as a context for the ad. Within an ad pod context, it examines the effects of serial position (primacy, recency), the nature of adjacent ads, and informational versus emotional appeals.

INTRODUCTION

The effects of various contexts on responses to advertising, especially television advertising, have received considerable attention from researchers. The relationship between programs and the emotions they evoke on the one hand and ad responses on the other has been especially well studied. For example, Goldberg and Gorn (1987) have explored the effect of happy and sad TV programs on reactions to commercials. They found that a happy program produced a more positive mood as viewers watched commercials, greater perceived commercial effectiveness, more affectively positive cognitive responses, and to some extent, better recall. Studying the power of feelings in understanding advertising effects, Edell and Burke (1987) also found that antecedent negative and positive feelings are an important predictor of ad effectiveness and that these feelings significantly influence beliefs about brand attributes and attitudes toward the brand.

However, important as the programs in which an ad is embedded and the feelings they evoke may be to ad effectiveness, other aspects of context may be still more important. The immediate context for most television commercials is not the television program in which it is embedded but rather, other, adjacent commercials also included in the pod of ads. Precisely what precedes and follows an ad is also, of course, a function of an ad's position within the pod of ads, so pod position effects are another potentially important aspect of ad context. Our objective in this study was to explore these more immediate context effects.

PRIMACY AND RECENCY EFFECTS

Two recently published studies on ad pod position effects have provided some support for the idea that serial position within an ad pod may drive ad responses. Testing the applicability of the large body of psychological research on primacy and recency (e.g., Kerr, Ward, and Avons, 1998), Zhao (1997) found that advertisements fared "better...in an earlier position within the pod." Two other researchers, Pieters & Bijmolt (1997), found that "primacy and recency have only modest effect sizes [and that] placing a commercial first is better than placing it last." Important as these studies are in giving an idea of the effects that advertisers can expect from various serial positions in an ad pod, each has important limitations. Zhao's study was a quasi-experiment conducted in the aftermath of the Super Bowl. While the study has good external validity, its internal validity is questionable. Zhao was unable, for instance, to control for effects of different brand names and of various executional variables. Since all subjects saw the same set of ads in the same positions within the pod, the effects of order were confounded with execution and brand effects. And Super Bowl ads being notorious for their clever writing, stylistic innovation, and high production values, Zhao's sample of ads cannot be seen as representative of ordinary advertising. The Pieters and Bijmolt (1997) study was conducted in The Netherlands where ads occur only between programs and where the average pod is much longer than it is in the United States. Thus, the blocks of commercials they used in their study averaged 12.7 minutes in length. Findings on ad pods of that length may well be inapplicable to the much shorter ad pods typical in the United States, especially since American ad pods are generally much more embedded within television programs. In this study, ad pods were more representative of those typical in the United States, both in their length (6 minutes) and in being embedded in segments of a program. In addition, the data were collected in an experiment rather than a quasi-experiment, so internal validity should be higher than it was in Zhao's study.

INFORMATIONAL/TRANSFORMATIONAL AD EFFECTS

In an important article, Puto and Wells (1983) distinguished some years ago between two broad classes of ads: those that are transformational (primarily emotional in their appeal) and those that are informational (primarily rational in their appeal). Subsequent researchers have found that ads in the two classes have quite different effects on viewers. Hitchon and Thorson (1995), for instance, found that ads with a high emotional content (transformational ads) wear out over multiple exposures more slowly than those with a low emotional content (informational ads). In a more elaborate study that built upon this distinction between cognitive and affective ads, Singh and Cole (1993) found that informational ads produce higher ad claim recall than transformational ads across 0, 4, and 8 repetitions but lower brand name recall. Moreover, liking for the commercial increased as the length of the commercial increased from 15 to 30 seconds if the ad were transformational but decreased if the ad were informational. While these studies make it clear that the distinction between informational and transformational advertising should be of interest to advertising theorists and practitioners and that the two kinds of ads have different effects, they do not look at the context effects of these two classes of ads. In our study, we explored these context effects.

HYPOTHESES

The issues treated in this study are encapsulated in three sets of hypotheses that bear on order effects, adjacency effects, and on ad class effects. The serial position effects we hypothesize are expressed in hypotheses 1 and 2 which both focus on ad order.

H_1:	Ads positioned at the beginning of an ad pod will perform better on measures of ad effectiveness than will other ads.
H_2:	Ads positioned at the end of an ad pod will perform better on measures of ad effectiveness than will other ads.

Along with order effects, we proposed competing hypotheses on possible adjacency effects. On the one hand, it is possible that ads will perform better if they are placed adjacent to other similar ads. Specifically, informational ads may perform better when placed in a set of informational ads. Likewise, transformational ads may perform better when placed in a set of transformational ads. One might label these hypothesized results a resonance effect. Sharing a single cognitive or affective orientation, the ads in the set might reciprocally enhance ad responses to other ads in the set.

H_3:	Ads in an ad pod will perform better when they are placed next to other similar ads, i.e., informational ads being placed next to other informational ads and transformational ads being placed next to other transformational ads.

On the other hand, it is possible that the opposite might occur. Ads may perform better when they are placed next to a dissimilar ad, informational ads being placed next to transformational ads and visa versa. This effect would be related to Weber law on stimulus change and might be called a contrast effect since the heightened responses would be evoked by the contrast between the rhetorical styles of adjacent ads.

H_4:	Ads in an ad pod will perform better when they are placed next to other dissimilar ads, i.e., informational ads being placed next to transformational ads and visa versa.

Finally, we offer two competing hypotheses on the relative value of the two main classes of ads evaluated in this study--informational and transformational ads. The hypotheses suggest, alternatively, that one or another of the two main classes of ads identified by Puto and Wells (1983) may be more persuasive.

H_5:	Informational ads are more persuasive than transformational ads.
H_6:	Transformational ads are more persuasive than informational ads.

METHOD

The subjects in this study were 69 students in introductory business courses at highly selective university in the Midwestern United States. Among these subjects there were 32 females and 37 males. The experiment had a 2 (transformational first\informational first) x 2 (resonance\ contrast) design. In other words, the six ads used in the study were grouped as follows: TTTIII in cell 1, TITITI in cell 2, IIITTT in cell 3, and ITITIT in cell 4, where T and I signify transformational and informational ads. The three transformational ads were for Folgers Coffee, Theragran Vitamins, and the Visa Gold credit card. The three informational ads were for a GE diswasher, a Dogdge pickup truck, and for Advil pain reliever. These six ads were selected from a set of twelve ads shown to 30 student subjects in a pilot study. The subjects rated each ad on two scales, one measuring the degree to which it was informational, the other the degree to which it was transformational. The six ads in the study were those which rated highest and lowest on their respective scales. On its own dimension, each set of three ads were rated significantly higher than the alternative set of three ads, a fact that suggests our manipulation of the informational\transformational distinction was adequate.

In each data collection session for the main experiment, subjects were shown a video that began with a 10 minute segment of a 20/20 program from ABC on the marketing of Nike products. One of the four ad pods was then shown, followed by another 20/20 segment on Rollerblades. The 20/20 segments were selected because they were likely to be of interest to college age subjects and because they were consistent with the cover story in the study--that subjects would be quizzed on the topic of marketing ethics. After watching the program segments and the ad pod, subjects filled out a questionnaire that included items on product recall, brand recall, product recognition, brand recognition, ad claim recall, and brand attitude. All recall and recognition items except for ad claim recall were coded 1 if correctly recalled/recognized, 0 if not recalled/recognized. So numbers reported below on brand/product recall/recognition represent the percentages of the products correctly identified. The measure for ad claim recall was the number of ad claims correctly recalled. Brand attitudes were measured on a multi-item 5 point scale that ranged from 1, dislike very much, to 5, like very much. Cronbach's alpha for the attitude scales ranged from .95 to .96.

RESULTS

To test H_1 (the primacy hypothesis) and H_2 (the recency hypothesis), linear and quadratic contrasts in within-subjects ANOVAs were used. The tests compared the performance of ads in first through sixth positions in the ad pod on each of the six dependent variables. In the linear test, H_1--ads positioned at the beginning of an ad pod will perform better on measures of ad effectiveness than will other ads--was unambiguosly supported across the first five dependent variables and ambiguously on the sixth: product recall ($F = 8.420$, $p < .005$), brand recall ($F = 8.257$, $p < .005$), product recognition ($F = 7.174$, $p < .009$), brand recognition ($F = 6.831$, $p < .011$), ad claim recall ($F = 5.244$, $p < .026$), and brand atttitudes ($F = 23.284$, $p < .000$). The means for the several dependent variables used to test H_1 are reported in Table 1. On all the recall and recognition items, the first ad performed better than any other ad. On the sixth measure, brand attitude, the significant linear contrast supports the recency hypothesis rather than the primacy hypothesis. However, as reported below, the quadratic contrast was also significant, and that supported the hypothesis of a primacy effect.

Since the primacy effect was stronger than the recency effect on all dependent measures except brand attitude, H_2--ads positioned at the end of an ad pod will perform better on measures of ad effectiveness than will other ads--was not supported by the linear contrasts with the exception of the last one, as discussed above. It was, however, somewhat ambiguously supported in the quadratic contrasts which were also significant across all six dependent variables: product recall ($F = 7.976$, $p < .006$), brand recall ($F = 10.534$, $p < .002$), product recognition ($F = 19.880$, $p < .000$), brand recognition ($F = 4.191$, $p < .045$), ad claim recall ($F = 7.044$, $p < .010$), and brand attitudes ($F = 7.714$, $p < .007$). An inspection of the means will reveal that the final ad performed better than at least one ad in the middle of the pod. This effect was strong enough to make all quadratic tests significant.

TABLE 1						
	Product Recall	Brand Recall	Product Recognition	Brand Recognition	Ad Claim Recall	Brand Attitude
First Ad	.71	.65	.94	.85	1.16	3.62
Second Ad	.44	.41	.81	.81	.92	3.34
Third Ad	.29	.29	.71	.71	.60	3.63
Fourth Ad	.45	.36	.72	.72	.89	3.51
Fifth Ad	.45	.39	.66	.63	.64	3.89
Sixth Ad	.38	.38	.84	.73	.83	4.09

To test H_3 (the resonance hypothesis) and H_4 (the contrast hypothesis), the performance of ads in the first two between-subjects conditions TTTIII and IIITTT was compared with the performance of those in last two conditions TITITI and ITITIT. Across all six dependent variables, the results of this test were not significant. So H_3--ads in an ad pod will perform better when they are placed next to other similar ads, i.e., informational ads being placed next to other informational ads and transformational ads being placed next to other transformational ads--was rejected. H_4--ads in an ad pod will perform better when they are placed next to other dissimilar ads, i.e., informational ads being placed next to transformational ads and visa versa--was likewise rejected. Informational and transformational ads do not appear to produce resonance or contrast effects within ad pods.

To test H_5 (the information superiority hypothesis) and the competing hypothesis, H_6 (the affect superiority hypothesis), the performance of the three informational ads was compared with the performance of the transformational ads across all six dependent measures. On the product and brand recall and recognition measures, there were no significant differences in the responses to the transformational and informational stimuli. Thus, the class of the ad does not seem to affect basic recall and recognition. However, unsurprisingly, subjects were able to recall more ad claims on average from the informational ads (which contained more claims) than from the transformational ads ($F = 11.103$, $p < .001$). What is more surprising is that subjects were also more persuaded by the rational than by the emotional appeals ($F = 22.377$, $p < .000$). These results support H_5 and lead to a rejection of H_6. Means for these tests are reported in Table 2

TABLE 2						
	Product Recall	Brand Recall	Product Recognition	Brand Recognition	Ad Claim Recall	Brand Attitude
Transformational 1	.75	.68	.89	.88	1.06	3.37
Transformational 2	.30	.23	.67	.67	.29	3.07
Transformational 3	.32	.33	.74	.77	.90	3.88
Informational 1	.56	.46	.90	.78	1.40	3.81
Informational 2	.55	.49	.72	.78	.97	3.80

Informational 3	.39	.29	.77	.89	.59	4.10

MANAGERIAL IMPLICATIONS

Our study has several important implications for marketing managers. The support for the primacy and recency hypotheses suggests that various positions in an ad pod should be differently priced, slots at the beginning and end of an ad pod costing more than those in the middle. At present, prices do not differ, so marketing managers may be able to secure a competitive advantage if they can persuade advertisers to place their ads in initial or final position within a pod.

Our study also suggests that at least for ads to which consumers are likely to have only one or two exposures, informational ads are likely to be more persuasive than transformational ads. While transformational ads receive the bulk of the attention at award time and are more likely to be enjoyed by the public, our results suggest that informational ads may be more effective in actually selling products.

In applying the results of this study, practitioners should keep in mind several limitations. Since the subjects for the study were drawn from a student pool at a highly selective liberal arts university, they may have a higher need for cognition than the typical viewer of a television advertisement. Consequently, they may be more inclined to respond well to informational appeals. The study also contained one confound not entirely controlled by the design. Ads were tested in only three or four of the six possible positions within the ad pod. This means that the order effects were confounded with the effects of particular brands and ad executions to some degree. This problem is not as serious as that in the study by Zhao discussed above since ads were rotated through multiple positions, but it is an important limitation of the study nonetheless.

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THE ACADEMIC ETHICS OF UNDERGRADUATE MARKETING MAJORS

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ABSTRACT

This paper reports the results of a survey of marketing majors concerning their academic ethics. Though students generally rated the 16 practices in the study as unethical, levels of participation in them varied from twenty-six to one hundred percent. Participation in the practices was found to be related to students' grade point average and sex. The primary reason cited for participation was to get a high grade. Consequences of dishonest academic behavior and methods for limiting it are discussed.

INTRODUCTION

College faculty and administrators have had concerns about the academic ethics, or academic misconduct, of students for several decades. A considerable amount of research has been conducted on the topic, most of which has been surveys of students to determine the extent of their participation in unethical practices, how they view the ethical level of these practices, and how unethical academic behavior is related to student characteristics. Students from many academic disciplines, including business administration, have been surveyed. However, relatively little has been done with respect to the individual majors within the business area. This paper reports the results of a survey of marketing majors.

LITERATURE REVIEW

Participation in unethical academic behavior by business students has been reported at alarmingly high levels. Tom and Borin (1988) found that 49% of undergraduate students taking a marketing course had engaged in at least 1 of 23 dishonest behaviors. Sims (1993) found 91% of undergraduate business majors reported dishonest behavior. Brown (1995) reported 81% of graduate business students had engaged in at least 1 of 15 unethical behaviors more than infrequently while in graduate school.

Rates of participation of business students have also been found to be high relative to other majors. Bowers (1966) found that 66% of business majors had engaged in dishonest behavior, the highest rate among nine majors. Other rates ranged from 58% for engineering majors to 37% for language majors. Baird (1980), though he did not report actual rates, found business majors more likely to cheat than liberal arts and education majors. Meade (1992) reported a study by McCabe at 31 top-ranked schools. Business majors showed a higher rate of dishonest behavior (87%) than engineering (74%), science (67%), or humanities majors (63%). Roig and Ballew (1994) found that business and economics majors showed more tolerant attitudes toward dishonest behavior than did social science students.

The relationship between unethical academic behavior and characteristics of students in various majors has been investigated. Several studies found males more likely to participate in unethical activities than females (Baird, 1980; Davis & Ludvigson, 1995; Genereux & McLeod, 1995; Karlins, Michaels, Freilinger, & Walker, 1989; Sierles et al., 1980). However, other studies reported no difference (Brown, 1995; Stern & Havlecek, 1986). McCabe & Trevino (1996) found equal rates for males and females, but the rate among females had increased from a decade earlier while the rate for males had stayed about the same. A study by Graham, Monday, O'Brien, and Steffen (1994) found rates of participation higher among females. A more consistent finding has been that cheating behavior varies inversely with GPA (Baird, 1980; Genereux & McLeod, 1995; Graham et al. 1994; Haines & Diekhoff, 1986; Singhal, 1982).

Two additional points about unethical academic behavior are apparent from the literature. First, students are more likely to engage in practices they view as less unethical (Brown, 1995; Graham, et al., 1994; Greene & Saxe, 1992; Newstrom & Ruch, 1976; Nuss, 1984; Stevens, 1984; Tom & Borin, 1988). Secondly, students tend to see themselves as more ethical than their peers (Greene & Saxe, 1992; Newstrom & Ruch, 1976; Stevens, 1984).

The desire to obtain a high grade and lack of adequate study time dominate the reasons cited for participating in unethical behavior (Baird, 1980; Brown, 1995; Davis & Ludvigson, 1995; Graham, et al., 1994; Meade, 1992; Nuss, 1984).

Studies of business students have not generally indicated the functional area of business in which the students were majoring. However, there is limited evidence that accounting majors have relatively high ethical standards. Nowell and Laufer (1997) reported a 1990 unpublished study by Moffat that found that among business students, economics majors were the most likely to cheat and accounting majors were the least likely to do so. Rates of student participation in unethical activities were not reported. Jeffery (1993) found that at both the beginning and senior levels accounting majors had more developed ethical reasoning capabilities than both non-accounting business majors and liberal arts majors, but acknowledged that the relationship between ethical development and behavior had not been determined.

Students enrolled in marketing classes have been the subjects of three studies. Tom and Borin (1988) surveyed students in seven marketing classes at a large university. Forty-nine percent said they had participated in at least one of 23 unethical behaviors. They rated as less severe those practices that they had engaged in at a high rate. Allen, Fuller, and Luckett (1998) surveyed students enrolled in mass lecture sections of an undergraduate marketing course at a large metropolitan university. Overall, thirty six percent of respondents reported cheating behavior. Management, marketing, and general business majors showed higher levels than other business majors, but specific rates were not reported. Nonis and Swift (1998) collected data from a convenience sample of students majoring in various business majors that were enrolled in marketing classes. Eighty four percent of respondents were found to have cheated in their college classes.

We found no studies of the academic ethics of students who had declared marketing as their major. This paper makes a contribution toward filling that gap in the literature.

METHODOLOGY

We administered a questionnaire used by Brown (1994, 1995) in two studies of graduate students, modified slightly to fit an undergraduate population, to marketing majors at an eastern state university during the Spring term of the 1998-99 academic year. The questionnaire contained 16 academic practices that were selected from the literature and that might be considered unethical. Respondents were asked to indicate how often they had engaged in each activity while a university student. A 6-point scale was utilized with six representing *never*, and a range of one, *frequently*, to five, *infrequently*, for those who had participated in the activity. Respondents were then asked to rate the ethical level of each practice from one, *very unethical*, to five, *not at all unethical*.

Eleven reasons why students might engage in unethical academic behavior were selected from the literature. Respondents were asked to rate on a 5-point scale from one, *not at all likely*, to five, *very likely*, the chance that each would be a reason why students would participate in unethical academic behavior. Demographics asked were grade point average (GPA), hours worked on a job per week, semester hours of course work carried, gender, and year of birth.

Questionnaires were administered during class meetings. Respondents were assured anonymity and were provided a plain envelope in which to seal their completed questionnaires before returning them to the instructor. Forty two completed questionnaires were returned.

RESULTS

Sample Characteristics

Characteristics of the sample are shown in Table 1. All of the respondents were juniors (26.2%) and seniors (73.8%). Most (95.2%) were under age 25, while the number of males and females was equal. Even though almost 93% carried a course load of more than 12 semester hours, 57% were employed 20 hours or more per week. A little more than half had GPAs less than 3.0.

Participation in the Practices

Results on the extent of participation in the 16 practices are presented in Table 2 in the columns labeled "Participation." For each practice, the percentage of respondents admitting participation in the activity is shown, as well as the practice's rank from highest (1) to lowest (16) level of participation. Each practice's rating on the 5-point frequency of participation scale is also shown. Four practices showed rates of participation in excess of 85%. They were: working with others on an individual project (85.7%), giving information about the content of an exam to someone who has not yet taken it (90.5%), asking about the content of an exam from someone who has taken it (92.9%), and having someone check over a paper before turning it in (100%). All four of these practices involve collaboration between or among students outside the classroom. Though collaborative learning is often encouraged, it appears to be spilling over into situations where it is not intended.

The three practices engaged in by the highest proportion of students were also the three engaged in most frequently. They were the only ones with means on the "frequently" side of the midpoint of the frequency of participation scale.

Table 1. Respondent Characteristic

Characteristic	Percent
Class rank:	
Junior	26.2
Senior	73.8
GPA:	
Less than 3.0	52.4
3.0 and above	47.6
Hours of employment per week:	
Less than 20	42.9
20 hours or more	57.1
Semester hour course load:	
1 to 12	7.3
More than 12	92.7
Gender:	
Female	50.0
Male	50.0
Age:	
Under 25	95.2
25 and older	4.8

While asking for or giving information about the content of exams at times other than when they were being taken were among the practices engaged in by the highest proportion of students, four methods of cheating on exams while they were being taken accounted for four of the five least engaged in practices. They were: having information programmed into a calculator during an exam (28.6%), passing answers during an exam (35.7%), using exam crib notes (38.1%), and copying off another's exam (42.9%). All four practices had frequency of participation ratings on the "infrequently" side of the scale, but the frequency of participation reported for the two practices that are done alone was higher than for the two practices that involve other students.

Table 2. Participation In and Ethical Level of Practices

	Participation			Ethical Level	
Practice	Rank	Pct.[1]	Mean[2]	Rank[3]	Mean[4]
Having someone check over a paper before turning it in	1	100.0	2.38	1	4.45
Asking about the content of exam from someone who has taken it	2	92.9	2.67	2	3.43
Giving information about the content of an exam to someone who has not yet taken it	3	90.5	2.84	3	3.40
Working with others on an individual project	4	85.7	3.64	4	3.24
Padding a bibliography	5	78.6	3.73	6	2.88
Before taking an exam, looking at a copy that was not supposed to be available to students	6	66.7	3.14	7	2.79
Allowing another to see exam answers	7	64.3	4.26	13	2.17
Plagiarism	8	59.5	4.28	10	2.43
Visiting a professor to influence grade	9	54.8	3.74	5	3.05
Taking credit for full participation in a group project without doing a fair share of the work	10/11	45.2	4.16	8	2.52
Using a false excuse to delay an exam or paper	10/11	45.2	4.53	9	2.45
Copying off another's exam	12	42.9	4.56	16	1.86
Using exam crib notes	13	38.1	3.87	12	2.26
Passing answers during an exam	14	35.7	4.47	14	1.95
Having information programmed into a calculator during an exam	15	28.6	3.33	11	2.33
Turning in work done by someone else as one's own	16	26.2	4.64	15	1.93
Overall percent admitting participation		100.0			

[1]Percent admitting participation

[2]Scale: 1 = *frequently*, 5 = *infrequently*
[3]Ranked from *least* to *most* unethical
[4]Scale: 1 = *very unethical*, 5 = *not at all unethical*

The practice that ranked 16th was "turning in work done by someone else as one's own," with a substantial 26.2% of students admitting engaging in this practice while a university student. Levels of participation in the remaining seven practices ranged from 45.2% for "using a false excuse to delay an exam or paper" and "taking credit for full participation in a group project without doing a fair share of the work" to 78.6% for "padding a bibliography."

The level of participation in the practices was related to two student characteristics, GPA and sex. Characteristics were collapsed into two categories, and participation was indicated as did or did not participate. The chi-square test was used to determine significance. As shown in Table 3, significant differences in the level of participation were found between five practices and students' GPA and between four practices and students' sex. In all five instances, students with GPAs less than 3.0 showed higher levels of participation in the practices than students with GPAs of 3.0 or higher. Differences ranged from about 25% for padding a bibliography to 39% for taking credit for full participation in a group project without doing a fair share of the work. In all four instances, males showed higher levels of participation in the practices than females. Differences ranged from about 29% for looking at a copy of an exam before taking it to about 38% for using exam crib notes.

Table 3. Significant Differences in Participation by Student Characteristics

	GPA				Sex			
Practice	<3.0	3.0 & up	Chi sq.**	P	F	M	Chi sq.**	P
Padding a bibliography	90.9*	65.0	4.18	.041				
Before taking an exam, looking at a copy that was not supposed to be available to students	81.8	50.0	4.77	.029	52.4	81.0	3.86	.050
Allowing another to see exam answers					47.6	81.0	5.08	.024
Plagiarism	77.3	40.0	6.04	.014	42.9	76.2	4.84	.028
Visiting a professor to influence grade	72.7	35.0	6.02	.014				
Taking credit for full participation	63.6	25.0	6.31	.012				

in a group project without doing a fair share of the work								
Using exam crib notes					19.0	57.1	6.46	.011
*Percent participating **df = 1 for all tests								

Ethical Levels of the Practices

Ratings of the ethical level of the practices and their ranks from *least* to *most* unethical are shown in the columns labeled "Ethical Level" in Table 2. Students rated most of the practices as unethical. Only five of the practices were rated higher than three, or on the "not at all unethical" side of the midpoint of the 5-point scale. When the practices were ranked from highest to lowest in terms of the proportion of students participating in them, and from least to most in terms of being unethical, the first four practices had identical ranks. This suggests that there is a tendency for students' behavior to be consistent with their ethical beliefs. However, the relationship is not perfect. While "visiting a professor to influence a grade" was the 5th least unethical practice, it was the 9th most engaged in practice. Perhaps the face-to-face encounter with an authority figure was a deterrent to participating in this practice.

The tendency for consistency between student behavior and ethics was again apparent with the practices engaged in by the smallest proportions of respondents. Four of the five practices engaged in by the smallest proportion of students were among the five practices seen as most unethical. The exception was "Allowing another to see exam answers." This practice was rated more unethical than 12 other practices, but was the seventh most engaged in practice.

Reasons for Unethical Behavior

The reasons cited for unethical academic behavior are shown in Table 4. The unethical student was seen as one wanting high grades in courses perceived as difficult, but unwilling to use available time to study. It is worth noting that although almost 60% of respondents worked 20 or more hours per week, "does not have time to study" was cited as only the sixth most likely reason for unethical behavior. Respondents believed that unethical behavior was not likely to be engaged in because everyone does it, it was a challenge or a thrill, or because of peer pressure.

Table 4. Reasons for Unethical Behavior

Reason	Mean[1]
To get a high grade	4.43

Has the time but does not study	4.07
Difficulty of material	3.86
Feels no one is hurt by behavior	3.79
Low risk of getting caught	3.52
Does not have time to study	3.48
Feels work is irrelevant	3.10
Instructor is poor or indifferent	3.18
Everyone does it	2.76
Peer pressure to do it	2.45
Was a challenge or thrill	2.29
[1] Scale: 1 = not at all likely, 5 = very likely.	

DISCUSSION

The results indicate that while the level of participation of marketing majors in unethical academic activities is very high, their behavior is typical of that of today's college students. It is incumbent on faculty and administrators in all academic disciplines to understand and deal with the problem of academic dishonesty.

Dishonest academic behavior has consequences on the campus and beyond. Chisholm (1992) enumerated the damages dishonest behavior does to an institution of higher learning. The reputation of the institution is diminished in the academic community and with the general public. Students lose faith in the institution and become alienated. The grades of honest students may suffer to the extent grading is done "on a curve." Dishonest behavior that is unchecked gives the impression it is acceptable, encouraging further participation in such activities.

Correlations have been found between dishonest academic behavior and behavior on the job. Sierles, Hendrickx, and Circle (1980) found students who cheated in academic classes in medical school were more likely to falsify patient records in a clinical setting. Sims (1993) found significant correlations between the number and severity of dishonest acts respondents engaged in as students and as employees. Crown and Spiller (1998) cite theoretical evidence that unethical behavior tends not to be limited to a specific situation. They found in their review of theories of organizational ethical decision making that most theories do not pose different models for different decision making situations.

Recommended actions that college faculty and administrators can take to minimize dishonest academic behavior have fallen into three categories. The first category consists of "clarification" activities. Their purpose is to make sure students and faculty know what is

considered cheating at the institution. In one survey, of the respondents who said they had never cheated
in college, 12% admitted to copying homework, 6% to allowing another person to copy from their exam, and 3% to plagiarism. About 25% of respondents said no college instructor had ever talked to them about what is considered cheating. The author recommends the formulation of a cheating policy at the institutional level, distributed to students in written form and explained by instructors in the classroom. Examples of forms of cheating that might not be clear to students, such as plagiarism, should be included. The policy should then be vigorously enforced (Portello, 1993).

The second category consists of "situational" activities. Their purpose is to create an environment in which cheating is difficult to carry out. These activities are applicable to forms of cheating that take place in the classroom, such as cheating on exams. They include refraining from re-using exams, using multiple versions of exams, and proctoring exams closely (Barnett & Dalton, 1981). Note that this approach addresses the issue of opportunity, not proclivity.

The third category consists of "values-oriented" activities. Their purpose is to get students to see learning as a valued activity rather than just as a means to an end such as getting into graduate school or getting a job. Shrophsire (1997) says students would not cheat at a sport because it ruins the game. The purpose of the game is to develop the skill of playing it. Education should be made more like a sport and less like a CPA exam review course, emphasizing the memorization of material and playing it back on an exam. Though it is uncertain how much influence instructors can have on the values of college-age people, this is the only alternative available for influencing the kinds of unethical practices that take place outside of the classroom, out of view of the instructor.

Three types of additional research are suggested. The first is to replicate the study with other populations of marketing majors to confirm the findings presented here. The second is to replicate the study over time to track trends in the academic ethics of marketing majors. The third is to assess the effectiveness of strategies for reducing unethical academic behavior as they are developed and implemented.

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SALES REPRESENTATIVES' PERCEPTIONS OF THE EFFECTIVENESS OF RELATIONSHIP BUILDING ACTIVITIES WITH MEMBERS OF A SEGMENT

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ABSTRACT

This paper examines the opinions of sales representatives regarding how they might effectively operationalize relationship marketing with customers making up targeted segments. A mail survey was employed to obtain insights into this area. The research indicated that certain activities, inputs to buyers, buying center targets, and criteria for assessment were evaluated more highly for emphasis in the sales representative relationship formulation programs. This paper analyzes the results of the study and sets forth a number of conclusions based upon the analysis.

INTRODUCTION

For many firms, one of the keys to marketing success in today's increasingly competitive and fragmented market is a well-conceived program of market segmentation. The program requires careful implementation if it is to attain its goals, however. Increasingly, managers are discovering that a vital ingredient for implementation is the creation and maintenance of strong and positive relationships with members of the segments.

Satisfaction of members of target segments often requires planning and carrying out a relationship marketing strategy (Duncan & Moriarty, 1998; McKenna, 1991). "Supplier firms in long-term relationships with select customers are able to retain or even improve their profitability levels more than firms which employ a transactional approach" (Kalwani & Narayandas, 1995). In turn, relationship marketing has been defined as "marketing with the conscious aim to develop and manage long-term and/or trusting relationships with customers, distributors, suppliers, or other parties in the marketing environment" (Bennett, 1995). The antecedents for achieving a relationship status include trust, cooperation, commitment, and satisfaction (Morgan & Hunt, 1994). Achrol (1997) furnishes further insight into this process. He relates that "Relationship marketing emphasizes that customer satisfaction is a necessary but not sufficient goal of marketing activity; rather the goal should be to develop a lasting relationship based on a structure of long-term benefits and mutual affinity between buyer and seller" . This paper focuses on developing relationships with members of target segments. The objective of the strategy is to enhance the firm's ability to satisfy the needs of customers and operate within a rapidly and continually changing environment (Peppers, Rogers, & Dorf, 1999; Zeithaml, Berry, & Parasuraman, 1996.

In many companies, much of the relationship marketing with segment members is implemented through the activities of the sales force (Smith & Barclay, 1997). It is these individuals who are in close contact with customers and who are in a position to learn their needs and make provision for the delivery of products and services which will result in need satisfaction. (Ramsey & Sohi, 1997). Sales representatives form a nexus between the company and its customers and it is largely through their efforts that effective relationships are formed and maintained. An important ingredient to successful relationships is a high degree of trust in the sales representative, on the part of customers (Doney & Cannon, 1997).

A trend in recent years has been to assign sales representatives to specific segments (Often referred to as organization "by customer", "by customer type", or "by market" in the literature). This pattern has largely replaced geographic, product, and other forms of organization in many companies. The assignment of representatives to individual segments is compatible with the marketing concept and with relationship marketing, as it permits representatives to develop expertise in serving particular customers and types of customers.

Given that sales representatives shoulder much of the responsibility for relationships, how can they go about fulfilling this obligation? What activities should they perform? What inputs should they provide to their customers? Upon whom should they concentrate their relationship marketing efforts? What criteria will customers employ to assess the worth of these efforts? This manuscript addresses these and related issues.

OBJECTIVES OF THE STUDY

The objectives of the inquiry outlined in this paper were:

1. To determine which activities are perceived by sales representatives as most effective in accomplishing successful relationship marketing objectives with segment members.
2. To determine which inputs to customers are perceived by sales representatives as most effective in achieving successful relationship marketing objectives with segment members.
3. To determine what buying roles are perceived as the superior targets for relationship marketing building efforts with segment members by sales representatives.
4. To determine the sales representative perceptions of the relative importance of segment member criteria for the assessment of' relationship marketing efforts.

5. To assess differences between sales representatives employed by consumer and industrial goods companies as regards the preceding four objectives.

This last objective was assessed, since there is evidence that the process of relationship marketing differs to some degree between consumer and industrial goods companies. (Sheth & Parvatiyar, 1995; Bagozzi, 1995).

In order to address these objectives, the researchers queried a sample of sales representatives from industrial and consumer goods firms which organized the sales force by type of customer, calculated measures of the variables set forth in objectives one through four (stated above) and noted differences between representatives from these two types of companies (in order to address the fifth objective). Self reports from the sampled sales representatives formed the basis for measures of effectiveness and frequency counts.

Sales representatives are probably the best parties to query as to the effectiveness of relationship building activities. It is these individuals who are in the closest contact with customers. It might be argued that the customers of sales representatives are the best judges of the effectiveness of relationship construction efforts. But these individuals may not be aware that representatives are attempting to generate a relationship and, further may not recognize the nature of the tactics that are being employed by the representatives. As such, their ability to provide useful assessments is limited.

A reasonable degree of satisfaction of the five objectives could be potentially advantageous to sales managers and sales representatives alike. It would furnish insights for sales managers' training, supervision, and promotion programs, since all of these can be instrumental in implementing relationship marketing strategies. In addition, satisfaction of the objectives could furnish action prescriptions to sales representatives, as to how they might effectively carry out relationship marketing programs in their day-to-day activities.

METHODOLOGY

The sample frame was the list of *Fortune 500* companies. Telephone inquires were made to a randomly-selected 100 of these. Of the total, 68 indicated that they were organized by type of customer. The random selection process was continued until a total of 100 firms with sales forces organized by type of customer were selected. This was the final sample composition.

The researchers mailed ten questionnaires and a cover letter to the sales managers (a total of 1,000 questionnaires). The cover letter promised anonymity and indicated that the research was for academic purposes. Further it related that respondents would be able to obtain copies of the results, if they so desired. Each sales manager was requested to furnish questionnaires to ten randomly-selected sales representatives employed by the company, to collect these when completed, and to return them to the researcher in a self-addressed envelope. The sales managers were asked to choose only sales representatives who had at least two years of field experience beyond the initial training period. This insured that novice sales representatives, who probably would not be in a position to contribute substantially to the goals of the study, were excluded.. This effort produced 281 usable returned questionnaires.

A second set of questionnaires was sent to nonrespondents, yielding 68 additional completed questionnaires. This produced a final sample size of 349, comprising 192 consumer goods and 157 industrial goods sales representatives. (The two categories included sellers of both goods and services).

The questionnaire furnished listings of sales representative activities, inputs, targets, and criteria for assessment as they correlate to relationship marketing. Activities were defined as "processes which sales representatives could employ to build and maintain satisfactory relationships with potential customers." In turn, inputs to customers were defined as "benefits which customers would visualize as being associated with satisfactory relationships with suppliers." The items in each of the lists were derived from a content analysis of seven widely-adopted college level personal selling texts examined by the researchers. The respondent sales representatives were asked to rate on a five point scale the degree to which each item in the list pertained to relationship marketing. The definition of this process was as follows: "marketing with the conscious aim to develop and manage long-term and/or trusting relationships with customers" (From Bennett, 1995). The scales ranged from very effective, effective, neutral or no opinion, ineffective, and very ineffective.

The questionnaire was pretested through thirty sales representatives employed in the city where the researchers are employed. The pretest respondents reviewed an initial questionnaire and suggested various improvements. After reviewing a revised questionnaire, they indicated that the measuring instrument was such that it enabled them to effectively communicate their perceptions about relationship marketing. Further, they reported that the process of answering the questionnaire was not overly difficult. They agreed that the listings on the questionnaire were all-inclusive--they were not aware of items other than those included in the questionnaire.

RESULTS

The representatives were asked to indicate the extent to which various activities which they might perform in conjunction with customers were effective in relationship marketing. Table One sets forth the results. Those activities drawing the highest mean scale values for the sample at large were "fill buyer company needs", "study buyer company needs", use account management process", "fulfill commitments to buyer", solve buyer problems", "indicate intent to partner with buyer", and "use consultative selling". Comparisons between the two groups reveal some significant differences. Representatives serving consumer goods firms granted more emphasis to "category management for buyer", "do surveys for buyers", and " provide automated reordering". Conversely, industrial goods sales representatives gave higher scores to "indicate intent to partner with buyer", "use key account process", "customize orders", "provide telemarketing service", "provide entertainment, and "inspect buyer physical facility". Of the total twenty activities, significant differences appear in the case of nine, suggesting some differences in the perceptions of the two groups of representatives.

The respondents were asked to evaluate a number of inputs which they might provide to buying organizations to further relationship marketing programs. Table Two sets forth the mean scale values for these variables. Those with the highest magnitudes are “assistance in problem solving”, “empathy of the representative”, “listening by the representative”, “making company resources available”, and “assistance in identifying problems”. A comparison of the two groups reveals that consumer goods sales representatives provided higher scores than did industrial goods representatives for “product quality”, “information about the industry”, “marketing research studies”, and “fast delivery”. On the other hand, industrial goods representatives furnished higher values for “assistance in identifying problems”, “consulting service”, “information on vendor products”, “service personnel support”, “obtaining price reductions”, “technical support”, and “customized orders”, Eleven of the inputs show significant differences between the two groups, further reinforcing the notion that consumer and industrial goods representatives have differing perceptions on relationship marketing.

Table One
Reported Effectiveness of Various Activities

Sales Representative Activity	Mean Scale Value		
	Total Sample	Consumer Goods	Industrial Goods
Fill buyer company needs	4.9	4.9	5.0
Study buyer company needs	4.9	4.9	5.0
Use account management process	4.7	4.5	4.9
Fulfill commitments to buyer	4.5	4.6	4.5
Solve buyer problems	4.4	4.4	4.4
Indicate intent to partner with buyer	4.3	3.9	4.6*
Use consultative selling	4.3	4.1	4.5
Category management for buyer	4.0	4.6*	3.3
Use key account process	3.9	3.5	4.4*
Respond effectively to buyer questions	3.7	3.9	3.6
Customize orders	3.7	3.0	4.5*
Provide telemarketing service	3.5	3.1	3.9*
Do surveys for buyers	3.5	4.1*	2.9
Provide automated reordering	3.3	4.1*	2.5
Develop friendships with buyer	3.2	3.0	3.4
Provide entertainment	3.2	2.9	3.6*

Inspect buyer physical facility	3.0	2.6	3.5*
Provide small gifts	2.6	2.4	2.8
Provide bribes	1.9	1.6	2.1
Other	3.3	3.5	3.4

*Signifies a mean scale value that is significantly greater than the corresponding mean scale group in the other column, according to a *t* test at the .05 level.

Table Two
Reported Inputs for Buying Organizations

Sales Representative Inputs	Mean Scale Value		
	Total Sample	Consumer Goods	Industrial Goods
Assistance in problem solving	4.8	4.6	4.9
Empathy of the representative	4.8	4.8	4.8
Listening by the representative	4.8	4.9	4.7
Making company resources available	4.8	4.7	4.9
Assistance in identifying problems	4.7	4.3	4.9*
Consulting service	4.5	4.2	4.9*
Product quality	4.5	4.9*	4.3
Information on vendor products	4.3	4.0	4.7*
Service personnel support	4.1	3.6	4.7*
Obtaining price reductions	3.8	3.3	4.4*
Technical support	3.8	3.3	4.4*
Information about the industry	3.5	3.9*	3.0
System integration with buyer	3.5	3.3	3.7
Customized orders	3.2	2.7	3.8*
Expense reduction programs	3.1	3.3	2.9
Product development assistance	2.7	2.4	2.9
Marketing research studies	2.5	3.4*	1.7

Reliable delivery	2.5	2.8	2.2
Fast delivery	2.2	2.6	1.7
Rapid decision making	2.2	2.0	1.7
Other	2.7	2.9	2.6
*Signifies a mean scale value that is significantly greater than the corresponding mean scale group in the other column, according to a *t* test at the .05 level.			

The respondents were asked to indicate what buying roles were the best targets for relationship marketing. Table Three presents the result of the enumeration and analysis. In turn, the categories emanated from Berkowitz, Kerin, Hartley, & Rudelius (1994). The top two targets, as measured by mean scale value are buyers (those who select suppliers and negotiate terms of sale) and deciders (those who approve supplier selections). Following these are influencers, users, and gatekeepers. Buyers and deciders were evaluated higher by consumer goods representatives than by industrial goods representatives. The latter provided higher scores for users than did their consumer goods counterparts. The two groups posited significant differences for three of the five categories.

Table Three
Superior Buying Role Targets for Relationship Marketing

Buying Role Target	Mean Scale Value		
	Total Sample	Consumer Goods	Industrial Goods
Buyers (select suppliers & negotiate terms)	4.7	5.0*	4.3
Deciders (approve suppliers)	4.4	4.8*	4.1
Influencers (affect buying decisions)	4.1	4.3	4.0
Users (use product or service)	4.1	3.5	4.7*
Gatekeepers (control inputs of information)	3.5	3.3	3.8
*Signifies a mean scale value that is significantly greater than the corresponding mean scale group in the other column, according to a *t* test at the .05 level.			

Finally, the sales representatives were asked to indicate the importance of the criteria which they found to be important to buyers for assessment of the sales representatives' relational marketing efforts. These criteria were derived from a previous study of relationship marketing endeavors (Kanter, 1994). Table Four sets forth the results. The highest mean score values were for "interdependence" (the partners need each other), "individual excellence" (representatives add value and their motives are positive), and "information" (partners communicate about goals, data, problems, and solutions). Representatives handling consumer goods granted the highest ratings to "independence", "investment" (seller devotes resources to the relationship), and "institutionalization" (relationship has formal status with clear responsibility). Conversely, industrial goods were significantly higher for "integrity" (sales representative and his or her firm are trustworthy and honorable) and "integration" (partners develop shared methods of operating). The two groups provided significantly different mean scale values for five of the eight criteria, further suggesting different perceptions regarding relationship marketing.

Table Four
Evaluations of Criteria for Assessment of Sales Representative Relational Marketing Efforts

Criteria	Mean Scale Value		
	Total Sample	Consumer Goods	Industrial Goods
Interdependence (The partners need each other)	4.6	4.9*	4.2
Individual excellence (Representatives add value and their motives are positive)	4.4	4.5	4.2
Information (Partners communicate about goals, data, problems, and situation)	4.3	4.0	4.7
Importance (Relationship helps buyers reach objectives)	4.0	4.0	4.0
Integrity (Sales representative and his or her firm are trustworthy and honorable).	4.0	3.7	4.4*
Investment (Seller devotes resources to the relationship)	3.7	4.2*	3.3
Integration (Partners develop shared means of operating).	3.6	3.3	4.0*

Institutionalization (Relationship has formal status with clear responsibility)	3.5	3.9*	3.0
*Signifies a mean scale value that is significantly greater than the corresponding mean scale group in the other column, according to a *t* test at the .05 level.			

DISCUSSION

This paper has provided an examination of several facets of salesperson behavior in implementing relationship marketing programs with market segment members who carry consumer goods and industrial goods firms. The respondents were asked to assess the effectiveness of various activities in carrying out relationship marketing. For the sample at large, large scores were noted for “fill buyer company needs”, “study buyer company needs”, “use account management process”, “fulfill commitments to buyer”, “solve buyer problems”, and “indicate intent to partner with buyer”. All of these are consistent with the marketing concept--directing company resources toward satisfaction of the customer at a profit. A comparison of the activities rated most highly by representatives employed by consumer and industrial goods firms, however, suggests that different means are employed to achieve customer need satisfaction.

Category management was rated more highly by consumer goods than by industrial goods representatives. The respondents for the former perceive that their customers desire detailed consultation on the product mix that will assist them in achieving their merchandising objectives. Also ranked highly was “ do surveys for buyers”. Purchasers of consumer goods apparently look for information on areas such as consumer behavior, the competitive environment, and major trends taking place in the industry. In addition, automated reordering received a higher score for consumer goods. This cost and time saving process is perceived as being useful in forming relationships with economy-minded customers.

Industrial goods sales representatives evaluated certain activities as more effective than did members of consumer goods sales forces. To a large extent, these activities relate to a perceived desire by industrial goods customers to obtain specialized attention and service from the sales representatives. This is logical given the substantial differences in the needs of individual industrial goods buyers and in the relatively large size of their purchases. Specifically, industrial goods sales representatives granted higher scores than consumer goods representatives for” indicating intent to partner with buyer”,” using key account process”, “customizing orders”,” providing telemarketing service”,” providing entertainment”, and “inspecting buyer physical facilities.”

The respondents were also asked to assess the effectiveness of various inputs to buying organizations, as a means of furthering relationship marketing. For the total sample, the highest mean scale values were registered for “assistance in problem solving”, “empathy of the representative”, “listening by the representative”, “making company resources available”, and “assistance in identifying problems”. These are all inputs which relate directly to the individual behavior of the sales representative--they are benefits that representatives can personally furnish to service the customer. Hence, they are activities in which representatives who seek to build relationships should develop expertise and practice on an ongoing basis.

There are differences in the assessments of the value of the inputs between consumer and industrial goods representatives. The former give “product quality”, “information about the industry”, “marketing research studies”, and “fast delivery” high evaluations, relative to industrial goods representatives. Generally, these are inputs that are dependent upon personnel in the salesperson’s company who are not members of the sales department. In order to bring these resources into play, the sales representative must depend upon outside parties, and his or her ability to activate these parties, either through some type of formal or informal control or through persuasion. The utilization of these inputs requires that the salesperson develop either power (as through authority) or the ability to convince others to take certain actions, as a means of building relationships.

Several inputs were substantially higher rated by industrial goods than for consumer goods representatives. These were “assistance in identifying problems”, “consulting service”, “information on vendor products,”service personnel support”, “obtaining price reductions”, “technical support”, and “customized orders”. The first three of these are inputs which can be supplied directly by the representative, while the last four require the services of other (other than the salesperson) members of the salesperson’s organization. Hence, both the ability to directly provide inputs and to obtain them from other company members is required.

The respondents indicated that buyers and deciders were the superior buying role targets for relationship marketing. This would suggest that sales representatives devote the brunt of their efforts to these individuals. This is not to say that the others should be neglected, but only that they probably should not receive the same degree of thrust as do buyers and deciders. It should be recognized, of course, that the same individual will occupy more than one role in many cases, and this may magnify his or her importance as a target.

For consumer goods, buyers and deciders were perceived as more superior targets for relationship building than for industrial goods. In the case of the latter, users were seen as having considerable significance. Many industrial goods are machinery and equipment and other items that are operated by buying company personnel or are other items that are involved in the production process, whereas this is less common for consumer goods. This probably explains the bulk of the difference between the two groups.

The sample members evaluated the criteria for assessment of sales representative relational marketing efforts. For the sample at large, the highest evaluations were for “interdependence” (the partners need each other), “individual excellence” (representatives add value and their motives are positive), and “information” (partners communicate about goals, data, problems, and situation). The perception is that mutual dependence of the parties, reinforced by very high quality work on the part of sales representatives and a properly functioning flow of information are of substantial importance to buyers in assessing relationship marketing efforts.

There are some major differences between consumer and industrial goods representatives on the assessment criteria. Those in the former place more reliance, versus the latter on “interdependence”, “investment” (seller devotes resources to the relationship), and “institutionalization” (relationship has formal status with clear responsibility). All three of these criteria are related to the underlying notion that the relationship should be a permanent and not a transitory arrangement. A long-range perspective appears to be in effect, in this regard.

Industrial goods representatives granted higher evaluations, versus consumer sellers, for “integrity” (sales representative and his or her firm are trustworthy and honorable), and “integration” (partners develop shared means of operating). It is not evident why buyers in this sector would place more reliance on integrity than would buyers in the consumer goods area. It is possible that integration was rated higher in the industrial goods field because many of the products involved are employed in the manufacturing and distribution processes of buyers, requiring a high degree of integration with vendors.

The findings provide guidance for sales representatives who seek to establish and maintain relationships with potential customers. They indicate which activities appear to have promise and what inputs targets might seek. Further, they provide guidance as to the buying roles which might be the most receptive to relationship building endeavors. Finally, they suggest criteria that customers might employ in assessing these endeavors--providing direction as to how the sales representatives might address their communications to target customers.

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VISUAL PERCEPTION CHANGES IN THE AGING EYE: THE ELDERLY MAY NOT SEE WHAT YOU WANT THEM TO SEE

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ABSTRACT

Research in the areas of psychology, physiology, ophthalmology, and gerontology indicates that both optical and neural changes occur in the aging eye. These changes have a pronounced impact on the visual perception of older consumers and as such, have numerous implications for direct marketing and marketing in general. Pertinent studies in the literature that identify and explain the visual changes in older consumers are reviewed. Creative and media strategy considerations for effective targeting are discussed.

INTRODUCTION

A current major marketing mistake is an ineffective effort to market to the elderly (Flanagan, 1994). Even though the increasing size and economic power of the elderly population have been noted in published research (e.g. Day, Davis, Dove, & French, 1987/1988; Henderson, 1998; Long, 1998), marketing errors of commission and omission have occurred. Older adults have been negatively stereotyped (Sherman, 1987; Moore, 1988) and underrepresented in advertising (Milliman & Erffmeyer, 1989/1990), poorly segmented, and sometimes - ignored (Long, 1998; Moore, 1988). These mistakes are due, in part, to the fact that many marketers have looked at subjective rather than objective information regarding the elderly and, at times, have viewed elderly consumers as old young consumers. In reality, there are many differences between young and old consumers, some of which include differences in physical mobility (Rosendahl, 1992), cognitive processing abilities (Stephens, 1991), and sensory abilities (Long, 1998).

A key sensory ability that changes as a result of aging is the ability to perceive visual stimuli. Visual perception in the older consumer should be a critical area of concern for marketers who target the elderly, because visual perception is often at the root of information processing and resulting consumer behavior. Psychologists, commercial color consultants, and advertisers, for example, use a variety of color hues to elicit emotions and consumer behavioral responses (Lee & Barnes, 1989). Without a doubt, the implications of visual changes in an aging population are numerous for segmentation and targeting (Braus, 1995).

Since humans are highly visually oriented creatures, a better understanding of visual perception in the aging eye will benefit marketers in at least three ways. First, a more thorough knowledge of visual perception in older adults will enhance the general understanding of the later stages of information processing since exposure to stimuli, at least in part, determines what occurs in the later stages. Second, it will play a major role in the development of creative and media strategies, both of which are important to marketers (Lamons, 1992). A quote by Ross (1983) regarding such media decisions is even more pertinent today: "The currently increasing use of a multiplicity of media requires that each individual medium be refined for more effective targeted marketing. Equally important, if not more so, is the significance of media's interrelationship and interdependence as a means of achieving a synergistic effect." Finally, from a consumer standpoint, marketers will be able to address the specific visual needs of the older age group rather than merely treat them as older young people. In an article by Goerne (1992) on direct mail, Schultz was quoted as saying, "We still don't do a very good job of understanding our customer." An understanding of the changes in visual perception that occur with aging will enable marketers to target older consumers more effectively.

All this is not to say that the aging population and its impact on marketing have gone unnoticed. Certainly, numerous articles and chapters with a focus on or a mention of older consumers have been published over the last 15 years. These include discussions of the size of the older segment (Greco, 1984; Longino, 1994; Loudon & Della Bitta, 1988), segments within the older market (Day, Davis, Dove, & French, 1987/1988; French & Fox, 1985; Hitschler, 1993; Lumpkin, 1985; Visvabharathy & Rink, 1985), characteristics/dimensions of older consumers (Lazer, 1985, 1986), marketing mix related issues (Greco, 1987; Peterson, 1992; Schewe, 1988; Stephens, 1991), and information processing (John & Cole, 1986). The information presented by these and other authors has enriched our knowledge of the older segment, thereby enhancing our abilities to study the consumer behaviors of this older segment and to target them more effectively. However, in the various literature reviews and presentations of original research, the critical area of visual perception has been largely overlooked.

The purpose of this article is to advance the application of visual perception theories in marketing strategies targeting the elderly consumer. The literature in marketing, psychology, physiology, ophthalmology, and gerontology has been reviewed extensively in order to provide a solid foundation for understanding how the elderly, or aging, eye differs perceptually from the young eye. From this foundation, marketers will be better able to develop and implement marketing strategies which target the elderly consumer.

CHANGES IN THE PUPIL AND THE LENS

At least two normal yet critical changes occur in the aging eye that affect visual functioning. The first is that the diameter of the pupil diminishes (Botwinick, 1973). The second is that the crystalline lens changes (Leopold, 1965). That is, the lens becomes less transparent due to an accumulation of inert tissue at the center of the lens. In addition, the lens yellows and increases in thickness with aging (Long, 1998; Weale, 1963).

Impact on Color and Contrast

Quantitatively, these changes result in a reduction in the amount of light which reaches the retina (Latham, Whitaker, & Wild, 1994). In fact, a 60 year-old's retina can receive approximately only 30% of the light that reaches a 20year-old's retina (Long, 1998). Qualitatively, the yellowing of the lens results in a change in the spectral quality of the light perceived by the viewer (Pollack & Atkeson, 1978). According to Said and Weale (1959), the yellowing causes a further reduction in the perception of the blue part of the spectrum. These conclusions are compatible with those of Gilbert (1957) who found that in persons 60-years old and older there was a loss of sensitivity over the entire spectrum and notably a differential loss at the blue end of the spectrum.

Since less visual stimulation occurs in the older eye, modifications in visual stimuli used in marketing to older consumers are warranted. For example, the choice of color used in packaging and advertisements placed in magazines and newspaper inserts should incorporate the fact that an older person has more difficulty than a younger person in seeing the blue part of the spectrum. A green figure on a blue background (as seen on an actual package) may present an interesting contrast to a younger person, but may cause confusion or present no contrast to an older consumer. In addition, low contrast colors are difficult for the older eye to distinguish. For example, white lettering on a pale blended yellow-green background (as seen in a magazine ad) will not yield the desired impact.

The color choices should also be modified for the older targeted consumer by those organizations using printed materials in direct selling. Nothing, including the business card, should be taken for granted. Turquoise blue copy on a gray background (as seen in an actual support print piece) and red letters on a black background (as seen on a business card) should be avoided. If little or no contrast is perceived, then the exposure will be distorted or perhaps will not occur at all.

Colors and contrasts should be examined in other areas as well. When targeting the elderly, flyers, menus, on-premises signage, web pages, pre-admitting forms, stationery, bags, carry-out boxes, specialty advertising pieces, and computer generated charts and graphs, to name a few, should be designed with the elderly eye in mind. A green or black logo on blue/gray stationery, or orange and red headlines on a blue/green senior center pamphlet are ineffective.

One might say that the above examples would be fine for a younger target market. And to the greater extent, that would be true. However, <u>all</u> of the above examples, and others observed by the authors, were for products and services specifically targeted to the elderly.

Impact on Type Size

Color and contrast are not the only concerns when marketing to older consumers. The visual perception changes that occur as a result of aging dictate that type size should also be considered (Anonymous, 1986). Specifically, type size should be between 12 and 14 points if possible (Zitter, 1990). Here again, what should happen and what does happen are often two different things. On numerous observed packages and in a variety of ads targeting older adults, type size was quite small – less than 9 points.

At the extreme, ignoring these age differences in visual perception could present an actual danger. Consider, for example, the small-type white copy used to communicate directions, warnings, and uses observed on a clear bottle that contained a green poisonous cleaning fluid. To the elderly, the words are nearly invisible.

Technological advances in the printing industry and desktop publishing make the above recommendations for customization not only possible, but also cost effective. Hill (1986) noted the customization of catalogs as a way of reducing cost and unlocking lists which previously could not be mailed. These benefits will become even more apparent when targeting older consumers as they grow in number and as the viable consumer upper age category becomes even older.

Impact on Peripheral Vision

From both quantitative and qualitative perspectives, changes in the eye also affect peripheral vision. In two experiments comparing the peripheral vision of young and old adults (Cerella, 1985), it was found that peripheral vision is constricted in elderly adults. In experiment 1, the author found that the breakdown of extrafoveal perception (peripheral vision) of target letters occurred at a greater rate in older than in young adults. In experiment 2, the outer elements in a multicharacter display were seen with greater difficulty or not at all by the older adults. The results of these experiments have strong practical implications with regard to older consumers' perceptions of visual information. Specifically, age decrements in information processing ascribed to decreased attention capacity with age, may in fact be due largely to the age decrements in the underlying perceptual processes. This conclusion is supported by a review of research measuring older adult consumers' cognitive competence (Sorce, 1995).

Since peripheral vision is reduced in the elderly, key pieces of information should not extend into the margins of visual presentations targeted to older persons. This is applicable for some forms of on-premises signage, point-of-purchase displays, transit, and outdoor advertising when close-in visual information incorporates most of the visual field. This finding is important as well with flyers, brochures, and full page, two page, and fold out ads in magazines and newspapers. The consumer may spend extended time with print media in order to digest the important information, however, s/he also may not.

Additional Evidence

Still further evidence of the effect of optical changes in the aging eye has been found in the study of visual intermittent stimulation, the most widely explored area of which has been critical flicker-fusion frequency (CFF). A flickering light is perceived when a series of equally spaced flashes of light strike the retina, and as the flash frequency increases, the perceived contrast is reduced. In fact, at a sufficiently high rate of repetition, the light appears to be constant rather than flickering. CFF, then, is the point at which flicker disappears for an individual. As a result of this phenomenon, CFF has been classically used as a measure of how persons perceive sequentially presented visual stimuli, or the temporal resolving power of the visual system (Ginsburg, 1970; Landis, 1953, 1954).

CFF studies that have compared the visual perception of young and old adults have been consistent in finding that CFF declines with age (Coppinger, 1955; Misiak, 1947, 1951, 1961; Simonson, Enzert & Blankenstein, 1941; Weale, 1963, 1965; Wilson, 1963). These studies present clear evidence that older persons do not perceive visual stimuli the same as young persons. But why does this decline occur? Combining the results of five studies, Weale (1963) estimated that between the ages of 20 and 60 years senile miosis, or excessive smallness or contraction of the pupil, is able to account for about 70% of this decline and lenticular yellowing for another 10%. Thus, he concluded that physical factors can account for the major part of the senile variation in flicker fusion. But what accounts for the remaining 20%? Neural changes offer an interesting explanation, as well as an additional challenge for marketers.

NEURAL CHANGES

Neural changes in the aging eye have been indicated by studies testing the theory of stimulus persistence which deals with an initial visual stimulus blurring into a second. This theory is based on data involving age differences in the ability to process visual stimuli separated in time (Axelrod, 1963; Axelrod & Eisdorfer, 1962; Axelrod, Thompson & Cohen, 1968; Birren, Casperson & Botwinick, 1950; Eisdorfer & Axelrod, 1964). Axelrod (1963) proposed that as age increases, the ability to terminate the effects of one stimulus before receiving another is weakened. Thus the effects of the first stimulus carry over to the second. In Axelrod's words, "Deficits in tasks which demand discrimination among successively presented stimuli suggest an increased refractoriness of the receptive or neural elements involved in the transmission of impulses or, at least, an ability to follow the stimulation rate. The residual effects of a stimulus (S_1) appear to persist, so that a second stimulus (S_2) following S_1 by a fraction of a second, arrives before the processes initiated by S_1 are over, and 'smearing' occurs." (p.136)

When the theory was first proposed, it was primarily applied post hoc to previous studies and claimed support from their results. In the past two decades, however, the theory has gained direct support from research. Some of these studies will be discussed in the following paragraphs to illustrate the neural changes that occur in the aging eye.

Visual Aftereffects

When light hits the retina, even briefly, the excitation of the receptors does not stop immediately upon termination of the stimulus. Under some special conditions and with sufficient exposure to the light stimulus, the excitation, and thus visual perception, may persist for several minutes. This phenomenon is known as visual aftereffects.

Eisdorfer and Axelrod (1964) supported their theory of stimulus persistence by comparing visual and tactile figural aftereffects in young and old adults. They found that visual aftereffects endured as long or longer in the elderly when sufficiently long stimulus exposure durations were used. It was believed that the normal functioning of these damping neurons at a young age would decrease stimulus persistence, whereas the opposite would hold true in old age.

Other Temporal Resolution Studies

Kline and Orme-Rogers (1978) tested stimulus persistence by sequentially presenting word-halves to 12 young (ages 18 to 20) and 12 old (ages 59 to 78) males and females. Stimulus duration and interstimulus interval (ISI) were systematically varied. An interaction was found between age, sex, and stimulus duration. Recognition scores were significantly higher for the older group, thus supporting the stimulus persistence theory.

The stimulus persistence theory was supported as well by Kline, Ikeda, and Schieber (1982). In this study, old and young observers were exposed to pairs of brief green and red flashes in order to produce reports of yellow. The green and red stimuli were separated by six levels of interstimulus intervals and presented at two luminance levels. Consistent with the hypothesis, reports of yellow (color integration) occurred significantly more often among old observers than young observers at longer interstimulus breaks.

Since it is apparent that neural changes occur which cause stimulus persistence, then stimuli presented in rapid succession in a medium such as television should be more difficult for an older consumer to perceive and process accurately. Is it any wonder that older consumers grumble about television given the phenomenon of stimulus persistence? Whereas the stimuli in packaging and print advertising are stationary, the stimuli in television presentations, such as broadcast advertising and video trailers, may be constantly in motion and therefore perceived as blurred. This phenomenon is not related solely to television, however. It applies also to any messages-in-motion such as electronic boards, neon signs, and web pages. That is not to say that these media should be avoided when targeting the elderly. Rather, it indicates that care should be taken in decisions of tempo and special effects. Slower, constant tempos without fast-paced cuts or multiple split screens, for instance, would be more accurately perceived and processed by the elderly.

Although Schewe (1991) stated in his guidelines for communicating with the elderly that marketers should give preference to print media, some of his other guidelines could also enhance the effectiveness of television advertisements, infomercials, videos, web pages, and other electronic forms of communication. His recommendations to keep the message simple, make the message concrete, supply memory aids, and make good use of context, used along with the recommendations cited here, could clarify an otherwise confusing medium.

In a related study, Stephens (1982) found that elderly adults recalled less than either middle-aged or young adults after viewing time-compressed television advertisements. In fact, the elderly participants always did worse on recall with or without time compression. The author concluded that the elderly suffer in their ability to process information when they cannot control the pace and when the rate of information flow is faster than normal. It is suggested here, that the poorer performance by the elderly persons were the result of both perceptual differences and cognitive inferiority to the younger groups.

CONCLUSION

Keane (1984-1985) stated that advertising targeting the elderly should avoid sterotypic thinking. He added, "Is not the underlying challenge to design new products and their advertising positioning on the basis of how the aging marketplace is evolving and will likely be rather than on the seemingly safe harbor of what worked in the outdated past?" (RC-11) It would appear from the vision research that an extension of this thought is in order. That is, marketers cannot continue to assume that an older person's vision differs from a younger person's only with regard to visual acuity, nor that an older person, through use of corrective lenses, sees things as a younger person sees them. It is clear, optical and neural changes that occur as a result of aging affect the way in which various stimuli are perceived by older persons.

Additional research is needed to further explore the theories of visual perception and their applications when targeting the elderly. The size and steady growth of the older age segments in the population will continue to provide numerous opportunities for marketing. However, marketers must realize that the elderly are not just older young people. A better understanding of the visual perception changes that occur with aging will help decision-makers arrive at that realization.

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