ABSTRACT

Tobacco companies have the ability to target their products to segmented audiences by advertising in specialty magazines. Segmentation is a means of providing audiences with ads appropriate to their behavioral, demographic, and psychological characteristics. Through a content analysis of cigarette advertising in 10 popular magazines, a study examined how advertising strategies vary depending on characteristics of the primary readership of different popular magazines. The analysis demonstrated that black and youth-oriented publications have received an increasing number of cigarette ads since 1965. Compatible with segmentation approaches, an analysis of ad content indicated that groups with high smoking rates are often encouraged to switch brands, while groups with low smoking rates are enticed to smoke by the depiction of attractive models having fun. A logistic regression of romantic content that compared trends over time to the general growth of specialized magazines indicated that the incidence of horseplay and coy model poses has increased over time, while the incidence of eroticism has remained relatively stable. In accord with psychographic theories, significant content differences are found in magazines read by different market segments: horseplay is usually targeted at women, poorer, and younger readers, and overtly sexual appeals and coy model poses seem to be targeted at women, black, and poorer readers more often than at men or general audiences. Knowledge of the tobacco industry's segmentation techniques may help health professionals design smoking prevention and cessation programs to counter cigarette advertising more effectively. (Four figures and 4 tables of data are included, and 50 references are attached.) (Author/SR)
How cigarettes are sold in magazines:
Special messages for special markets

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Abstract

Tobacco companies have the ability to target their products to segmented audiences by advertising in speciality magazines. Segmentation is a means of providing audiences with ads appropriate to their behavioral, demographic, and psychological characteristics. A content analysis of ten popular magazines demonstrates that black and youth-oriented publications have received an increasing number of cigarette ads since 1965. Compatible with segmentation approaches, an analysis of ad content indicates that groups with high smoking rates are often encouraged to switch brands, while groups with low smoking rates are enticed to smoke by the depiction of attractive models having fun. A logistic regression of romantic content that compared trends over time to the general growth of specialized magazines indicated that the incidence of horseplay and coy model poses has increased over time, while the incidence of eroticism has remained relatively stable. In accord with psychographic theories, significant content differences are found in magazines read by different market segments: horseplay is usually targeted at women, poorer, and younger readers; overtly sexual appeals and coy model poses seem to be targeted at women, black, and poorer readers more often than at men or general audiences. Knowledge of the tobacco industry's segmentation techniques may help health professionals design smoking prevention and cessation programs to more effectively counter cigarette advertising.
How cigarettes are sold in magazines: Special messages for special markets

Following the landmark 1964 Surgeon General's report, Congress passed the Public Health Cigarette Act of 1970 that banned cigarette advertising from television and radio. In response to these and other anti-smoking events, the overall rate of smoking among adults dropped from 41 percent to 29 percent between 1966 and 1987 (Dept. of Health & Human Services, 1989). Of course, the tobacco industry continues its attempts to expand, or at least maintain, their market. Therefore, barred from television and radio, cigarette advertising has moved to other media. The quick replacement of broadcast advertising with print media (Warner, 1986) demonstrates the industry's perception that advertising is important to sales and profits. With over $2 billion dollars spent on advertising and promotion, tobacco is now the most heavily marketed product in the United States (Federal Trade Commission, 1988). So although the ban did not slow overall cigarette advertising and promotion, it did change the ways and places in which tobacco was marketed. Specifically, magazines that allow advertisers to reach specific segments of the population have shown the greatest growth over this period (Nowak, 1989; Pember, 1988: 93-101). These magazines have shown a large influx of cigarette advertising and have become the main medium for cigarette advertising (Federal Trade Commission, 1989).

Interestingly, the rates of smoking are not equal across various segments of the population. Youth smoking rates as reported by high school seniors have not changed since 1981 (Johnston, O'Malley & Bachman, 1987). Women's smoking rates have declined much more slowly than among men (Dept. of Health and Human Services, 1989). And blacks are more likely to smoke than whites: 40 percent of black males smoke, compared with 31 percent of white males; and 28 percent of black women smoke, compared with 27 percent of white women (Department of Health and Human Services, 1989; Schultz, 1987). Altogether, some 50 to 56 million Americans
continue to smoke, spending more than $33 billion a year on tobacco (Davis, 1987; Gonzales & Edmunston, 1988).

This paper will examine how the tobacco industry segments its audience based on demographics and smoking behavior, and attempts to reach each through specialized magazines and copy. It will compare differences in advertising rates and content among ads aimed at each of these segments of the population.

Audience segmentation:

Marketing textbooks describe segmentation as "the subdividing of a market into homogeneous subsets of customers" (Block & Roering, 1976: 352) based on the desire to make an appeal to particular market segments (Converse, Huegy, & Mitchell, 1965: 493). This is perceived as resulting "in a stronger hold upon a portion of the market rather than a weaker appeal to the entire market" (Converse, Huegy & Mitchell, 1965: 7). Although there is some debate on how to best implement such a strategy (Foote, 1969), segmentation seems to have gained acceptance (Kotler & Andreasen, 1987; Manoff, 1985: 29; Schultz, 1987).

Segmentation techniques often choose an audience based on use of, or desire for a product, select the appropriate media to reach that audience, and develop unique strategies for each (Weinstein, 1987: 184). Strategies developed and tested on samples of these segments of the audience are believed to inform advertisers how the ads will be evaluated on their appeal to other people falling into the same categories, their target segment. That is, by assuring a match between the test audience and the target audience, that audience is anticipated to be similar in other ways, including those referred to as "psychographic," or psychological similarities (Wells, 1974).

Three variables that are often used in segmentation studies include product usage; demographics including income, gender, and ethnicity; and psychological variables such as needs and values (Weinstein, 1987: 44-47). Therefore, for the purposes of analyzing how cigarette advertisers target specific populations, it may be important to examine how cigarette advertising
messages depend on current use, demographics, and psychological characteristics of the target audience (Wells, 1974).

The nature of cigarette advertising in magazines:

Tobacco companies spent $340 million on magazine advertising in 1986, more than twice that spent in 1975 (Federal Trade Commission, 1989), and the highest of any medium. However, industry publications discuss the need to scrutinize magazine advertising more carefully, targeting expenditures away from "high-brow" and "middle-brow" publications and toward those with a greater blue collar readership (Englander, 1986). Cigarettes are also being pitched more aggressively to blacks (Blum, 1986; Davis, 1987). A senior vice president of marketing for RJ Reynolds stated that "Reynolds Tobacco has made a special effort to reach black smokers since the early 1960s" (Winebrenner, 1988). Furthermore, research demonstrates that the tobacco industry is also targeting young people and women (Albright, Altman, Slater & Maccoby, 1988). Certain groups appear to be special targets of tobacco companies: women, blacks, younger, and less-affluent people. Ads directed toward each of these groups are examined in this paper.

Advertising directed toward women:

Cigarette advertisements began to appear in major middle-class women's magazines such as McCall's, Ladies Home Journal, and Better Homes and Gardens in the 1930s. These ads depicted women whose smoking made them sexually attractive (Ernster, 1985a). Following the broadcast ban, women's magazines received an increasingly larger percentage of cigarette advertising compared to magazines directed at other market segments (Albright et al., 1988). Of the 20 magazines receiving the most cigarette advertising revenue in 1985, eight were women's magazines: Better Homes and Gardens, Family Circle, Women's Day, McCall's, Ladies' Home Journal, Redbook, Cosmopolitan, and Glamour (Gorog, 1986). The emergence of a number of exclusively female cigarette brands is another indication of this trend (Ernster, 1985b).
Advertising directed toward blacks:

Cigarettes are also advertised heavily in black-oriented publications such as Ebony, Jet, and Essence (Davis, 1987). In 1985, tobacco companies spent $3.3 million for advertisements in Ebony (Gorog, 1986). Furthermore, cigarette advertisements in 1985 accounted for 12 percent of total advertising revenue in Essence, billed as "the magazine for today's black woman" (Cooper & Simmons, 1985). It is interesting to note that in 1986, Black Enterprise, an upscale black magazine, received only 2.5 percent of its ad revenue of $10 million from cigarette advertisers, whereas tobacco ads accounted for over three times the ad pages in the less upscale black magazines Ebony (9 percent) and Essence (8 percent) (Schultz, 1987). Several cigarette brands have been targeted specifically to the black community: Newport, Kool and Salem account for 60 percent of cigarettes purchased by blacks. Moreover, blacks are almost three times as likely as whites to smoke menthol cigarettes (Davis, 1987). In early 1990, there was a great deal of public disapproval of marketing another brand, Uptown, specifically toward black customers (Newsweek, 1990).

Advertising directed toward youth:

Despite the tobacco industry's denials that it advertises to children (RJ Reynolds Tobacco Company, 1984), cigarette advertisements continue to appear in publications with large teenage readerships (Davis, 1987). In Glamour, one fourth of whose readers are girls under 18 years of age (Hutchings, 1981), cigarette advertising expenditures were $6.3 million in 1985 (Gorog, 1986). In addition, in Sports Illustrated, one third of whose readers are boys under 18 years of age (Hutchings, 1981), cigarette advertising expenditures were $29.9 million in 1985. Furthermore, TV Guide, which received $36 million in tobacco advertising revenue in 1985 -- more than any other magazine (Gorog, 1986) -- informs its advertisers that each issue reaches 8.8 million teenagers 12 to 17 years old (Adweek, 1983). The proportion of cigarette ads placed in magazines with large youth readerships has increased substantially since 1972 (Albright et al., 1988).
Advertising directed toward lower-income groups:

Recently, cigarette companies have increased their emphasis on advertising in "blue-collar" magazines such as *Popular Mechanics*, (Davis, 1987). The number of pages with cigarette advertising in the top ten "upscale" magazines (e.g., *Vogue* and *U.S. News & World Report*) fell 23 percent in 1984 and 17 percent in 1985, whereas the number of pages in the top ten blue-collar magazines fell only 7.1 percent in 1984 and 9.5 percent in 1985 (Englander, 1986). Smoking rates among blue-collar male workers (47 percent) exceed those among white-collar male workers (33 percent) (Dept. of Health and Human Services, 1985), and smoking rates generally increase with decreasing education (Remington et al., 1985). In fact, the Americans who smoke are likely to be from less-affluent groups, while the income divisions between smokers and nonsmokers are growing wider (Gonzales & Edmondson, 1988).

Research question:

The preceding discussion illustrates that tobacco companies are differentially targeting certain segments of the population. Although previous research has demonstrated that youth and women's magazines receive proportionally more tobacco advertisements than other magazines (Albright *et al.*, 1988; Altman *et al.*, 1987), there are few empirical studies of targeting market segments such as blacks and lower-income groups. Two studies found differences in content for black versus white readers across several products (Pokrywcy, 1989; Schooler & Basil, 1990). In addition, Federal Trade Commission data also indicate that the nature of cigarette advertising is changing (Federal Trade Commission, 1939). This study, through a content analysis of cigarette advertising, will examine how cigarette advertising strategies vary depending on characteristics of the primary readership of different popular magazines. This will include four types of dependent variables: the number of cigarette ads, characteristics of the models, whether ads focus on the product or models, and the themes used in magazine ads in various types of magazines. The independent variables include the demographics of the audience (income, gender, and race), and the year of the magazine's publication. In addition, these findings will be compared to the national data on cigarette use (percentage smokers, ex-smokers, potential smokers, and non-smokers).
Method

This study is an extension of earlier content analyses of popular magazines (Albright, et al., 1988; Altman et al., 1987). Magazine readership data were obtained on magazine subscribers from a standard advertising industry source (Simmons, 1987), and were selected to obtain a maximum contrast between women, black, youth and other readerships which were available to coders. Magazines representing five demographic readership categories were examined: youth magazines (Cycle World, on motorcycles; Mademoiselle, fashion; Rolling Stone, music), women's magazines (Essence, fashion; Ladies Home Journal, homemaking; Mademoiselle, fashion), black magazines (Ebony, fashion; Essence, fashion; Jet, news), men's magazines (Cycle World, motorcycles; Popular Science, science), and adult-general (Time, news; TV Guide, TV programs). In sum, ten magazines were sampled from the first tobacco ad found, in 1924, through July 1989. The list of these magazines, along with their years of publication and readership demographic information (age, income, gender, and race) are displayed in Table 1.

In order to account for possible seasonal variation, alternating 6 month Winter (October to March) or Summer (April to September) issues were sampled. One month within each seasonal category was randomly selected. For the magazines published weekly (Time, TV Guide), a random number from one to four determined the week of the month selected within the winter or summer block. A total of 1171 advertisements were coded. Data gathered included the number of

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1 Marketing data included information only on subscribers over the age of 18. Therefore, the median age for readers of magazines listed in Table 1 is probably an overestimate since it does not reflect the fact that a large proportion of the readers are people younger than 18.

2 Magazine categories, due to their lack of independence (i.e. Essence was categorized as both a women's magazine and a black magazine), were compared in two ways (explained later).
cigarette ads and the number of pages in each issue; the number, gender, and race of people in each ad (if any); and the themes of the ads, including any romantic or erotic content. Six coders analyzed the advertisements: four trained coders analyzed the original sample through 1985, and the authors (trained by one of the original coders) updated the sample to July 1989 and also expanded the sample to include *Essence* and *Jet*. Altogether, interrater reliability among the six coders was 90 percent.

**Data Analysis**

For the first analysis we chose to study the number of cigarette ads over time and the number of ads which were published for selected audiences (readers). This examined how the average number of ads per issue has changed over time across all magazines sampled, and within each of the five readership groups. The next several analyses looked at content differences within these ads and in the various magazine categories. We investigated the rates at which ads showed cigarettes and people. In many ads, cigarettes are not shown and the primary emphasis was, for example, on models skiing or playing volleyball on the beach. In these “model” ads, the only reference to smoking was usually the overlay of a pack of cigarettes at the bottom of the page. The types of romantic or erotic themes used in cigarette ads that utilized models were also examined. Horseplay was defined as males and females cavorting in some way; erotic content as very romantic or sexy situations or innuendo, and coy or seductive model poses as wanton looks, suggestive glances or poses. To look for possible message targeting, magazines were assigned into readership categories and analyses of variance were computed to determine whether differences observed in ad content between types of magazines were statistically significant.

Correlations between readership characteristics and several factors related to our sampling method had the potential to make observed differences between magazine types misleading. First, several magazines fit into more than one category (*Essence*, for example, is both a woman’s magazine and a black magazine). Second, the magazines were not selected randomly. Magazines were purposively chosen to fit into certain categories based on readership data. These ten
Cigarette Advertising

magazines, therefore, cannot be considered to be representative of all magazines. Third, the independent variables, notably gender and income, did not cleanly split into categories, which would have made assignments to categories somewhat subjective. Fourth, several of the readership demographics were strongly related to each other. The correlation between income, race and gender made it difficult to establish which of these variables was driving differences between readership categories. For example, we could not determine whether the nature of ads in Jet was due to the fact that the readers were mostly poor, or because they were mostly black. Finally, more specialized magazines appeared later in time (e.g., two of the black magazines began publication in 1970). Thus, the total sample includes more magazines (and thus more ads) per category in the past twenty years. This confound between the year and the type of magazine made it difficult to establish whether the observed differences were a result of changes over time, or differences between the types of magazines. In order to compare each of these potential explanations, multiple regression analyses that control for time and demographics were used. In essence, multiple regression analysis provided a way of looking at ad differences based on the actual demographic characteristics of the magazine's audience to determine which factors were affecting the nature of cigarette advertising.

The independent variables in this study: year of publication, and the readership demographics obtained from Simmons (age, percent female, percent black, and median income)--formed continuous variables. However, the magazines with a high black readership also had a readership with lower incomes ($r=-.81, p<.001$), reflecting the strong relationship between race and income. This would have resulted in collinearity and potentially unreliable regression coefficients had these two variables been used together. Instead, each regression was run twice: once using the first three variables (publication year, readers age and gender) and the percentage of black readers; then again, using the first three variables and income. The coefficients for the first three variables were quite consistent across the two analyses (for example, .49 versus .50). Therefore, we concluded that the relationships we observed were reliable and the regression
coefficients were averaged and reported only once in each table. These betas can also be interpreted to represent a rate of incidence equal to e to the beta.³

Results

The total number of cigarette ads per issue over the years is shown in Figure 1. The growth of cigarette advertising in magazines that occurred after the television advertising ban in 1972 is apparent (Albright et al., 1988). The trend toward more cigarette ads per issue over time is statistically significant (r=.103, p<.001). Since 1981, however, the number of cigarette ads per issue has dropped.

Figure 2 shows the number of cigarette ads per issue by each readership category of magazine (general, men's, women's, black, and youth) from 1960 to 1989. This figure illustrates that there is an overall increase of cigarette ads into more specialized readership categories. However, in the five year period between 1984 and 1989, this trend has changed. The number of ads per issue for tobacco products is declining in general, men's, and women's magazines and generally stable in black and youth publications.

We also examined the rate at which ads used models or cigarettes. The total number of cigarette ads between 1924 and 1989 which used models is shown in Table 2. This table also

³ For example, e .15 is equal to +5, denoting a 5-fold increase.
shows the proportion of cigarette ads that used models and women and blacks as models. The data show that although the rate of using female models differs across magazines ($F=5.5$ (9,1077), $p<.001$) magazines are willing to show models of either gender, but unwilling to use models of a different racial group than the magazine's primary readership ($F=132$ (9,946), $p<.001$).

Figure 3 illustrates the focus of cigarette ads that were presented in each readership category, collapsed over the years 1924-1989. In general, it indicates that women's and black magazines had the highest percentage of ads focused on the product itself. Differences in the percentage of ads focusing on cigarettes between the magazine categories were significant ($F=19.2$ (4,1088), $p<.001$). Meanwhile, men's and youth magazines more frequently focused on the models in the ads, for example, ads which do not depict smoking, but models playing volleyball, skiing, etc. These between-category differences were also significant ($F=11.7$ (4,1088), $p<.001$).

Of the ads which used models, romance was the most frequent theme in model-based ads. Figure 4 shows the difference in the specific types of romantic or sexual themes by readership category. Incidents of he-seplay ($F(4,1088)=3.36, p<.05$) and the incidence of erotic romantic contact ($F(4,1088)=5.65, p<.001$) was highest in black and youth-oriented publications. The highest incidence of models being portrayed as coy or seductive (usually women) was in women's magazines ($F(4,1088)=24.1, p<.001$).
As discussed above, Figures 3 and 4 do not reveal what factors contribute most to these differences: increasing numbers of specialized magazines in recent years or demographic differences in magazine readership. Therefore, multiple regression analyses were run that compared the effects of time and demographics simultaneously. The analysis of the frequency of use of themes that focus on the product and the model, shown in Table 3, suggests that the amount of advertisements focusing on the cigarettes themselves has decreased over time (Beta = -0.015, p < 0.001). Across readership categories, there was a greater tendency to focus on the product for older (Beta = 0.045, p < 0.001), female (Beta = 0.313, p < 0.05), black (Beta = 0.475, p < 0.001) and less-affluent (Beta = -0.037, p < 0.001) audiences. The statistical analysis of the rate at which ads focused on models, also shown in Table 3, indicates there is also a decreasing trend to focus on models (Beta = -0.018, p < 0.001) over time. In addition, there was less focus on models for older (Beta = -0.19, p < 0.001), female (Beta = -0.365, p < 0.01), and black (Beta = -0.402, p < 0.001) audiences. Ads that focused on the models were most likely aimed at readers with higher incomes (Beta = 0.027, p < 0.001).

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INSERT TABLE 3
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Table 4 shows the multiple regression analyses of ad content. In the analysis of horseplay there appears to be an increasing trend between 1924 and 1989 (Beta = 0.043, p < 0.001). Horseplay was negatively related to age of readers (Beta = -0.013, p < 0.01) and primarily targeted at younger readers. Horseplay also was more frequently targeted toward women (Beta = 0.783, p < 0.01) which means that ads targeted at women are 2.2 times as likely to contain male-female-horseplay as ads targeted at men. Incidences of horseplay were negatively related to income (Beta = -0.020, p < 0.05). This means that it is theme used most heavily with less affluent readers. With these factors
controlled, however, horseplay showed no relationship to readership race. This suggest that the differences seen in Figure 4 are probably attributable to income and gender rather than race.

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**INSERT TABLE 4**

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Erotic romantic content, also shown in Table 4, indicates no significant trend over time. These themes appeared to be targeted at women (Beta=1.32, p<.05), so ads targeted at women are 3.7 times more likely than those targeted toward men to contain erotic themes. The use of erotic themes was also higher in black publications (Beta=1.45, p<.001) indicating that black-targeted ads are 4.3 times as likely to use these themes than ads targeted at whites. In addition, magazines whose readers have lower incomes show higher incidences of erotic content (Beta=-.114, p<.001). Furthermore, this erotic content was more likely to appear in magazines targeted at older readers (Beta=.036, p<.05).

The analysis of coy or suggestive poses is also shown in Table 4. It demonstrates that the use of coy poses increased over time (Beta=.017, p<.05). Also, coy and suggestive poses appeared more frequently in women's magazines (Beta=1.46, p<.001) indicating that ads targeted at women are 4.3 times more likely to depict coy models than ads directed toward men. In addition, the use of coy model poses was higher in black magazines (Beta=.448, p<.01), indicating that ads targeted at blacks are 1.6 times as likely to contain coy model poses than ads targeted at whites. And coy or suggestive model poses seemed to be targeted at older (Beta=.058, p<.001) and less affluent readers (Beta=.047, p<.01).
Conclusion

Data from this study illustrate that tobacco companies do appear to be targeting their products to specific segments of the population. Specifically, the number of cigarette ads has increased steadily since 1965 in magazines with specific audiences, reflecting the growth of specialized magazines (Nowak, 1989: 8; Pember, 1988: 93-111). Women were the target of ads beginning in the 1930s. And while readers of black- and youth-focused magazines have historically been exposed to fewer cigarette ads, this appears to be changing. Beginning in the 1970s, the number of cigarette ads in black- and youth-oriented magazines has risen dramatically and steadily. Since the early 1980s, while there has been a large drop in the number of cigarette ads in general, men's, and women's magazines, the number of cigarette ads in black- and youth-oriented magazines has remained constant.

Reflecting segmentation approaches to marketing, this study found significant differences in the focus of cigarette ads appearing in magazines read by different segments of the population. In accord with previous research, characteristics of the models were closely related to those of readers (Schooler & Basil, 1990). In this case, a model's race and gender was related to that of readers.

With regard to the focus of the advertisements, cigarette ads targeted at women tended to focus more on the product than on models, conflicting with some previous data (Ernster, 1985a). However, this may be explained on the basis that the type of tobacco products being advertised to women are unique: they emphasize style (slimness, color, etc.). Selecting a specific brand of cigarettes is portrayed as a fashion decision. Black readers are also targeted with ads that are more likely to focus on cigarette brands and not models. This finding is in accord with previous research (Davis, 1987). Lower-income readers are also more likely to be given ads that focus on the product itself. The high proportion of product-based ads aimed at black and lower-income readers may be explained on the basis of current smoking rates: since both groups smoke at a high rate (34% black, 31% poor, versus 29% overall -- Dept. of Health & Human Services, 1989:4),
advertisers are attempting to sell them a particular brand or its quality. That is, advertisers are not trying to recruit new smokers so much as pry them away from other brands or reinforce brand loyalty. On the other hand, cigarette ads in youth magazines are more likely to portray models in situations that are fun. This is compatible with findings that ads are likely to depict images of adventure or risk and of recreation (Altman et al., 1987). This focus on models is compatible with the concept of recruiting younger audiences into smoking, showing them smokers are active, having fun skiing or playing volleyball.

Altogether, our sample of cigarette advertising does not support claims that women, black, youth, and poorer readers are targeted primarily with appeals that emphasize handsome, vigorous models and then subtly link these individuals to smoking. The focus of the majority of ads appears to depend on the segment’s current rate of smoking and attributes of the product being offered. Readers with high smoking rates are often pitched to choose certain brands with appeals based on some aspect of the brand rather than on the models depicted in the ad. However, readers in low-smoking-rate groups appear to be given appeals that focus on models, suggesting that smoking is fun, makes friends, and will make you desirable. Groups with lower smoking rates are more frequently given appeals that appear to be attempting to recruit new smokers.

As predicted by psychographic approaches to marketing, this study also found significant differences in the content of cigarette ads. Of the ads that do use models, the rate of romantic and sexy content depends on the particular audience. Ads directed toward women that focus on models are likely to depict horseplay between men and women, use romantic themes such as men and women with their arms around each other, and portray women as coy and seductive. This finding agrees with other research on cigarette advertising in magazines that finds ads in women’s magazines are more likely than ads in other magazines to show romantic or erotic images (Altman et al., 1987). The content of model-oriented ads in black magazines are also likely to include romantic themes and coy poses, but more explicit ones than those targeted at women and other readers. This finding is in accord with research across several products (Pokrywczynski, 1989). Cigarette ads in youth magazines are more likely to portray male-female horseplay or
romantic/erotic situations. These themes can be combined with images of adventure, risk and recreation as has been observed elsewhere (Altman et al., 1987). For ads targeted at lower-income readers that use models, horseplay, romance, and coy poses are all quite prevalent.

In content then, women, black, youth and poorer readers seem to be targeted with more overtly sexual appeals than men or general audiences. These appeals are probably based on focus-group research which is centered around the principle of psychographic similarity. Therefore, knowledge of these content differences may be of use to health professionals in designing smoking prevention and cessation programs. In this way, anti-smoking campaigns can be made more compatible not only with the ads themselves, but also with the viewer characteristics that dictate advertisers' appeals. These specialized anti-smoking appeals may then be used to more effectively counter the targeted advertising tactics of the tobacco industry. In addition, these differences in content suggest that research may wish to examine how these specialized ads influence and are perceived by their audience, that is, to delve further into the process of identification with models and possible subsequent emulation as has been discussed by Bandura (1988).
References

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Pokrywczynski, J. V. (1989). Sex in ads targeted to black and white readers. *Journalism Quarterly:* 65 (Fall), 756-760.


### TABLE 1:
Magazines, years surveyed, and readership demographics

<table>
<thead>
<tr>
<th>MAGAZINE</th>
<th>YEARS SURVEYED (to July 1989)</th>
<th>Median Age</th>
<th>Median Household Income ($1,000s)</th>
<th>Percent Female</th>
<th>Percent Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cycle World</td>
<td>1963-</td>
<td>27.5</td>
<td>29.2</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>2. Ebony</td>
<td>1950-</td>
<td>34.2</td>
<td>21.6</td>
<td>61</td>
<td>90 *</td>
</tr>
<tr>
<td>3. Essence</td>
<td>1971-</td>
<td>31.9</td>
<td>24.1</td>
<td>73 *</td>
<td>90 *</td>
</tr>
<tr>
<td>4. Jet</td>
<td>1969-</td>
<td>32.9</td>
<td>19.7</td>
<td>55</td>
<td>93 *</td>
</tr>
<tr>
<td>5. Ladies H. Journal</td>
<td>1920-</td>
<td>41.9</td>
<td>29.0</td>
<td>90 *</td>
<td>8</td>
</tr>
<tr>
<td>6. Mademoiselle</td>
<td>1954-</td>
<td>27.2</td>
<td>32.3</td>
<td>95 *</td>
<td>10</td>
</tr>
<tr>
<td>7. Popular Science</td>
<td>1920-</td>
<td>38.4</td>
<td>33.7</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>8. Rolling Stone</td>
<td>1968-</td>
<td>25.1</td>
<td>29.9</td>
<td>41</td>
<td>10</td>
</tr>
<tr>
<td>9. Time</td>
<td>1926-</td>
<td>37.3</td>
<td>34.5</td>
<td>45</td>
<td>11</td>
</tr>
<tr>
<td>10. TV Guide</td>
<td>1959-</td>
<td>36.1</td>
<td>26.8</td>
<td>57</td>
<td>13</td>
</tr>
</tbody>
</table>

NOTE: * indicates more than 70 percent of readers fall into this category, so this magazine was assigned to the corresponding principal readership category for Figures 1 and 2. This information is from Simmons (1987). The regression analyses used the actual dollars and percentage figures.
TABLE 2:  
Number of Ads with Models by Race and Gender

<table>
<thead>
<tr>
<th></th>
<th>Number of Ads (Total)</th>
<th>Percent of Ads with Models</th>
<th>MODEL Percent</th>
<th>MODEL Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>1. Cycle World</td>
<td>54</td>
<td>93</td>
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<td>-.018 ***</td>
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<tr>
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<td>.027 ***</td>
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</table>

NOTE: Beta weights are reported. Because of correlation, Black and Income are reported from separate regressions (see Method section for further details).

* p < .05
** p < .01
*** p < .001
TABLE 4:
Ad Content

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<th>Coy model</th>
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<tr>
<td>Year</td>
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Readership

<table>
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<th>Demographic</th>
<th>Horseplay</th>
<th>Erotic</th>
<th>Coy model</th>
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</thead>
<tbody>
<tr>
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<td>.036 *</td>
<td>.058 ***</td>
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</tbody>
</table>

NOTE: Beta weights are reported. Because of correlation, Black and Income are reported from separate regressions (see Method section for further details).

* p <.05
** p <.01
*** p <.001
FIGURE 1:
Mean Number of Cigarette Ads per Issue
1924-1989

FIGURE 2:
Mean Number of Cigarette Ads per Issue
by Principal Readership 1960-1989
FIGURE 3: Theme Focus by Principal Readership

Principal Readership

Percentage of Ads

FIGURE 4: Percentage of Ads with Romantic Themes by Theme and Principal Readership

Principal Readership