Beyond Race: Culture Cues and Acculturation While Processing Pro- and Anti-Smoking Messages

Thesis

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Abstract

Participants viewed a series of advertisements featuring an equal combination of pro-smoking and anti-smoking messages, African American and Caucasian characters, and African American and Caucasian culture cues. Culture cues were based on racial preferences in music, food, and sports. Participants were then asked to complete a series of scales including the Multigroup Ethnic Identity Measure (MEIM, α=.94) or the African American Acculturation Scale – Short form (AAAS, α=.88). The MEIM was used to measure the level of ethnic identification for Caucasian participants and the AAAS was used to measure the levels of acculturation in African American participants.

**Hypothesis 1.** Participants’ attitudes towards smoking messages will be dependent on the race of the viewer. **Hypothesis 2.** Traditional African American participants will view smoking messages featuring cultural cues in a more positive manner than acculturated African Americans participants. **Hypothesis 3.** Caucasian participants who have a strong ethnic identity will favor smoking messages that feature Caucasian culture cues.

**Results.** As predicted, among African American participants, the race of the characters portrayed in the ads interacted with the participants’ AAAS scores, which approached significance, $F(1, 47) = 3.43, p = .07$, partial $\eta^2 = .07$. ANCOVA results, for African American participants, indicated a significant three-way interaction between race, culture cue, and smoking message, $F(1,47) = 4.13, p <.05$, partial $\eta^2 = .08$. When culture cues were absent from anti-smoking ads there was very little difference between
the attitudes towards the ads (Aad) regardless of the race portrayed in the ads. When culture cues were present there was a difference in Aad. Ads featuring African American characters and African American culture cues were viewed significantly more favorable than ads featuring African American characters absent culture cues. A greater sample size is necessary for more powerful effects. Overall results indicate that African Americans have a greater affect towards anti-smoking ads that feature African American character coupled with African American culture cues. Caucasians also seem to have a greater effect size when ads feature African Americans.
Dedication

To the Ragin-5 and the one Moore, who have given me so much love and support throughout this journey, I appreciate the pep talks, visits, and reading my research. To Onyx, thank you for enduring the long hours and the inattentive behavior, thank you for periodically commandeering my laptop and forcing me to go for a walk. I would have never made it this far without you all.
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Fields of Study

Major Field: Communication
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Literature Review

“For the marketing manager, a knowledge of differences between whites and blacks and [culture’s] role in the consumer’s evaluation of products and product claims is essential.” (R.J. Reynolds document, n.d.). This statement was made by a tobacco marketing manager when discussing the different marketing strategies necessary for targeting African American versus Caucasian consumers. When the tobacco industry documents were released nearly 15 years ago, a Pandora’s Box of information about marketing strategies was also released. Among them were countless on the record statements and entire marketing campaigns that pointed to a concerted effort by the tobacco industry to specifically target American’s through their subcultures (Randall, 1998). One of the most prevalent examples is the targeting of African Americans through a conscious effort to infiltrate and understand the culture. The tobacco industry seemingly has gathered what social scientist and government officials are still trying to comprehend, the important role culture plays in the acceptance of behavior messages, particularly, health behavior.

Among those critical health behaviors is the smoking epidemic. Every day 5,800 new smokers enter the market (U.S. Dept. of Health, Center for Disease Control [CDC], 2007). People of lower socio-economic status, adults with household incomes below the poverty level and those with less than some college education, account for the majority of
smokers (CDC, 2004). The U.S. Census Bureau reported that African Americans continue to have the highest rate of poverty with 34.5% living below the poverty line, almost double the national average (Historical Poverty Tables, Table 3, 2008), making African Americans at greater risk to become smokers.

Though African Americans account for less than 12% of new smokers (CDC, 2007), and among adolescents African Americans have the lowest smoking rates of any major American ethnic group (Gardiner, 2001), the rate of African American smokers steadily increases with age (CDC, 2005b). In other words, though African Americans adopt smoking behavior at a lower rate as adolescents, they adopt smoking behavior in larger numbers during adulthood (Yerger, Przewoznik & Malone, 2007). Prevalence rates for smoking among low-income adult African Americans range from 33% to 59% compared with 21% for the general population (CDC, 2005a). Though African Americans are strongly motivated to quit smoking, fewer African Americans than Caucasian Americans are able to do so (Larson et al., 2009). Furthermore, African Americans are less likely to abstain from smoking for more than a year (U.S. Dept. of Health and Human Services, 1998). Consequently, African Americans are more likely to be long-term smokers. It is important to note that these figures take into account rates in general and that “smoking behavior” can also be the partaking of alternative smoking products such as cigars, cigarellos, mini cigars, cloves, and marijuana.

The combination of generally lower socio-economic status and long-term smoking, results in African Americans being at greater risk for smoking related disease and death (Pollay, Lee & Carter, 1992). The rate of African American cancer deaths is 33% higher than any other race, particularly lung cancer, the leading cause of cancer.
death among African Americans (American Lung Association, 2010). One of the speculated reasons that African Americans adults are at particularly high risk for initiating smoking behavior is that tobacco companies historically target urban lower socio-economic communities, which are heavily populated by African Americans (McKinnon, 2003).

**Tobacco Industry Targets African American Consumers**

The tobacco industry has a longstanding relationship with the African American community. By establishing their smoking products as an image of success and status that so many low-income African Americans were trying to obtain and by appealing to their sense of community, the tobacco industry was able to exploit the African American community (R.J. Reynolds, 1989 & Winebrenner, 1988). For instance, companies such as Phillip-Morris and R.J. Reynolds sponsored athletic events, cultural events such as concerts and festivals, and offered athletic scholarships designed specifically for minority populations (Law, 1992). Among some of the events sponsored by tobacco companies were the fortieth anniversary gala of the United Negro College Fund and the Ebony Fashion Show (Law, 1992). The tobacco industry also developed brands especially for the purpose of targeting African Americans. Like the now defunct Uptown brand, which was to be targeted and sold specifically in predominantly African American communities (American Heart Association, 2009). The tobacco companies’ strategy was to appeal to the African American community through extensive community relations efforts. These efforts included making contributions to the campaigns of African American politicians and community leaders; they also infused African American media with their advertising dollars (Law, 1992). Essentially the tobacco companies infiltrated the African American
community, in no small part, by addressing the sociological and psychological issues that other industries ignored.

**Stress and Smoking among African Americans**

The primary explanation for individuals’ motivation to smoke is that the act of smoking relieves psychological stress (Jenks, 1994a, 1994b). African Americans as a whole face very specific combinations of stressors that affect them on a day-to-day basis. Many of the stressors are based on quantitative disparities between the African American community and the American majority. African American households are disproportionately in a number of socio-economic situations that could contribute to increased stress. (U.S. Census Bureau, American Community Survey [ACS], 2010, Table S1101). For example, with 80% of African American children born outside of marriage, African American women are two times more likely to head a household, without a husband or significant other (ACS, 2010, Table S1101). Marriage rates are a third lower than the majority and divorce rates significantly higher than the national average (ACS, 2010, Table S1101). Yet, 44.7% of African American women and 48.2% of African American men have never married (ACS, 2010, Table S1101). Forty percent of African Americans over the age of 30 years old are the guardians of at least one grandchild (ACS, 2010, Table S1001, S1002). African Americans are more likely to work or have worked in psychologically stressful, and typically lower paying, fields such as the Armed Forces, education, health care, government and social services (ACS, 2010, Table S2403). They are also more likely to work in physically demanding fields such as production, transportation, and material moving (ACS, 2010, Table S2404).
In addition, unemployment among African Americans is almost twice that of the national average (ACS, 2010, Table S2301) making them 2.5 times more likely to live in poverty, and more likely to live in older multi-unit buildings, colloquially known as “the projects” (ACS, Table, S2502). In essence, African Americans as a community, endure daily compounded stressors such as cramped living quarters, poverty, stressful work environments, lower education opportunities (thus lower advancement opportunities) and non-traditional family structures. Theorists posit that this unique level of disparity leads to psychological stressors that in turn contribute to smoking (Orleans, Strecher, Schoenbach, Salmon, & Blackmon, 1989; Romano, Bloom, & Syme, 1991).

Culture and Smoking among African Americans

In addition, culture shapes the methods and patterns of smoking and understanding culture is an essential element to reducing cigarette use. (Unger, Palmer, Dent, Rohrbach, & Johnson, 2000 and Leischow, Ranger-Moore, & Lawrence, 2000). Acculturation or lack thereof, is a variable to understanding ethnic minorities’ smoking habits (Webb, 2008). African Americans smokers tend to reject acculturation more than nonsmokers and therefore are more directly affiliated with traditional African American culture (Klonoff & Landrine, 1996, 1999). For example, African American smokers admitted greater distrust of the dominant culture of Caucasian Americans. (Fernander, et. al, 2008). They also reported that they continue to hold more traditional health beliefs, and accept superstitious or tribal beliefs as a more real part of their lives. Further, they were more likely to report that they regularly ate traditional foods than nonsmokers (Fernander, et. al., 2008). This connection with African American culture contributes to an increased acceptance of smoking behavior as part of African American socialization.
In fact, Klonoff and Landrine found the level of acculturation to be the best predictor of smoking behavior (1996). Their study also revealed that African American smokers have a more traditional belief system that includes the belief in the healing practices of herbs, teas and other plant products (Klonoff & Landrine, 1996, 1999). This finding is consistent with the knowledge that African American smokers appear to believe that they will suffer few of the health consequences of smoking (Klonoff & Landrine, 1996, 1999), and may also explain why some alternative smoking products such as mini cigars and cigarellos would be considered more natural, and thus more health conscious, than cigarettes.

In addition, traditional African Americans, those less acculturated, are more detached from the attitudes and beliefs of the dominate society and may have less information about the dangers of smoking (Fernander et al, 2008). Smoking may also serve as a significant mechanism of expression or as a symbol of fashion or cultural taste among certain socio-economic statuses (Pamel, 2006). As one researcher stated:

“[f]or baby boomers, the body—exercised, slimmed, well cared for—represented an ideal of youth and strength. High status was demonstrated not with martinis, fur coats, and silver cigarette cases, but with expensive mineral water, jogging, and disdain for smokers. As a cultural object for this group, the cigarette came to mean a foolish, and irritating to others, disregard for bodily health.” (Griswold, 1994).

To higher socio-economic status (SES) groups the act of smoking has developed into a less than desirable practice (Pampel, 2006). Based on current SES patterns of smoking, the behavior does not carry the same stigma for lower SES groups as it does for higher SES groups. Among lower SES groups smoking behavior still signifies
characteristics such as: risk taking, independence, and an anti-authoritarian attitude (Pampel, 2006).

At least one study has investigated the correlation between strong cultural symbols, music, with smoking behavior (Pampel, 2006). Music is also highly correlated with race as well as cultural taste (Pampel, 2006). For example, African Americans tend to enjoy Jazz-Blues genre (0.86, p <0.01). Pampel study presented evidence that cultural predictors correlate with the act of smoking cigarettes (2006). Thus it is feasible to suggest that culture correlates with smoking behavior. The results of Pampel’s research are consistent with claims that both smoking and musical tastes represent facets of class-based cultural norms (2006). Pampel’s attention to culture is consistent with the importance of identity and peer group affirmation for health behaviors, a point that may explain smoking behaviors among African Americans.

**Motivation and Smoking Behavior**

Although ethnicity and culture do play an external part in African Americans motivation to smoke; it is the contention of this author that the connection between motivation and culture is stronger than has ever been attributed. Research has shown that individual experiences and environment will lead to individuals demonstrating different motivational activation patterns (Bandura, 1994). This study adds to the literature by demonstrating the correlation between culture and attitudes toward smoking messages. Smoking messages are defined by the author as both pro- and anti-smoking content in advertisement, for the purpose of this study specifically cigarette messaging in print advertisement.
Motivation is a concept that deals with internal or external influences that reward or punish a particular behavior (Munro, 1997). This system of results helps an individual attain certain goals that may be seen as having been socially constructed by the social group and culture one grows up in (Munro, 1997). According to Edwards, motivation is fundamentally driven by the desire to maintain order (1999). “Humans as a species want to maintain their place in social order and do so by adjusting their behavior accordingly” (Edwards, 1999). This form of motivation is termed social motivation (Munro et al., 1997). Theorists argue motivation is directly tied to culture (Morling & Kityama, 2007).

The definition of culture that will be used in this study is: “learned systems of meanings, communicated by means of natural language and other symbol systems, having representational, directive, and affective functions, and capable of creating cultural entities and particular senses of reality.” (Morling & Kityama, 2007).

The tie between motivation and culture is heightened when one considers how culture shapes and drives people’s needs. For instance, food, sleep and sex are basic physiological needs according Maslow’s Heirarchy (1943). Though less fundamental, the need to belong to a social in-group is also necessary (Maslow, 1943). Morling and Kityama stated that in addition to physiological needs, culture helps shape one’s self-concept (2007). Many cultures, including African based cultures, practice an interdependent concept of self, in which the self is connected and defined by others in a relationship (Morling & Kityama, 2007). This knowledge is particularly poignant to this study considering that some social scientists have determined that some fundamental elements of West and Central African culture are still evident in contemporary African American culture (Herskovits, 1941/1990). In cultures that value interdependence, social
norms and attitudes are greater motivators than individual attitudes and desires (Morling & Kityama, 2007). Though interdependence is valued among particular in-groups it is not always expected or appreciated when interacting with other social groups. For example, in African American culture rebellion against mainstream culture is valued. Especially among males, deviance helps one gain status within a social group (Xie, Li, Boucher, Hutchins, & Cairns; 2006). Defiance is also viewed as a trait of independence by both African American adolescent males and females, but is particularly accepted and expected behavior for adolescent males (Xie et al., 2006). Though many African Americans have inhabited the United States for more than four centuries they still have maintained cultural elements that are unique to their sub-culture (King, Bendel, & Delaronde, 1998). Therefore it is plausible that African Americans’ smoking behavior and is culturally motivated.
Purpose of Study

Every year African Americans die at a higher rate than Caucasian Americans from smoking related illness (CDC, 2005b). Yet, only a few anti-smoking media or cessation programs directly target African Americans. One possible reason for this oversight might be because very little attention has been paid to the significant cultural factors that contribute to African American smoking behavior. Studies examining the relationship between African American culture, socialization, and smoking-related factors are imperative to understand how to enhance cessation rates and subsequently improve the health status of African Americans. Although studies exist that examines socioculturally relevant factors such as race-related disparities and general-life stressors, there are only a few that address how ones acculturation impacts smoking behavior (see Webb, 2008; Landrine & Klonoff, 2000; Klonoff & Landrine, 1999; and Klonoff & Landrine, 1996). In fact the studies that do recognize a relationship between acculturation and smoking behavior have all made the suggestion that acculturation findings should be used in anti-smoking messages, yet none have attempted to test the suggestion. This study will examine the how acculturation correlates with attitudes toward smoking messages and whether acculturation should be utilized in smoking prevention material. The examination of acculturation in smoking messages is important because the findings could assist in decoding specifically how tobacco companies attract African Americans to their advertisements. In turn, those findings can be used in anti-
smoking advertisement as a means of more effectively attracting African Americans to the message, particularly those who are more traditional.

Anti-smoking messages geared toward traditional African Americans is important to help reduce the rate of overall African American smokers. The author suspects that those who are more acculturated can be influenced by general anti-smoking ads. While more traditional African Americans may need ads that are geared towards them and their value system. African Americans who are less acculturated hold on to traditional cultural cues such as spirituality and community. These cultural cues promote a bond with other African Americans. Many African Americans who demonstrate a propensity toward more traditional cultural cues also demonstrate distrust for the majority and the values of the majority culture (Landrine & Klonoff, 2000), thus they may not have as positive reaction to ads featuring mainstream culture symbols.

One such value that differs between the majority culture and African American culture is the perception of smoking. The majority culture is experiencing a pendulum shift in views so that smoking is distasteful and an unhealthy practice, while in the African American culture it holds an association with strength, prowess, and communal bonding (Griswold, 1994). A plausible alternative to acculturation as a moderator could also be education, or lack of health education, and socio-economic stressors that vastly differ from the majority Caucasian culture.

The concept that acculturation helps to make African Americans less favorable toward smoking cigarettes could be seen as counterintuitive because traditional African Americans have a distrust of representations of the majority culture and should therefore have a distrust of a product created by “big tobacco companies.” However, because of the
complex history of African Americans and the tobacco industry, the majority culture’s perception of the tobacco industry is not necessarily shared by traditional African Americans. African Americans’ relationship with the tobacco industry dates as far back as the slave era in America when they were used as labor to plant and harvest tobacco crops (*African Americans and tobacco*, 2006). However, during antebellum when few industries would hire African Americans as workers, let alone pay them a fair wage, working as sharecroppers in tobacco fields and later in tobacco factories presented a rare opportunity for African Americans to be paid then-decent wages as compared to the wages of Caucasian counterparts (*African Americans and tobacco*, 2006). "In the 1930s, almost half of the people working in the tobacco manufacturing industry were African American. That’s because the tobacco industry provided some of the only industrial jobs for blacks at the time.” (*African Americans and tobacco*, quoting Dr. Valerie Yerger of the University of California, San Francisco).

During the 20th Century, the tobacco manufacturers were often the only industry to offer endorsement contracts to African American entertainers and athletes such as Louis Armstrong, Nat King Cole, and Jesse Owens (*African Americans and tobacco*, 2006). The tradition of tobacco companies making donations to African American politicians and social organizations, and community improvement projects dates back almost as far back as the companies’ founding and continues today. Further, there are areas of literature that track the smoking behavior to pre-colonial eras in African cultures (*DuBois, 1915, Emboden, 1972, Du Toit, 1975, and Abel, 1980*). Both areas of literature point to a reality where smoking behavior in general and smoking tobacco have deeper cultural significance than in the majority culture.
The majority culture is beginning to view smoking behavior as that of social deviants, an act undertaken by those of lower socio-economic status, and the behavior of those less educated (Griswold, 1994). Traditional African Americans do not necessarily accept the ideals of the American dream and thus may not find education and status as defined by Caucasian culture to hold the same level of importance, and thus will lack those markers of acculturation. This study is only the beginning of research that can examine how the level of acculturation affects smoking behavior and motivation. It only scratches the surface of how traditionalism mediates smoking behavior. Typically, smoking behavior is blamed on stress-level, socio-economic status, and other negative features of the African American experience. These factors definitely contribute, but they may not completely explain the initiation of the behavior, especially at a later age than the general population. Nor do these factors fully explain the continued use of smoking behavior, nor smoking of other substances beyond tobacco.

**Hypotheses**

**Hypothesis 1.** Participants’ attitudes towards smoking messages will be dependent on the race of the viewer.

**Hypothesis 2.** Traditional African American participants will view smoking messages featuring cultural cues in a more positive manner than acculturated African Americans participants.

**Hypothesis 3.** If Caucasian participants demonstrate a strong ethnic identity based on their MEIM score, then they will favor smoking messages that feature Caucasian culture cues.
Theoretical Framework

An Overview of Acculturation

Acculturation refers to the changes that take place in an individual after extended contact with culturally dissimilar people, groups, and social influences (Gibson, 2001). Traditionally, the theory referred to the adoption of the majority culture by newly transplanted immigrants, refugee, and asylum seekers who were permanently transplanted in their new country (Berry 2006; Berry, 1980). Acculturation is traditionally conceptualized as an explanation of individuals’ navigation of a continuum where the retention of their heritage and culture and acquisition of the majority culture are at opposite ends of the spectrum (Gordon, 1964). The theory evolved over time, recognizing that assumption of majority culture and retention of one’s heritage culture is not dichotomous (Berry, 1980). An accepted model of acculturation recognizes retention and adoption of cultures in four categories: assimilation (adopts the receiving culture and discards the heritage culture), separation (rejects the receiving culture and retains the heritage culture), integration (adopts the receiving culture and retains the heritage culture), and marginalization (rejects both the heritage and receiving cultures) (Schwartz, Unger, Zamboanga, & Szapocznik, 2010; Berry, 1980).

Recent studies have found that acculturation can also take place in an intercultural context. Particularly with cultures that have a long history of distinction and separation from one another (Arnett, 2002). For example, African American culture in American
society. Though African Americans have been in the Americas for more than four hundred years, the majority of the time has been spent on the fringe of American culture (Unger, Palmer, Dent, Rohrbach, & Johnson, 2000). So vast is the history of separation that any real integration and equality has been achieved only recently relative to the extended history of separation, thus acculturation as a theory can apply to people of African descent in America (Klonoff & Landrine, 2000; Herskovits, 1941/1990).

**Acculturation and Cultural Values**

Ethnic identity examines the importance one’s place on their in group membership with a particular ethnic group (Phinney, 1992). Whereas acculturation looks at the practices, traditions and beliefs of the culture associated with an ethnic group and the saliency of those three components for an individual. Like ethnic identity, acculturation also views ethnicity as a spectrum. Ethnic minorities’ place on their cultural spectrum, whether it is closer to their heritage culture or their receiving culture, varies as individuals.

The most tangible examples of acculturation come in the shifting of cultural values and symbols. This is most often studied in the context of individuals from collectivist cultures immigrating to western societies with individualist cultures (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Research involving ethnic minorities tends to focus on how specific values unique to that ethnic group interact with the individualistic nature of the American society. For example, communalism of the African American culture (Boykin, Jagers, Ellison, & Albury, 1997); familism and *machismo* in many Hispanic cultures (Alvarez, Jason, Olson, Ferrari, & Davis, 2007); and conformity and family recognition in many Asian cultures (Kim, Li, & Ng, 2005).
Acculturation represents changes in cultural identity; cultural identity defined as one’s cultural practices, values, and identifications (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). The process by which these practices, values, and identification interact, and often exchange space in one’s cultural identity, with dimensions from the receiving culture can be divided into three dimensions: Practices (which incorporate language and cultural food); Values (i.e. Collectivism, Interdependence, Familialism v. Individualism, Independence); Identifications (County of origin v. Receiving Country). The process occurs at different rates and for some may never occur.

**Acculturation and Health Care**

The impact of acculturation on health behavior has been explored by several studies, mostly addressing immigrant populations (Zamboanga, Raffaelli, & Horton, 2006; Lopez-Gonzalez, Aravena, & Hummer, 2004; Gibson, 2001). However, the impact of acculturation on African American health behavior has been researched sparingly (Webb, 2008; Klonoff, & Landrine, 1996). Studies that have explored acculturation and African American health behavior have found that acculturation often serves as a moderator for health decisions. For instance in a study exploring breast cancer found that acculturated African Americans and Mexican Americans were more likely to seek regular breast examines and thus were more likely to have exam-detected breast cancer. This translated into earlier detection and a greater chance of survival (Garcia et al., 2012). This shows a positive affect of acculturation.

In other ethnic populations acculturation has been found to be a strong indicator of pro-smoking attitudes and behavior (Lopez-Gonzalez, Aravena, & Hummer, 2005; Unger, Palmer, Dent, Rohrbach, & Johnson, 2000; Chen, Unger, Cruz, & Johnson, 1999).
This may be because those who are less acculturated still practice behavior from cultures where smoking and tobacco use is common. In the African American culture, there is evidence of early African cultures using smoking products (Ahijevych & Wewers, 1993; Abel, 1980; Du Toit, 1975). There is also a very strong historical connection with tobacco companies (Balbach, Gasior, & Barbeau, 2003; Sherington, 1994; Pollay, Lee, & Carter-Whitney, 1992; Du Toit, 1975; Du Bois, 1915). This connection could lead those who are more traditional to accept the practice of smoking more readily and have greater difficulty with cessation (Webb, 2008; Klonoff & Landrine, 1999; Klonoff & Landrine, 1996). It also may lead African Americans to be more forgiving of the presence of cigarettes in ads, other media, or daily life. In fact, level acculturation has been positively linked to smoking behavior. Those who are more acculturated are less likely to smoke (Klonoff & Landrine, 1996, 1999). It follows that in the transverse, African Americans with a high level of acculturation and ethnic identity would have a higher cessation rate with culturally specific material.

**Acculturation and Ethnic Identity**

Related to the study of acculturation is a separate area of literature that focuses on *ethnic identity* (Phinney & Ong, 2007; Phinney, 1990). Ethnic identity is achieved through a two-step process, exploration and affirmation. An individual first explores what their ethnic group means to them and then the values attached to that ethnic group for each individual (Phinney, 1990). Some literature includes a third step, resolution, where the individual makes a final decision based on the gathered information about what their ethnic group means following a period of exploration (Umana-Taylor, Yazedjian, and Bamaca-Gomez, 2004).
The role of ethnic identity is often explored in the context of one’s health behavior. Some believe that ethnic identity can be utilized proactively against delinquent behavior such as drugs and alcohol use (Bruce & Waelde, 2008). While other studies have found that ethnic identity is associated with increased risk of drugs and alcohol use as well as increased unsafe sexual behavior (Zamboanga, Raffaelli, & Horton, 2006). This is difficult for scholars to explain, but it may have to do with the fact that ethnic identity is subjective and can be constructed based on the individual’s own understanding of their ethnicity.

Another form of ethnic identity that has been developed specific to the United States is American Identity. This concept refers to the extent to which the person feels attached and committed to the majority culture of the United States and its history and traditions (Schildkraut, 2007). Individuals whose American identity was highly related to their self-esteem tended to be non-Hispanic whites (Phinney, Cantu, & Kurtz, 1997). While African Americans and Hispanics showed only a modest relationship between their self-esteem and American identity, and it was not significantly related to either positive or negative effect. (Kiang, Yip, & Fuligni, 2008).

**Foundation of Ethnic Identity: Social Identity Theory**

Identity theories are based in the social identity theory (Tajfel, 1981). Identity is derived from one’s concept of self, based on his or her knowledge of one’s membership in a social group (Tajfel, 1981). Ethnicity is a central part of one’s self-concept, particularly for ethnic minorities, who often are identified and defined by the majority
society because of their ethnicity (Elias, Appiah, & Gong, 2011). Thus the theory of ethnic identity was derived as a mechanism for explaining how one’s race or ethnicity is incorporated into their self-concept (Phinney, 1992). The social identity of ethnic minorities is composed of two elements: (1) race, which refers to phenotypical differences between groups (e.g., skin color), and (2) ethnicity, which incorporates the cultural intergroup differences in attitudes, beliefs, and norms (Phinney & Onwughalu, 1996). Early studies examining ethnic identity approached the subject as a very homogenous value. Ethnic identity was demonstrated the same within a minority group (Elias et al., 2011). Research failed to acknowledge that there were many cultural components to an ethnic group, for example, political attitudes are import to African Americans, while language is important to Hispanic cultures (Phinney, 1992; Phinney 1990). The Multigroup Ethnic Identity Measure (MEIM) was developed to address the varied components of ethnic identity (Phinney, 1992). The MEIM examines four components of ethnic identity: Self-identification and ethnicity, ethnic behaviors and practices, affirmation and belonging, and ethnic identity achievement (Phinney, 1992). Though originally developed for the measurement of adolescent ethnic identity (Phinney, 1992), several studies have used it for adults as well, with no discernible negative effects on their results (Elias et al., 2011). However, this study will utilize both the MEIM and African American Acculturation Scale (AAAS). The MEIM will be used to test is ability measure the ethnic identity of Caucasians. The AAAS will be used because its specificity to the African American group and because the concept of acculturation has a longer history than ethnic identity. While measured seperately, ethnic identity and acculturation are not mutually exclusive. In fact, acculturation can be used to explain one’s ethnic
identity. Those who have a salient connection to their ethnicity do so because of their level of acculturation.
Method

Participants and Procedures

Participants were recruited from a large Midwest university and the local community. Recruitment consisted largely of snowball sampling. Some participants were drawn from a large communication course at the university. Participants from the communication course were offered extra credit for participation. Participants were also approached at the student union and multicultural centers around campus to ensure a diverse sampling. Participants were also asked to identify additional participants for the study.

Participants were asked to provide electronic consent before they could access the experiment. Then they viewed a mix of 8 pro-smoking or anti-smoking print advertisements on the computer. After each advertisement, they were asked to rate their emotional and attitude responses to the advertisement (Appendix 1). Next, they completed a set of questionnaires which measured ethnic identity (Appendix 2) or acculturation (Appendix 3) depending on the participants’ ethnicity self-identification. Finally, all participants completed questionnaires that measured attitude toward smoking (Appendix 4) and smoking behavior (Appendix 5). The entire experiment took approximately 10-20 minutes depending on how long participants took to view the ads.
**Experiment Design**

This study used a factorial design. Stimuli was (Culture Cue: present, absent) × (Race Portrayed in the Ad: Caucasian, African American) × (Marketing: pro-smoking, anti-smoking) × (Participant Race: Caucasian, African American). The culture cue and portrayed race were within-subjects factors, and one print advertisement was selected for each manipulation level. Manipulations were based on cultural cues: Food, Music, and Sports. Marketing and participant race are between-subjects factors. Each ad featured only one cultural cue, and there was a pro-smoking/cigarette and an anti-smoking manipulation for each cue as well. Text on the advertisements featured four phrases that were neutral in messages (see Appendix E). The advertisements were created using Photoshop software.

**Variables**

*Cultural Cues.* Cultural cues were hypothesized to have an effect on the participants’ attitudes towards smoking and antismoking advertisements. Based on the African American Acculturation Scale (AAAS), cultural cues were defined as symbols of traditionally communal activities involving more than one African American (Klonoff & Landrine, 1996). Examples of communal symbols are: food, music, and sports. These culture cues were chosen because they all are symbolic of the communal practices that have shaped African American history. For instance, food consumption, especially that of soul food is associated with communal gatherings, holidays, and showing of affection through various meals (Byars, 1996). Research into food consumption, music preference and sports activities provided background for the specific cultural cues used in the advertisements.
Acculturated African Americans have adopted a significant amount of the majority cultures attitudes and beliefs, by their assimilation into the culture. Thus they often exchange attitudes, beliefs and values of the African American culture for those of the majority Caucasian American culture, especially those attitudes, beliefs and values that conflict with the majority culture (Klonoff & Landrine, 1996). Whereas, traditional African Americans are more detached from the majority Caucasian American culture and may even outright reject certain aspects of the culture (Klonoff & Landrine, 1996). One such rejection may be the cultural disdain for tobacco products. Some cultural dimensions discussed in the AAAS that could be translated into tangible elements in the advertisements were music and socializing with mostly or only African American individuals (demonstrating a preference for African American things or a distrust of Caucasian or majority culture), socializing around food, particularly foods associated historically with the African American culture (demonstrating traditional value attached to food preparation and consumption), socializing through specific sports and games such as pool, cards, and dominoes (Klonoff & Landrine, 1996). The stimuli were created to depict these cues. Cultural cues from mainstream American culture were used to represent Caucasian cultural cues because American culture is primarily a conglomeration of the European ancestries that colonized the country. The cultural cues that were represented in the stimuli were specific sports (e.g. football and baseball), socializing around food (namely soul food), and musical cues (jazz, hip hop, blues).

**Sports.** Sporting activities are a large part of the socialization process in the African American culture. African Americans historically found it very difficult to penetrate the middle and upper socio-economic classes except through the professional
pursuit of hobby-like activities, such as sports, music, and other forms of entertainment. For example, becoming a professional athlete or a professional entertainer (Beamon, 2010). In response to institutionalized racism and the historic absence of opportunities in other fields, African Americans were reared in a culture that values specific athletic abilities and creates an overrepresentation in specific sports, namely football and basketball (Sailes, 1991). Today, African American men are still commonly socialized towards football and basketball as appropriate sports endeavors and thus are overrepresented in those areas (Sailes, 1991). It is a perpetuating cycle. Many African American youth grew up only viewing entertainers and professional athletes as role models. Thus they pursued those arenas when they came of age and then the next generation viewed mostly entertainers and professional athletes as role models. Even with the African Americans expanding into other fields and even other sports, football and basketball still experience an overrepresentation of African American athletes. African American athletes represent the majority of the players in the National Basketball Association (79%), National Football League (65%), and almost half in the National Collegiate Athletic Association (44%) (Lapchick, 2009). Sports served as a particularly useful and tangible culture cue. They represent the collective by requiring team participation and because of the overrepresentation of African Americans in particular sports, clear cultural associations are made with sports like football and basketball. This was not always the case.

In the early 1940’s through the late 1950’s, baseball was the sport most associated with African American athletes. This was due in large part to the Negro Baseball Leagues that provided African American athletes an opportunity to play professional athletics in
then segregated America (Ogden & Rose, 2003). The integration of professional baseball altered the landscape of professional athletics for African Americans, as few African American athletes were offered an opportunity to play in major league baseball (Ogden & Rose, 2003). Upon integration the doors of professional baseball were essentially closed to African American, save a few historical figures (i.e. Jackie Robinson). African American participation ever since is demonstrative of the residual effect. In 1991, the number of African American players in Major League Baseball was 18%, today the number is 8.5% with only 9% of MLB fans being African American (Strauss, 2012). However, among Caucasians, baseball continues to be a favorite athletic activity (Bloom & Willard, 2002).

Extreme sports have also become a major athletic outlet for Caucasian athletes. Some scholars refer to the rise in fascination with extreme sports as “white revolt,” where Caucasian athletes struggle to redefine how American media has framed athleticism (Kusz, 2007). Extreme sports have ascended in the media, even to a professional level, in part as a new “space of whiteness” for athletes. Once upon a time, it was uncommon to see African American athletes in professional roles in athletics and for many years beyond the integration of professional athletics, it was still uncommon to see them in leadership positions (i.e. the quarterback position was reserved for Caucasians). Today, extreme sports such as snowboarding, professional skateboard, extreme biking, have taken the place of sports once dominated by Caucasians. The sports stimuli embedded with African American cultural cues featured football and basketball. While the Caucasian culture cues featured were tennis a sport traditionally associated with affluent Caucasians, soccer was also featured. While soccer is not necessarily associated with
Caucasians in international sports in American sports it is viewed as an activity undertaken by Caucasians as is baseball (Bloom and Willard, 2002). Hiking and skateboarding were also used in stimuli as examples of extreme sports.

**Music.** Some of the same systematic discrimination also resulted in an overwhelming preference and performance of specific types of music. Some of the preference for music is drawn out of the African music roots found in “black music.” However, the institutionalized discrimination of the music industry has also pushed African American performers into specified genres of music. For instance, Rock music is especially popular among Caucasian audiences, and today is compiled mostly Caucasian artist. However, the origins of Rock and Roll (Rock n’ Roll) music are found with African American entertainers (Mizell, Crawford & Anderson, 2004). The genre first came from Rhythm and Blues (R&B) artists such as Little Richard and Chuck Berry who creatively reinvented the R&B genre (Mizell et al., 2004). The original Rock n’ Roll sound was often referred to a “race music” because so many Caucasian listeners enjoyed the music created by African American artists (Cohn, Aldin & Bastin, 1993). In the 1950s when artists such as Elvis Presley and Jerry Lee Lewis began to mimic the sound and performance tempo of their African American predecessors the genre increasingly gained a Caucasian following until eventually it became associated with young Caucasian listeners (Mizell et al., 2004). Today, 48% of the United States listens to the Classic Rock genre, 52% of Caucasians listen to the Rock genre at a rate three times higher than all non-Caucasian demographics combined (Mizell et al., 2004). Caucasian music listeners also have a strong preference for Country Western music. Caucasian listeners are two and
half times more likely to listen to County music than non-Caucasians (45% v. 18%) (Mizell et al., 2004).

African Americans on the other hand are more apt to like R&B/ Soul, Jazz, and Rap (2002 Survey of Public Participation in the Arts). Approximately one-third of all adults enjoy R&B music (Mizell et al., 2004). However, African Americans tend to favor R&B almost twice as much as Caucasians (41% v. 28%). This is in large part because of the origins of the music. R&B has its roots in the Blues and Jazz genres, which music historians’ credit as a genre unique to the African American culture (Richards, 2002). In fact, the accepted definition of R&B for many years was “a catchall term referring to any music that was made by and for black Americans” (Palmer, 1995). Today, R&B is the third most listened to genre in the United States with 64 million adults listening (Survey of Public Participation in the Arts, 2002).

Jazz is the second most listened to genre in the African American community and the fifth most listened to overall (Survey of Public Participation in the Arts, 2002). This genre is particularly popular among the baby boomer generation (Mizell et al., 2004). Because of its origin in the United States, Jazz has been called America’s classical music (Mizell et al., 2004). The popularity of Jazz among Caucasian audiences has grown substantially over the years, today 26% of Caucasians enjoy Jazz, however; it is still enjoyed at a greater rate by African Americans (36%) (Survey of Public Participation in the Arts, 2002).

Though Rap/ Hip-Hop music is considered the fastest growing genre since its inception in the late 1970’s it is still enjoyed by less than the majority of adult listeners (Mizell et al., 2004). Rap has its origins in Jamaica Queens, New York. Caucasian
listeners grew substantially over the years, to the point that in the late 1990’s it was estimated that the majority of Hip-Hop CD’s were purchased by suburban Caucasian teenagers (Kitwana, 2006, p. 99). Still, the majority of Rap/Hip-Hop listeners remain people of color (20% of Hispanic listeners, 29% of African American adults (Survey of Public Participation in the Arts, 2002). However, the majority of listeners are African American youth and young adults 15-25 (58%) (Survey of Public Participation in the Arts, 2002). It should be noted that music serves as a tangible culture cue because the roots of “black music” is associated with African and slave culture. Even as music has evolved, music with a heavily reliance on rhythm and that features the heavy use of drums continues that association. The African American music stimuli featured symbols associated with Hip-Hop music (i.e. turn tables) and Jazz (i.e. saxophone), as those were symbols readily associated with those genres. The Caucasian music symbols featured electric instruments represent Rock n’ Roll, and an acoustic guitar representing a country or folk type genre.

The only genre that shows some equality is the genre Easy Listening, featuring artists such as Henry Mancini and Ray Coniff (Mizell et al., 2004). Caucasians still prefer the genre more than people of color (30% v. 24%), but not by much (Mizell et al., 2004). The narrow difference in the Easy Listening genre may be because it features musical styling that are associated with the African American culture, yet a great deal of the music is performed about Caucasian artists. This matters because research has found that across the board Caucasian listeners prefer music performed by Caucasian artists (Mizell et al., 2004). African American listeners on the other hand, prefer artist they associate with African American ethnic cues. Meaning that if they feel the Caucasian artist is
“black” sounding then they will show a preference toward the artist in the same way they would an African American artist (Mizell et al., 2004). African Americans may show similar preferences towards ads that feature symbols that they associate with a “black sound.” For example, turn tables might be associated with the Hip-Hop DJ sound, and a saxophone might be associated with the musical styling of Jazz.

Food. Food preferences among African Americans and Caucasians tend to vary a great deal. In general, African Americans prefer high sugar and processed foods while Caucasians prefer more vegetables in their diet. One study conducted by the United States Air Force for military personnel found that the preferred entrees among Caucasians are: roast beef, pizza, and lasagna as a distant third (Wyant & Meiselman, 1979). Caucasians preferred overwhelmingly prefer mashed potatoes as a starch. Apple pie was by far the favored dessert followed distantly by brownies. In general, Caucasians preferred American style food (males - 20%, females - 18%), Italian style food (males - 15%, females - 17%), and sea food (males – 14.5%, 15.5%) (Wyant & Meiselman, 1979). African Americans preferred fried chicken and barbeque ribs. Cornbread, sweet rolls, and potato salad were the preferred starch for African Americans. The preferred desserts for African Americans were sweet potato pie followed closely by pound cake. The preferred food categories for African Americans are soul food (males - 29%, females - 22%), followed by sea food (males - 14%, females - 18%) (Wyant & Meiselman, 1979).

Even among adolescents there seems to be a trend toward high fat content and high sugar foods (Kayrooz, Moy, Yanek & Becker, 1998). African American adolescent girls were found to prefer high sugar and/or high fat foods and beverages including ice cream, cookies, candy, chips, fast food, and fruit drinks. The most preferred healthy
foods included grapes, oranges, corn, and cold cereal (which are all high in sugar) (Sherwood, Story, Neumark-Sztainer, Adkins, Davis, 2003). Also, black adolescents are more likely to make food decisions based on social influences that Caucasian adolescents (Granner, Sargent, Calderon, Hussey, Evans, & Watkins, 2004). Caucasian adolescents reported that they had greater access to fruit and vegetables at home than black (Granner et al., 2004). In this study, when creating ads with food related African American culture cues we took these preferences into account and based food selection off of them. We also tried to demonstrate a preference for African American socialization and insinuate a distrust of Caucasians by either excluding them or by having them in the background. In the ads featuring food as the culture cue the food was central to the activity and interaction between the characters demonstrating socialization with food.

The symbols chosen to represent the cultural cues in the ads are chosen specifically because of their association with a communal aspect of African American culture or specifically because of their association with mainstream culture. However, to ensure the stimuli effect the number of people represented in ad was controlled. For example if there were two people represented in an ad featuring an African American culture cue then the ad representing the absence of African American culture cues for that manipulation would also feature two people. This standard was adhered to as much as possible for consistency. Thus the communal versus individualistic elements were represented by the presence or absence of cultural cues associated with community activities rather than the presence of multiple people.

**Race portrayed in the advertisements.** The race of the characters featured in the advertisements.
**Marketing.** This will be manipulated by the verbal information in the ad to promote or prevent smoking. Also, the universal “no smoking” symbol will be present in all anti-smoking ads and a pack of generic cigarettes coupled with the Surgeon General’s warning label will be on all pro-smoking ads.

**Racial identity.** Race will be determined by self-identification with one race or more races on a demographic questionnaire.

**Acculturation.** Acculturation was determined using the African American Acculturation Scale (AAAS). For efficiency, the short form of the AAAS was used (Landrine & Klonoff, 1995). It is important to note that though acculturation literature typically defines acculturation as the exchange of traditional cultural values for mainstream values, when Landrine and Klonoff refer to acculturation it is in the direction of traditionalism (1995). Thus, Landrine and Klonoff discuss acculturation towards African American culture and their scale reflects this definition of the term. The original AAAS is a 74-item inventory that consists of statements rated from 1 (I totally disagree) to 7 (I totally agree). An acculturation score is calculated using the mean total. There are eight subscales in the AAAS: (1) Traditional Family Structure, Values, and Practices, (2) Traditional Childhood Socialization, (3) Preference for Things African American, (4) Interracial Attitudes, (5) Preparation/Consumption of Traditional Foods, (6) Traditional Religious Beliefs and Practices, (7) Traditional Health Beliefs and Practices, and (8) Superstitions. High scores indicate a traditional cultural orientation (immersed in African American culture), and low scores an acculturated orientation (Landrine & Klonoff, 1995).
A short form of the AAAS was developed for use when the length of the original version is inappropriate (Klonoff & Landrine, 1995). Like the original, the AAAS-33 is scored on a 7-point Likert scale (see Appendix 1). The correlation between the scores on the AAAS-33 and the original AAAS was, $r = .94$, $p < .05$. This version consists of 33 items that assess 10 subscales of the African American culture.

The AAAS-33 had 10 subscales instead of the original 8: (1) Preference for African American Things (6 items, $\alpha = .80$), (2) Religious Beliefs and Practices (6 items, $\alpha = .81$), (3) Preparation/Consumption of Traditional Foods (4 items, $\alpha = .70$), (4) Traditional Childhood Socialization (3 items, $\alpha = .76$), (5) Superstitions (3 items, $\alpha = .65$), (6) Interracial Attitudes/Cultural Mistrust (3 items, $\alpha = .69$), (7) African American Folklore/Falling Out (2 items, $\alpha = .92$), (8) Traditional Games (2 items, $\alpha = .53$), (9) African American Family Values (2 items, $\alpha = .26$), (10) African American Family Practices (2 items, $\alpha = .40$). Cronbach alpha for the AAAS as an entire scale is $\alpha = .88$. High scores indicated a traditional cultural orientation (immersed in African American culture), and low scores an acculturated orientation (Landrine & Klonoff, 1995). The questions were randomly presented, using the survey program Qualtrics, to prevent order bias (see Appendix A).

The AAAS has been used in studies that examine the correlation between acculturation and cigarette smoking (Klonoff & Landrine, 1996), African American men’s body perception (Webb, Looby, & Fults-McMurtery, 2004), and neuropsychological test performance of African American elders (Manly, Byrd, Touradji & Stern 2004).
**Ethnic Identity.** Ethnic identity was measured using the Multigroup Ethnic Identity Measure (MEIM). The MEIM is a 12-item scale (α = .94) composed of three subscales that measure components of ethnic identity: the ethnic identity search subscale had 5 items (α = .82); and the ethnic affirmation, sense of belonging, and commitment subscale had 7 items (α = .93). The items are rated on a four point Likert scale, 1 – representing strongly disagree and 4 – representing strongly agree (see Appendix B). Measures are calculated using the sum total of the items, and then determining the mean score. High ethnic identity is indicated by a mean score of 4 and low ethnic identity is indicated by a mean score of 1. Again, the questions were randomly presented to participants. The MEIM has been used in studies that examine adolescents’ responses to culturally embedded advertisement (Appiah, 2004); advertising response (Forehand & Deshpande, 2001), and product presenter response (Appiah & Elias, 2009).

**Advertisement Attitude.** Attitude towards the advertisements were tested using the Attitude Toward Ads scale (see Appendix C) (Miniard, Bhatla & Rose, 1990). The scale was developed based on the Elaboration Likelihood Model (Petty & Cacioppo, 1986). The scale measures the participants’ level of involvement and therefore the cognitive route used to process their brand attitudes. Participants with high involvement follow the central route to persuasion and base their attitudes on the claims of the advertisement. Low involvement participants follow the peripheral route to persuasion and thus their brand attitudes are based on aesthetic cues, such as the cultural cues. There were 7 items measured in the scale: (1) positive attitude, (2) negative attitude, (3) arousal, (4) persuasion, (5) informative value, (6) believability, (7) likability. The attitude subscale consisted of the items persuasion, informative, believable, and liability (see Appendix F:
Aad reliability for each ad stimuli). The scale has been used to measure attitudes toward anti-marijuana ads (Wang, Solloway, Tchernev, and Barker, 2012), influence of program valence and arousing content on subsequent ads (Wang & Lang, 2012), and the effects of arousal, liking, and believability of commercials (Yoon, Bolls & Lang, 1998).

**Smoking attitude.** The Smoking Attitudes Scale (SAS) is a 17-item scale assessing individuals’ attitude toward smoking (see Appendix D). Its internal consistency and construct validity have been established (Shore, Taschian, & Adams, 2000). The SAS reflects attitudes using four subscales (a) interpersonal relationships with smokers (5 items, $\alpha=.80$), (b) laws and societal restrictions of smoking in public places (6 items, $\alpha=.76$), (c) secondhand smoke health concerns (3 items, $\alpha=.79$), and (d) the marketing and sale of cigarettes (3 items, $\alpha=.63$).
Results

The major hypothesis of the study was that participants’ attitudes toward tobacco advertising are dependent on the race of the viewer and also the level of acculturation or ethnic identity experienced by the viewer. The cultural cues were used as moderators of participants’ attitudes toward tobacco advertisement and anti-tobacco advertisements. For example, a less-acculturated African American is more likely to have a more positive attitude towards an advertisement that features significant cultural cues regardless of the direction of the smoking message (anti-smoking or pro-smoking).

The dependent variable was the participants’ attitude toward the ad stimuli. The measurement of attitude is based on the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986). The ELM posits that the persuasion process of individuals takes a central and/or peripheral route. The central route requires extensive cognitive elaboration of the message. This cognitive elaboration is the basis for attitudes formed about the communication. When an individual lacks the ability or motivation to engage in extensive cognitive elaboration the peripheral route and attitudes are formed from this alternative process. Attitudes formed using the peripheral route are formed using message cues that are irrelevant to forming a reasoned opinion, such as liking the endorser of a product. Persuasion may follow either one or both routes, depending on the level of elaboration during message processing. Advertisement attitude literature suggests that, attitude regarding an overall evaluation the advertisement captures the persuasive impact
of the message argument and the peripheral cues (Miniard, Bhatla, & Rose, 1990). Use of the central route to evaluate the ad’s arguments will result in a causal influence on attitudes. Ads with African American characters should trigger greater motivation in traditional African Americans to cognitively process the ad message, while also appealing to the peripheral route due to identification with the cultural cues.

Key Findings

We ran a repeated ANCOVA on all of the participants (N = 112) which consisted of 50 African American participants and 62 Caucasian participants. Market (anti-smoking, pro-smoking), Culture Cue (presented, absence), and Race Portrayed in the Ads (black, Caucasian) are the repeated factors, and Smoking Attitude and race of the participants were covariates.

Hypothesis 1 predicted that in general both African American and Caucasian participants would have a more positive attitude toward smoking messages featuring culture cues specific to their race. Hypothesis 1 was partially proven; the presence of culture cues in the ads interacted with the race of the participants to affect Aad. This interaction is marginally significant, $F(1, 109) = 3.77, p = .05$, partial $\eta^2 = .03$. As shown in Figure 1, Caucasian participants responded exactly the same to ads regardless of whether culture cues were presented in the ads or not. African American participants, on the other hand, had more positive Aad when they included culture cues, although the pairwise contrast was not significant. The following sections further explore for each race group, how they respond to culture cues and whether association with the race group, as measured by AAAS and MEIN separately, moderate the responses.
Figure 1. Compared to Caucasian Participants, Who Showed Identical Aad to Ads with or without Culture Cues, African American Participants Showed More Differences to Cultures Cues.

**African American Participants**

A repeated two-way analysis of covariance (ANCOVA) was conducted on the data from 50 of the African American participants. Two data sets were incomplete and therefore not included in the analysis. The independent variable, Market (anti-smoking, pro-smoking), Culture Cue (presented, absence), and Race Portrayed in the Ads (African American, Caucasian) were the repeated factors. The dependent variables, Smoking Attitude and AAAS were covariates. The assumptions for the ANCOVA were met. As predicted by hypothesis 2, among African American participants, the race of the characters portrayed in the ads interacted with the participants’ acculturation level, which approached significance, $F(1, 47) = 3.43, p = .07$, partial $\eta^2 = .07$. 
To illustrate the two-way interaction, the participants were categorized into three groups of AAAS using a 33% split. The interaction effect is illustrated in Figure 2. As demonstrated in Figure 2, participants were divided into low, medium, high categories. Participants with a low AAAS score showed little interaction with the Aad. When participants had a medium or high AAAS score the interaction with the Aad greatly increased. Because of the small sample size the interaction did not reach significance; however there is evidence that the interaction was more than nominal. A greater sample size in the future may yield a more powerful interaction.

![Figure 2. Race Portrayed in Ads Interact with the Participants’ AAAS Trait to Affect Aad](image)

**Culture Cues in the Ads.** A $2 \times 2 \times 2$ analysis of covariance was conducted to determine the effect of the AAAS trait on marketing messages, culture cues present in the ads, and the race of the characters portrayed in the ads. ANCOVA results indicate a significant
three-way interaction (see Figure 2 and Figure 3), $F(1,47) = 4.13, p < .05$, partial $\eta^2 = .08$.

As shown in Figure 3, when culture cues were absent from anti-smoking ads there was very little difference between the attitudes of African American participants towards the ads regardless of the race portrayed in the ads. When culture cues were present there was a difference in Aad. Ads featuring African American characters and African American culture cues were viewed significantly more favorable than ads featuring African American characters absent culture cues. However, anti-smoking ads with Caucasian characters featuring African American culture cues had a negative effect. These results highlight the importance of anti-smoking ads featuring culture cues in addition to race.

The pattern is the same for pro-smoking ads however; the effect size is smaller (see Figure 4). This could be influenced by participants’ attitude towards smoking behavior. The marginal effect size suggests that cigarette advertisements that feature African American and culture cues are viewed more favorably by audiences. However, a larger sample size in the future could confirm the inference. If it is true that the interaction of race and culture cues is what contributed to the effectiveness of some cigarette advertising then health communication practitioners should consider using the same strategy to combat smoking in the African American community.
Caucasian Participants.

**Multigroup Ethnic Identity Measure.** MEIM was used to measure the strength of Caucasians participants ethnic identity, $F(1, 59) = 2.51, p = .12$, partial $\eta^2 = .04$. Thus, hypothesis 3, which predicted that Caucasians with strong ethnic identities would favor
smoking messages that featured Caucasian culture cues, was not proven due to the fact that few Caucasians in the study displayed strong ethnic identity.

The MEIM may not work well for Caucasian participants because the American culture is largely made up of their culture cues, thus culture cues may not be as salient to them because they are so readily available. Also, Caucasians in American come from so many geographic and cultural backgrounds that it may be difficult to measure their ethnic identity as one group. However, some social scientists have examined Caucasian racial identity as related to ingroup associations and dominance (Knowles & Peng, 1995). As stated earlier, racial identity is not the same as ethnic identity. So while, Caucasians may accept ingroup associations and privilege that generally come automatically with whiteness, they may not seek out, actively embrace, or practice elements of their ethnic identities (Knowles & Peng, 1995). Thus the MEIM cannot appropriately measure their ethnic identity because some of the factors focus on the active and purposeful acquisition and acknowledgement of ethnicity.

Effect of Race. The main effect of race on Aad was not significant, but did demonstrate noteworthy results, $F(1, 59) = 2.28, p = .14$, partial $\eta^2 = .04$. As shown in Figure 5, Caucasians showed no difference when viewing anti-smoking ads regardless of the race portrayed in the ads. These results, again, rendered hypothesis 1 partially unproven, because race did not produce a more positive attitude for Caucasians (although it did for African Americans). However, participants had a greater positive Aad when viewing smoking ads that featured African American characters. This could be because viewing African Americans in smoking advertisement reinforces the image of a defiant culture or attitudes are based on “positive” stereotypes of musical and athletic aptitude.
(Feldman, 1972). These beliefs may appear cool, novel, and possibly desirable to a younger audience (Appiah, 2001). Caucasian participants might also have rated the smoking ads in a more favorable manner because of social desirability bias.

Social desirability bias is the tendency for respondents to provide socially attractive answers (Fisher & Katz, 2000). Often, respondents are motivated to answer in a manner that they believe is valued in the social system. However, this would not explain why Caucasian participants did not measure anti-smoking ads featuring African Americans measured the same as Caucasian ads. Another explanation could also be distinctiveness theory, which posits that young people especially, demonstrate attitudes that tend to be counterintuitive. They tend to favor symbols that counter the white mainstream culture. They place a premium on items and behavior that they deem rebellious against their social norms, in this case African Americans smoking (Appiah, 2001).
Figure 5. Caucasian Participants Had Different AaD to Pro-Smoking Ads Featuring African Americans.
Discussion

This study contributes to the literature on smoking messages and prevention mostly by positing that anti-smoking advertisements that feature African American characters in combination with African American culture cues has an affect among African American audiences. The study does this by examining the role of acculturation as moderator for attitudes towards smoking messages both pro- and anti-. As previously mentioned, tobacco companies have historically utilized this strategy of embedding advertisements with salient races and culture cues. This study hopefully lends credence to the idea that anti-smoking ads and campaigns should also adopt this marketing strategy. By using the marketing techniques of tobacco companies in anti-smoking ads, health communication practitioners can tap into the key elements used by tobacco companies to draw the audience’s attention over the years.

Acculturation is a complex mechanism that influences one’s acceptance and adoption of the majority culture. While ethnic identity and racial identity have been utilized to examine smoking behavior and possible strategies for anti-smoking campaigns targeting African Americans, only a small number of studies have used acculturation to do the same. Those few studies that have proposed anti-smoking ads with embedded culture cues have not tested like stimuli. By testing anti-smoking stimuli against pro-smoking stimuli embedded with culture cues, this study adds to the foundation of literature so that more studies can test culturally salient anti-smoking ads on a larger scale.
Here, we found that African Americans who were more traditional, and therefore less acculturated, had a more positive affect towards smoking messages, particularly anti-smoking messages. The fact that the effect size was larger for culture cue than race salient anti-smoking ads and that the effect size for pro-smoking ads was minimal indicates that the African American community is experiencing a paradigm shift concerning smoking behavior. This collective change in perception could be making smoking ads less effective and culture cued anti-smoking ads more effective. In any case, the results demonstrate that the effectiveness of smoking messages goes beyond a pure racial issue. In the future, it will not be enough to create ads with the relevant race portrayed; rather an understanding of the culture and values of the target audience should be a priority.

The data also combats the prevalent mindset that one-size can fit all African Americans. It demonstrates that the African American audience is not a monolithic group and that some understanding of the target community’s level of acculturation is important when designing messages. Further, if one is seeking to make general advertising, it might be effective to create ads that feature African Americans and African American culture cues, since the data indicates that in addition to African American audiences, Caucasians are receptive to them as counterculture ads. A larger sample size in the future could turn the marginally significant results into more reliable data to further strengthen the hypothesis and proposals of this study.

Some limitations of this study are that the sample size was small. A larger sample size could make the effect sizes more powerful. Except for hypothesis 3, which focused on the interaction between Caucasian ethnic identity and attitude towards smoking
messages, all of the interactions had some notable effect, though they did not all reach significance. This suggested that in the future studies significance can be reached and the interactions are worth considering.

Because Caucasian participants did not score well using the MEIM, another scale should be considered for other studies to better gauge Caucasian identity. Rather than measuring ethnic identity, American identity might be a better fit for Caucasians (Schildkraut, 2007). Caucasian are considered the majority in American especially in influence and social power. The concept of American identity specifically looks at ones attachment to mainstream culture, which might be a more effective measure than ethnicity. As stated before, ethnicity might not be as salient to Caucasians because they are not typically place in a position of isolation where their ethnicity is highlighted ir has importance forced on it. Further, American identity has been highly related to the self-esteem level of non-Hispanic whites or Caucasians. (Phinney, Cantu, & Kurtz, 1997).

In the converse, while this study focused on culture and measured acculturation of African Americans, future studies might consider measuring ethnic identity in addition to acculturation to examine which measure best explains attitude towards culturally embedded smoking messages. Understanding whether the ads should prime ethnic identity or acculturation is necessary to understand how to develop the most effective ads for traditional African Americans.

Future studies may also want to examine how acculturation interacts with pro-smoking messages in general to further explore whether traditional African Americans are more or less positive towards smoking ads as a whole. However, this study focused on the interaction between ads with non-culture cues as exploration of how salient cues
are in advertisement. This study has provided evidence that regardless of the direction of the smoking message (pro or anti) traditional African Americans still experience a positive interaction with Aad. Lending credence to the assertion that tobacco companies utilize culturally embedded ads as a means of attractive African Americans and developing a positive attitude towards those ads, as proven by the positive attitudes towards smoking ads held by traditional African Americans. The larger interaction with culturally embedded anti-smoking ads demonstrates that this technique could be just as effective if not more in anti-smoking material. Also, future studies should consider delving further into the message process of culture cue ads. Examining free recall information might prove to be useful in determining what elements of the ads attracted the attention of participants. Also eye tracking would be another interesting way of measuring if the race salient characters in the ads or the culture cues are stimulating message processing and influencing Aad.

This study added to the literature for future studies. Overall, there it seems that the exploration of how acculturation influences anti-smoking message attitude and processing is a worthwhile endeavor. Further research could assist health advertisers, who are tasked with targeting African American populations, develop more effective anti-smoking ads. The message that is clear from this study is that when developing smoking messages for African Americans (and possible other minorities) one should go beyond race and ensure that culture cues are also utilized.
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Appendix A. 33- Item African American Acculturation Scale (AAAS-33)

Factor 1: Preference for African American Things

1. Most of the music I listen to is by Black artists.
2. I like Black music more than White music.
3. The person I admire the most is Black.
4. I listen to Black radio stations.
5. I try to watch all the Black shows on TV.
6. Most of my friends are Black.

Factor 2: Religious Beliefs and Practices

7. I believe in the Holy Ghost.
8. I believe in heaven and hell.
9. I like gospel music.
10. I am currently a member of a Black church.
11. Prayer can cure disease.
12. The church is the heart of the Black community.

Factor 3: Traditional Foods

13. I eat chit’lins once in a while.
15. Sometimes I cook ham hocks.
16. I know how long you’re supposed to cook collard greens.

Factor 4: Tradition Childhood

17. I went to a mostly Black elementary school.
18. I went to a mostly Black high school.

19. I grew up in a mostly Black neighborhood.

Factor 5: Superstitions

20. I avoid splitting a pole.

21. When the palm of your hand itches, you’ll receive some money.

22. There’s some truth to many old superstitions.

Factor 6: Interracial Attitudes/ Cultural Mistrust

23. IQ tests were set up purposefully to discriminate against Black people.

24. Most tests (like the SAT’s and tests to get a job) are set up to make sure that Blacks don’t get high scores on them.

25. Deep in their hearts, most White people are racists.

Factor 7: Falling Out

26. I have seen people “fall out.”

27. I know what “falling out” means.

Factor 8: Traditional Games

28. When I was a child, I used to play tonk.

29. I know how to play bid whist.

Factor 9: Family Values

30. It’s better to try to move your whole family ahead in this world than it is to be out for only yourself.

31. Old people are wise.

Factor 10: Family Practices

32. When I was young, my parent(s) sent me to stay with a relative (aunt, uncle, grandmother) for a few days or weeks, and then I went back home again.

33. When I was young, I took a bath with my sister, brother, or some other relatives.
Appendix B. Multigroup Ethnic Identity Measure

Instructions: Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree   (3) Agree   (2) Disagree   (1) Strongly disagree

1) I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

2) I am active in organizations or social groups that include mostly members of my own ethnic group.

3) I have a clear sense of my ethnic background and what it means for me.

4) I think a lot about how my life will be affected by my ethnic group membership.

5) I am happy that I am a member of the group I belong to.

6) I have a strong sense of belonging to my own ethnic group.

7) I understand pretty well what my ethnic group membership means to me.

8) In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.

9) I have a lot of pride in my ethnic group.

10) I participate in cultural practices of my own group, such as special food, music, or customs.

11) I feel a strong attachment towards my own ethnic group.

12) I feel good about my cultural or ethnic background.

13) My ethnicity is:

   (1) Asian or Asian American, including Chinese, Japanese, and others

   (2) Black or African American

   (3) Hispanic or Latino, including Mexican American, Central American, and others
(4) White, Caucasian, Anglo, European American; not Hispanic

(5) American Indian/Native American

(6) Mixed; Parents are from two different groups

(7) Other (write in): _____________________________________

14) My father's ethnicity is (use numbers above)

15) My mother's ethnicity is (use numbers above)

Appendix C: Attitude Towards Ads

1) Please rate how positive you felt on a 9-point scale where
   1 is not at all positive, not at all happy, not at all pleased
   and
   9 is extremely positive, happy, pleased.

2) Please rate how negative you felt on a 9-point scale where
   1 is not at all negative, not at all unhappy, not at all annoyed
   and
   9 is extremely negative, unhappy, annoyed.

3) Please rate how aroused you felt on a 9-point scale where
   1 is not at all aroused, not at all excited, not at all awake
   and
   9 is extremely aroused, excited, awake.

4) Please rate how persuasive you felt on a 9-point scale where
   1 is not at all persuasive,
   and
   9 is extremely persuasive.

5) Please rate how informative you felt on a 9-point scale where
   1 is not at all informative,
   and
   9 is extremely informative.

6) Please rate how believable you felt on a 9-point scale where
   1 is not at all believable,
and

9 is extremely believable.

7) Please rate how **likable** you felt on a 9-point scale where

1 is not at all likable,

and

9 is extremely likable

Appendix D: Smoking Attitude

Instructions: Please indicate your agreement with the following statements on a scale from 1 (strongly disagree) to 7 (strongly agree):

1) I would not date a person who smokes.
2) I would marry a person who smokes.
3) I would object to living with a smoker.
4) I prefer not to spend a lot of time with people who smoke.
5) I would be willing to form a close friendship with a smoker.
6) There is no good reason to ban smoking on airplane flights.
7) Restricting smoking in public places is unfair to smokers.
8) Laws restricting smoking in the workplace are unfair to smokers.
9) People should have the right to smoke where and when they want.
10) Smoking should not be restricted by law in any way.
11) Nonsmokers should learn to be more tolerant of smokers.
12) People have a basic right to breathe smoke-free air.
13) Secondhand smoke is a legitimate health risk.
14) Employers should be required to provide a smoke-free work environment for their employees.
15) All forms of cigarette advertising should be illegal.
16) Cigarette companies should be permitted to advertise their products in any way they wish.
17) The sale of cigarettes should be outlawed altogether.

Appendix E. Stimuli Chart
Appendix E: Stimuli Chart

This study utilized a 2 (Culture Cue: present, absent) × 2 (Race Portrayed in the Ad: White, African American) × 2 (Marketing: pro-smoking, anti-smoking), one ad per level. 8 ads in total for each person. Ads were shown in a computer generated randomized order.

<table>
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<tr>
<th>Present Culture Cue</th>
<th>ProCA1, α=.83</th>
<th>ProCA2, α=.76</th>
<th>ProCA3, α=.89</th>
<th>ProCA4, α=.88</th>
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<tr>
<td>African American Pro-Smoking</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
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<th>ProNA2, α=.88</th>
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<th>Present Culture Cue</th>
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<td>Absent Culture Cue</td>
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<td>AntiNA3, (\alpha = .88)</td>
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