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ENTERTAINMENT-EDUCATION TO INCREASE SELF-EFFICACY AND REDUCE COUNTERARGUING: HIV/AIDS PREVENTION AND AFRICAN AMERICANS

by

TONIA EAST PHANOR

Under the Direction of Yuki Fujioka, Ph.D.

ABSTRACT

The present study sought to expand current understandings of how and why participants identify with television characters, as well as how this identification is related to self-efficacy and safe sex intentions regarding HIV prevention. Based on the Entertainment Overcoming Resistance Model, it was expected that when viewers identify with characters in a media program, they would be less likely to counterargue or reject the HIV prevention message, but more likely to have greater intentions and self-efficacy in modeling the behaviors shown in the program. This study also sought to understand whether these outcomes may be influenced by the gender of the participant.

This study also examined ways of applying the EORM model to African American audiences. The levels of HIV/AIDS among African Americans make the need for prevention strategies for this specific community critical. This study sought a greater understanding of cultural influences, such as medical distrust. Medical distrust has been previously shown to influence responses of African American participants to health information messages. The African American sitcom *One on One* was chosen to show as a model of HIV prevention discussion and testing.

The study included 142 participants. Following a pre-session survey, participants viewed the stimulus and responded to an online survey. Results showed that participants identified with the male and female lead characters in the program. A paired t-test revealed that females were more likely to identify with the female lead than they were with the male lead character.

Medical distrust was related to greater counterarguing and lower self-efficacy to perform HIV prevention behaviors. Counterarguing against the message was low overall. Medical distrust did interact with identification in the prediction of counterarguing. However, counterarguing was not associated with less safe sex intentions. Identification with the characters in the program was related to greater self-efficacy for male participants. Self-efficacy was also related to greater safe sex intentions. Although identification was related to counterarguing and self-efficacy, these outcomes are also related to what aspects of the character viewers identify with and how they relate to the content of the media message.

INDEX WORDS: Health communication, Entertainment-education, HIV/AIDS

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by

TONIA EAST PHANOR

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Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

2015

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DEDICATION

I dedicate this dissertation to my mother, Ruth East, for giving so graciously into my life.

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I would first like to thank God for giving me the opportunity and wherewithal to complete my doctorate degree. I know I would have not made it without His strength. To my wonderful, husband Tiery Phanor; thank you for being patient with me throughout this process. I thank you for holding me up mentally, spiritually, emotionally, and physically. I want to also thank my mother, who has always encouraged me in every way. I thank you, Mom, for all the wisdom, love, financial, emotional, and spiritual support. To the rest of my family who may not completely understand what I am doing, I thank you for your encouragement nonetheless.

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CHAPTER ONE: INTRODUCTION

AIDS is the most serious threat the world faces today. If it isn't checked now it will do unbelievable damage.

- Richard Holbrooke, former U.S. ambassador to the United Nations, and former President of Global Business Council on AIDS. (Singhal & Rogers, 2003, p. 37)

AIDS is a major concern for people everywhere. This chapter will address some of the major sources that might contribute to current HIV/AIDS status in the African American community, including historical factors such as medical distrust, gender roles and power dynamics, religious beliefs, and communication styles. The levels of HIV/AIDS among African Americans make the need for prevention strategies for this specific community critical. This study sought a greater understanding of the various cultural influences on sexual behavior needed in interpreting message responses to entertainment-education (EE) on HIV prevention, particularly among African Americans.

HIV/AIDS Background

In the United States, there are over one million people living with the Human Immunodeficiency Virus (commonly known as HIV) and 21% of those infected are unaware of their status (CDC, 2010a). People living with HIV have contracted a virus, which over time causes an infection that depletes white blood cells and lessens immunity (CDC, 2011a). HIV attacks living white cells and reprograms those cells to produce the virus, at an astonishing rate of 10 billion duplications of itself per day (Gaitonde, 2001). People infected with HIV can have increasingly lower immune levels, which can progress to AIDS and increase their susceptibility to various infections (Elwood, 1999). The use of anti-retroviral drugs can disrupt stages in the life cycle of the virus, however, there is no cure. HIV infection rates are linked to growing health disparities. The CDC (2010c) reported HIV infection rates by particular risk groups, which include men who have sex with men (MSM), injection drug users, and various demographic groups. The largest risk groups for HIV infection in the United States are among MSM. MSM compose 53% of new HIV infections, compared to heterosexuals at 31% of new HIV infections (CDC, 2010a). Injection drug users are also a significant risk group at 12% of new HIV infections (CDC, 2010a). The CDC also found that women also represent a rising risk group, as a group comprising 27% of new HIV infections and 25% of those living with HIV. A recent study found that young adults are at greater risk over 8,294 young people aged 13-24 were diagnosed with HIV in 2009 (CDC, 2011d).Currently, African Americans represent the racial group with the largest percentage of HIV infection rates (CDC, 2011b).

HIV/AIDS prevalence and African Americans. Despite various health intervention efforts, including media campaigns and outreach trainings, a disproportionate percentage of African Americans have contracted HIV. As shown in Figure 1, racial disparities represent a significant gap or inequality in HIV/AIDS rates.



New HIV Infections by Race/Ethnicity, 2010 (n=47,500)

Figure 1. HIV Prevalence by Race (CDC, 2010c)

In 2007, HIV was the ninth leading cause of death among all African Americans and the third leading cause of death for African-American males and females aged 35 – 44 (CDC, 2011b). In 2010, African Americans made up 12% of the population, yet they represented approximately 44% of new HIV cases and 46% of all people living with HIV (CDC, 2010b). One out of 16 African-American males, and one out of 32 African-American females will be diagnosed with HIV at some point in their life (CDC, 2011b). Males who have sex with males (MSM) represent the largest proportion at 73% of new infections among African-American males (CDC, 2011b). African-American women, with 57% of new infections, are the largest percentage among all women (CDC, 2011c).

There is also concern for the growing HIV/AIDS prevalence among young African Americans. African Americans aged 13-24 were disproportionally affected by HIV rates,

comprising 65% of young people diagnosed with HIV (CDC, 2011d). College-aged young adults (age 20-24) represented the highest number of new infections among all age groups and races (Figure 2).



Figure 2. 2009 Diagnoses of HIV in the United States by Age (CDC, 2011a)

Research has attributed the prevalence of HIV/AIDS in the African-American community to many socio-cultural and historical issues, such as economic barriers, gender and relational roles, cultural expectations, and religious concerns (Alleyne & Gaston, 2010; Gilbert & Wright, 2003; Shavers-Hornaday, Lynch, Burmeister, & Torner, 1997). This study will review broader concerns within the African American context, such as medical distrust, gender role expectations, and religious beliefs, which are influential to sexual decision making for African Americans.

Factors Contributing to HIV/AIDS in African American Communities.

Historical Issues with Medical Distrust. Several studies revealed that African Americans still have less trust in medical professionals and are less likely to participate in medical research

(Bird, Bogart, & Delahanty, 2004; Corbie-Smith, Thomas, & St. George, 2002; Halbert, Armstrong, Gandy, & Shaker, 2006; Musa, Schulz, Harris, Silverman, & Thomas, 2009). Medical distrust occurs when patients perceive that medical professionals value their own research over the best interests of the patient (Corbie-Smith et al., 2002). Research has demonstrated that medical distrust has influenced African Americans' health and medical beliefs in general, including past and current negative experiences with medical care (Peterson, 2002).

Medical distrust has been found to be a barrier to seeking preventative care or adopting preventative behaviors for various illnesses. Halbert et al. (2006) for example, conducted a national survey of 432 Black and 522 White respondents on how they evaluate medical experts. The study found that African Americans reported lower trust in health care providers than did White participants.

Distrust is particularly common among historically marginalized groups, such as African Americans. As a historically marginalized group, African Americans have had various negative experiences in past medical research, which have resulted in medical distrust (Corbie-Smith et al., 2002; LaVeist, Nickerson, & Bowie, 2000). Medical trust has been defined as an expectation that health care providers will behave in a way that honors the patient's interest as priority (Halbert et al., 2006). Medical distrust has been observed as a lack of agreement with statements on trust of medical information presented, as well as agreement with AIDS distrusts beliefs (Bird & Bogart, 2005; Corbie-Smith et al., 2002).

Medical distrust among African Americans is rooted in medical abuses as far back as slavery, when African Americans were subjected against their will to medical experimentation (Dula, 1994). African-American women were sterilized without their consent or knowledge (Davis, 1981). Along with this, medical injustices against African-American males in the Tuskegee Syphilis study have contributed to the current distrust in government and medical research by African-American people and particularly by African-American men (Klonoff & Landrine, 1999; Reverby, 2000).

In the Tuskegee study, rural African-American men with syphilis participated in a study with the belief that they would receive free health care from the U.S. Public Health Service. Unbeknownst to the participants, they were actually being studied to see how syphilis progressed in the body untreated. After media nationally publicized that the penicillin treatment was being withheld from participants from 1932-1972, the Department of Health, Education, and Welfare ended the study (Reverby, 2000; Smedley, Stith, & Nelson, 2002). As a result, the National Research Act passed in 1974 to ensure that an Institutional Review Board would review all federally funded research (Heintzelman, 1996). However, a distrust of medical research still is prevalent within the African-American community, for fear of further abuse and based on current experiences of injustice (Peterson, 2002).

The legal segregation of hospital facilities has also contributed to feelings of unequal treatment of African Americans in the health and medical care system, particularly by White doctors, which has contributed to health disparities within the African-American population (Lillie-Blanto, Brodie, Rowland, Altman, & McIntosh, 2000; Stepanikova, Mollborn, Cook, Thom, & Kramer, 2006). The implementation of the Civil Rights Act of 1964 ended the legal segregation of hospital facilities, but the road to eliminating health disparities through equal access to healthcare has only recently been nationally implemented (Thomas & Quinn, 1991). Dr. Marc Hubert, director of the Avon Foundation for Breast Cancer, found empirical support for this idea. Dr. Hubert conducted a study with the Sinai Urban Health Institute, finding health disparities in breast cancer mortality in 23 of the 26 cities studied in the United States (Boone,

2012). Dr. Hubert explained that there are genetic differences in the aggressive strain of breast cancer most African-American women get. Ninety-percent of this disparity is linked to racial segregation and access to adequate health care (Boone, 2012).

HIV-positive African-American participants with high medical distrust were more likely than White respondents to report quality interactions with health care professionals and annual visits to health care providers. Moreover, of African-American respondents with higher distrust, over two-thirds reported racial discrimination in previous interactions with medical providers. In addition to the lack of medical trust in general, research has also suggested the existence of African American distrust specifically in regard to HIV/AIDS research and treatment (Halbert et al., 2006).

HIV/AIDS-related Distrust. Historical concerns regarding healthcare discrimination have contributed to AIDS conspiracy beliefs regarding the origin and treatment of HIV/AIDS within the African American community. For example, Klonoff and Landrine (1999) conducted a survey of 520 African Americans, finding that about 25% of participants agreed that HIV was a manufactured disease intentionally created by the federal government to destroy the Black race, with 23% neither agreeing nor disagreeing. Due to past discrimination, African-American males are more likely to hold conspiracy beliefs (Klonoff & Landrine, 1999). These beliefs were held not only by African Americans with a lower socioeconomic status, but also by participants with a higher income and educational level. Similarly, another study of African-American adults found that 70% of participants strongly or somewhat agreed that information was being withheld from the public regarding a cure for HIV/AIDS (Bird & Bogart, 2005).

These conspiracy theories regarding health issues are often spread through informal networks or places such as barber shops, hair salons, as well as college campuses (Thomas &

Quinn, 1991). These beliefs can have unfavorable consequences, including unwillingness to learn from the government and health institutes about HIV/AIDS and reluctance to take preventive treatment needed to control common infections, such as pneumonia, related to HIV/AIDS (Kaiser Family Foundation, 2003).

Implications of Medical Distrust. African American medical distrust has manifested in many forms, including their distrust in medical experts and treatment (Bird et al., 2004), uses of health care services (Peterson, 2002), participation in preventative treatment and research (Corbie-Smith et al., 2002), as well as lower organ donation rates (Callender & Miles, 2001). Distrust in medical providers can also result in lower help-seeking behaviors and/or behavioral intentions to adhere to medical recommendations from those they distrust (Armstrong et al., 2008).

Medical distrust has been linked to lower rates of voluntarily obtaining preventive health screenings for various illnesses in African Americans compared to Whites (Chen, Diamant, Pourat, & Kagawa-Singer, 2005; Smedley et al., 2003), including breast and cervical cancer (Yang, Mathews, & Hillemeier, 2011) and HIV/AIDS (CDC, 2011b) screening tests. Distrust in medical providers was also found to delay African-American males from receiving preventative blood pressure or cholesterol screenings (Hammond, Mathews, Mohottige, Agyemang, & Corbie-Smith, 2010) and may prevent people from seeking health care, even with greater availability of services (Whetten et al., 2006). In addition, medical distrust has also been associated with lower rates of organ donation by African Americans when compared to Whites (Callender & Miles, 2001). Although religious beliefs were partly attributed to the lower organ donation rates, participants also expressed their "fear of being used as a guinea pig, similarly to that which occurred in the Tuskegee incident" (Callender & Miles, 2001, p. 383). That is, they

feared that medical professionals would allow them to die prematurely in order to obtain their organs, not realizing that the medical team would not be the same as the team requesting the organs.

Gender Roles. Gender role socialization is an additional factor that may contribute to the epidemic HIV/AIDS rates in the African American community, impacting African American sexual and safe sex behavior. Gender-related orientations and practices are also a part of African American cultural history. Cultural expectations can have a major impact on gender identification (Resnicow, Dilorio, & Davis, 2008). Gender is a socially-constructed notion shaped by cultural expectations and norms as to what is appropriate behavior and roles for males or females (Alleyne & Gaston, 2010; Gupta, 2001). Gender roles are a cultural product where gender is negotiated within cultural values, norms, and beliefs. Studies have shown that cultural influences may impact how gender roles are adopted (Harris & Hill, 1998; Lull, 1995). As such, African American and European American gendered identities are not constructed similarly. African American gender roles can vary situationally, ranging from traditional to liberal considering the context.

Within traditional European American gender roles, the male tends to have greater financial responsibilities in the relationship, which potentially leads the male to exert more authority in the relationship (Dixon, 2007). For example, a study of gender role expectations of college students found that more European American males and females, as compared to African-American males and females, assumed that mothers should leave work in order to raise children and fathers would be sole providers (Stone & McKee, 2002). Another recent study revealed how European American males and females held more traditional role assumptions, when compared to African Americans (Buchanan & Selmon, 2008). In contrast, African American gender roles are influenced by a dichotomy of roles they were forced to adopt as slaves, where women were "genderless" and required to take on the same work as men, and men were not able to be providers or protectors for their families (Dixon, 2007; Lewis, 1989). Traditional role expectations exist for African-American women in a more exaggerated sense. African-American women are expected to not only support the man of their house but all Black men as a whole. The same notion applies to the role of "mother," where women are expected to nurture and provide for children other than their own (Harris & Hill, 1998). The maternal role of African-American women also has roots in slavery as caregivers for White families, and later as domestic servants. These gender norms are still reflected in today's culture—African-American females are assumed to take on roles that are nurturing, assertive, familial, spiritual, caring, and connected to self and community (Collins, 2000; Houston, 2000). According to Collins (2000), these gender role expectations demonstrate the Afro-centric view of community maintenance that emphasizes family, community, and faith.

Along with adopting these traditional gender roles, there are also more liberal and independent roles adopted by African-American women. Adoption of these independent roles continues to occur through a variety of sources, such as family, friends, society, and the media (Harris & Hill, 1998). African-American girls, especially in single-family homes, are trained from a young age to be self-sufficient and independent (Dixon, 2007), and most African-American girls have grown up watching their mothers be independent (Chapman, 1995, p. 35). Chapman (1995) states that this self-sufficiency was not necessarily negative and has pushed African-American females to excel academically and professionally. However, self-sufficiency can cause caregivers to take care of everyone besides themselves when it comes to health issues. For African-American males, masculine roles are often associated with being cool (Jackson, 1997). Early on, African-American boys learn the importance of physical prowess, being street smart, and being cool (Hecht, Jackson, & Ribeau, 2003). Majors (1989) proposed that African-American males have adopted the "cool pose" in response to the oppression of broader society, displaying themselves as aloof, emotionless, and fearless. Dickson (1993) explained how the "cool pose" allows them to maintain male pride, dignity, and respect. African-American males are stereotypically expected to take on hypermasculine roles that are nonacademic, violent, aggressive, criminally mischievous, athletic, and sexually promiscuous, which can influence actual performance of such behaviors (Pleck, Sonnenstein, & Ku, 1994). Roles observed in childhood help shape the roles and expectations of future relationships and can influence attitudes on sexual prevention, which are discussed in further detail later.

Power Dynamics in Heterosexual Relationships. Gender role expectations are often reflective of power dynamics operating in a relationship. Power dynamics in a relationship refers to how and who makes decisions in a relationship, which is influenced by larger cultural and social influences (Connell, 1987). According to Connell (1987), three major structures influence how gender is constructed in relationships between men and women. First, the sexual division of labor or socioeconomic inequities that exist among genders influence how gender is constructed. Second, the sexual division of power that exists among genders also shapes gender construction. Third, cathexis refers to the social and cultural norms that shape gender orientations. Each of these social and cultural environments has contributed to existing gender power difference observed in African American romantic relationships, which will be discussed below.

Socioeconomic inequities. African Americans made considerable economic gains in the 1960s due to civil rights initiatives, but economic disparities still exist. African Americans

represented approximately 13% of the American population in 2013 (U. S. Census Bureau, 2015). Research has found that African Americans receive only 9% of the income and owned only 3% of the assets in the U.S. (Conrad, Whitehead, Mason, & Stewart, 2005). The U. S. Bureau of Labor Statistics (2011), reported unemployment rates for persons aged 16 years and above at 8.6% for Whites, 7% for Asians, 12.5 % for Hispanics, and 15.9 % for Blacks. According to the U. S. Bureau of Labor Statistics (2011) unemployment rates were 38.5% for African-Americans women aged 16-19 and African- American males of the same age were at rates of 47.1%, while White women aged 16 - 19 had lower unemployment rates at 18.5% and White men had rates of 25.2%. African Americans as a whole have greater unemployment rate than their White counterparts. Research also finds that even among highly educated African-American women, there is a double bind of gender and race, where they find they are not promoted or paid comparably to White women, suggesting that race and gender together play a greater role than gender alone (Gregory, 1995; Tindall, 2009).

Without opportunities to excel professionally or academically, African-American males may seek to maintain their traditional role of dominance within heterosexual relationships (Dixon, 2007). African-American males were found to support more traditional views of gender power than African-American females (Buchanan & Selmon, 2008). African-American females have been found to support more liberal gender roles but, when economically or socially dependent on a male partner, these women are more likely to take on lesser roles in order to maintain the relationship (Dixon, 2007). Williams, Ekundayo, Udezulu, and Omishakin (2003), for example, commented on how poverty, hunger, homelessness, and other circumstances among African-American females have created a context where immediate survival takes precedence over asserting themselves within relationships. This is true even when their own health may be at stake, in the case of HIV/AIDS prevention behavior.

Sexual Division of Power in Relationships. When women outnumber men, men become a scarce resource and have greater control of the emotional power in the relationship (Dickson, 1993). African-American males with more partner options are more likely to exhibit greater power in the relationship, have multiple concurrent sexual partners, and increase a partner's potential exposure to HIV/AIDS (Wingood & DiClemente, 1997). It is common for African-American women to outnumber African-American men on college campuses. The U. S. Census Bureau (2011) reported education attained for all persons over the age of 25, finding relatively equal numbers of White male and female college graduates (30.6% and 29.3% respectively) in 2009, but there were less African-American male graduates at 17.8% than females at 20.6%. The educational gap can cause African-American women to feel that there are fewer opportunities for comparable relationships or a lack of "marriageable" African-American males (Gates, 1998).

This imbalance has caused a predominance of African-American females to lose power in intimate relationships as they compete for available bachelors (Fullilove & Fullilove, 1999). An African-American woman's desire to be in a relationship with an African-American man may lead to more risky sexual interactions, where females do not demand monogamy or condom use from their partners and therefore lead to greater risk of exposure to HIV (Alleyne & Gaston, 2010). In fact, research found that sex ratio imbalances of African-American male-to-female college students can result in "man-sharing", a behavior where women willingly have a relationship with a man whom they know is sexually involved with other young women (Ferguson, Quinn, Eng, & Sandelowski, 2006). *Cultural Norms in Gender Power Relationships.* The third structural force in understanding the gender power imbalance in African-American relationships is normative beliefs and behaviors derived from African-American cultural orientations. Normative cultural beliefs include religiosity and conservative gender role orientations (Wingood & DiClemente, 2002). Religious beliefs can also have a major impact on sexual beliefs and gendered behavior in relationships (Dixon, 2007). Religious beliefs in some cases promote conservative gender role expectations of manhood that may perpetuate HIV/AIDS stigma within the African-American community (Ward, 2005). Religion can support normative beliefs that the appropriate role of women to be submissive to male partners and supportive of male decisions, such as those that concern the use or lack of sexual contraception (Dixon, 2007).

All three structures of gender and power—whether socio-economic, sexual divisions of power, or socio-cultural factors—place African-American women at greater risk of contracting HIV/AIDS (Wingood & DiClemente, 2002). As discussed, social structural conditions such as unbalanced gender ratios (more Black women), economic hardships, and cultural norms, suggest the existence of power differences in African American relationships, such that African-American men tend to enjoy greater power and control over African-American women. This gender power dynamic then contributes to sex-related decision making, including HIV/AIDS preventive behavior.

In fact, research suggests that African-American women with low risk behaviors (e.g., few partners and use of protection), are still at greater risk of HIV contraction than women in other racial groups with low risk behaviors due to the higher prevalence of HIV among African-Americans than any other racial group (CDC, 2010b). Gilbert and Wright (2003) argued that African-American women's susceptibility to HIV/AIDS must address the full spectrum of issues

that affect their lives and cause them to be in higher risk situations, such as a lack of awareness on HIV, lack of access to health resources, and unequal gender roles within relationships.

Previous research has found that negotiation within sexual communication is often more difficult when there are assumed relational power imbalances (Harvey, Bird, Galavotti, Duncan, & Greenburg, 2002). Because sexual negotiation in safe sex behavior often involves assertiveness by women in addressing HIV/AIDS prevention, the discussion with their partners is not easy for some African-American women to initiate when in positions of lesser power (Wingood & DiClemente, 2002). Reluctance to discuss sexual prevention methods due to a lack of confidence, along with other health disparities (e.g., limited access to health resources), have contributed to African-American women's greater susceptibility to HIV/AIDS (Gilbert & Wright, 2003).

Additional Cultural Factors Affecting HIV/AIDS in an African American Context.

As reviewed above, there are varying influences in understanding HIV/AIDS in an African American context, including historical beliefs regarding medical distrust and gender roles, and power dynamics in African American relationships. Additional contributors to this epidemic reside in distinctiveness of African American culture, which includes religiosity and communication styles that may potentially influence message responses to HIV/AIDS prevention messages.

Influence of the African American Church. The role of the African American church has played a major role in shaping the beliefs of the culture and has established morality and leadership roles within the community (Hecht et al., 2003). Research has found that African Americans are more likely than Whites to regularly attend church, value religiosity, and use religion as a coping mechanism to deal with difficult issues (Taylor & Chatters, 1991). African-

American women in particular have higher levels of religiosity than White and Latino women do, as well as men of all races (Wilcox, 2005).

Religious traditions have played a major role even before slaves were brought to America from Africa, but while in America, Christian ideals introduced by slaveholders were adopted into African American culture and beliefs (Dixon, 2007). Within the African-American community, it has been faith and the religious practices of singing and prayer that allowed African Americans to overcome the brutality of slavery, the injustices of Jim Crow south, and ongoing racism and discrimination. During the civil rights movement, the church was a primary center for information and organization. Membership within the African American church has continued to grow to over 23 million, making it the largest independently-owned African American institution in the United States (Hecht et al., 2003).

Impact of Religious Beliefs on Sexual Behavior. Religious beliefs can have a major impact on sexual beliefs and behavior. Religious beliefs have also contributed to belief of the discussion of HIV/AIDS as taboo or shameful. Dixon (2007) explained how African American attitudes regarding sex are a mixture of African beliefs and American beliefs acquired through Christianity introduced in slavery. The notion of sex as dirty, evil, or sinful, and the idea that premarital sex as a sin has made the discussion of sexual behavior forbidden. Christian beliefs support the idea that sex is reserved for marriage and represents a union among a wife, a husband, and God. Religious beliefs may not only make discussion of sexual behavior taboo, but also increase the stigma associated with HIV/AIDS.

Religiosity has contributed to the belief that HIV/AIDS is a punishment for breaking religious laws concerning homosexuality (Whetten et al., 2006). Religious beliefs can also contribute to heterosexual normative beliefs on what is considered appropriate roles for African-

American males (Ward, 2005). The association of HIV with homosexuality can prevent heterosexual African-American men from being tested or seeking necessary treatment when diagnosed for fear of the additional stigma of being associated with homosexuality (Schwarcz et al., 2006).

HIV/AIDS association with homosexuality has been a reason many churches have not openly embraced HIV/AIDS prevention. Research found that homosexuality is viewed more negatively by African Americans than by Whites (Waldner, Sikks, & Baig, 1999). African-American gay men have a strong cultural identification with the black community, yet still view their community as less accepting of gays than do White gay males of their communities (Stokes & Peterson, 1998). This view on MSM has contributed to why African-American men may not discuss sexual activities with men to female partners, known as "down low" sexual behavior. For African-American men, being associated with being gay is perceived to lead to additional social and economic isolation (Melby, 2004).

Although the discussion of HIV/AIDS by religious organizations was once forbidden, now more faith-based organizations are promoting HIV/AIDS education and testing. For example, in a survey of African American church congregants, a large majority (90%) agreed that the church should be actively involved in HIV/AIDS education (Khosrovani, Poudeh, & Parks-Yancy, 2008).

African American Communication. Scholars assert that communication and culture are inseparable and all communication occurs within the context of culture (Hecht et al., 2003). African Americans are known to have implicit communication styles (Garner, 1998). Garner (1998) explained how the implicit communication of African Americans involves indirection that goes around the point in a circular manner known as circumlocution, which differs from explicit styles of communication that are literal, direct, and to the point. Garner further stated that African American communication involves inference, innuendos, insinuation, and suggestive communication. It is assumed that the listener will decode hidden meanings and references used. African American communication is largely shaped by context and nonverbal aspects such as touch, gestures, tone, rhythm, and cultural symbols, such as dress and adornments, which give further meaning to the message (Hecht et al., 2003).

Preference for explicit or implicit communication also may affect the ways people deal with personal issues and sexual concerns. Cultures with explicit communication styles are comfortable addressing personal concerns and issues of sexuality. However, people with implicit communication styles are not as comfortable discussing personal issues, particularly those related to individual sexuality. For example, researchers have found African American relationships had less self-disclosure when compared to European American relationships (Duncan & Goodall, 1998). In an effort not to shame the group or family, discussion of an illness or HIV status is taboo because it brings shame not just to the individual, but also to the community or family (Singhal & Rogers, 2003). These various cultural factors can make it difficult to design prevention messages that address taboo topics such as HIV prevention.

HIV/AIDS Prevention in the U.S.

In the United States, more than half a million people have died from AIDS since the early 1980s, and since then, various strategies have been used to address this issue (Centers for Disease Control [CDC], 2010a). The goal of most HIV/AIDS prevention campaign strategies has been to create increased awareness and a deeper understanding of HIV/AIDS, as well as bring about a change in sexually risky behaviors. However, researchers have yet to identify the best strategies to reach most-at-risk audiences (Williams et al., 2003).

Mass media have been used around the world as a strategy in reaching various audiences (Edgar, Noar, & Freimuth, 2008; Keller & Brown, 2002). However, the effectiveness of previous mass media campaigns to change attitudes, norms, and behavior has not always been evident (Palmgreen, Noar, & Zimmerman, 2008), and the CDC and other health organizations have only recently recognized the importance of developing effective communication strategies (Singhal & Rogers, 2003). Previous public health campaigns were medically accurate, but were not based in communication theory and did not relate culturally to the audience the campaigns were designed to reach (Singhal & Rogers, 2003).

In addition to knowledge of the topic and communication theory, a greater understanding of the various cultural influences on sexual behavior is needed to aid in the process of interpreting message responses to entertainment-education (EE) on HIV prevention, particularly among African Americans. Various prevention messages have been designed for the U.S. population, but these messages have seldom addressed culturally diverse audiences (Davis, Williams, & Akinyela, 2010).

Entertainment-Education and HIV Prevention

Recent research has indicated that the use of EE messages, which were designed to both entertain and educate audiences about a social issue, has been shown to be an effective way to reach culturally diverse television audiences in various countries, such as India, Peru, Tanzania, as well as the U.S. (Singhal & Rogers, 2004). Moyer-Gusé's (2008) Entertainment Overcoming Resistance Model (EORM) stated that EE has the greatest potential to engage audience members because of its use of narrative story lines. She argued that the dramatic narrative element of EE offers many features to contribute to disease prevention efforts. EE also has the potential to help viewers understand characters' viewpoints, which in turn may facilitate viewers' learning of promoted attitudes and behavior (Moyer-Gusé, 2008). Effective EE could provide an environment where viewers were more likely to identify with characters (Moyer-Gusé & Nabi, 2010). Moyer-Gusé and Nabi's (2010) application of EORM explained how the dramatic narrative format of EE made persuasive content less intentional or obvious, and thus could be used to reduce viewers' resistance to persuasion or counter-arguments about the promoted messages and behavior.

In support of this idea, existing research has identified the concept of character identification as one of the key factors in the narrative persuasion processes (Moyer-Gusé, Chung, & Jain, 2011; Moyer-Gusé & Nabi, 2010). Character identification is the ability to relinquish one's own identity to absorb oneself emotionally, cognitively, and behaviorally into the character (Cohen, 2001). Moyer-Gusé, Chung, and Jain (2011) proposed that greater character identification: (a) made viewers feel more vulnerable to the risk of getting a sexually transmitted infection; (b) reduced viewers' counterarguing thoughts or resistance to persuasive intention of promoted safe sex discussion; and (c) enhanced viewers' self-efficacy in the performance of the promoted behavior of safe sex discussion. Their study, based on White college participant data, found evidence supporting the model. But the authors questioned how demographic differences, such as race and gender of participants, might influence the mechanisms of narrative persuasion effects. Thus, the current study applied the EORM framework to African American responses to HIV/AIDS narratives to address this issue.

Entertainment-Education and HIV/AIDS Prevention for African Americans

African Americans represent the largest racial group infected with HIV/AIDS in the US (CDC, 2011b). The heightened levels of HIV/AIDS among African Americans are indicative of the critical need for prevention strategies that affect this community. HIV/AIDS prevention

messages directed to African Americans should consider cultural and social barriers that influence African American sexual behavior. For example, economic issues and medical distrust have been found to prevent African Americans from going to doctors for health information (Davis et al., 2010; Yoo & Tian, 2011). Evidence also suggests that African Americans are more likely to receive health information from television than from a doctor (Brodie, Hamel, Brady, Kates, & Altman, 2004). Beck (2004) has argued that EE television programs are particularly effective in reaching African Americans regarding health information.

The current study examined African American participants for three primary reasons. First, African Americans have been identified as one of the most at-risk racial groups with HIV/AIDS (CDC, 2011b). Second, African Americans tend to prefer media as a main health information source, including HIV/AIDS-related information, rather than health care authorities and medical experts (Khosrovani et al., 2008). Third, participant differences (e.g., gender and medical distrust) are likely to have an influence on EORM outcomes. This is likely considering the existence of gender role differences in cultural orientation and medical injustices African Americans have experienced in the past (e.g., Buchanan & Selmon, 2008; Wingood & DiClemente, 2002). These conditions provide this study with the unique ability to address how race and gender may play a role in audience responses to HIV/AIDS narrative persuasion.

EE incorporates the process of vicarious learning, where one learns a specific behavior by observing the televised model exhibiting the behavior (Bandura, 2001). Bandura (2001) stated that vicarious learning is more likely to take place when the behavioral model is perceived as being similar to the viewer, such as being the same gender as the viewer. Existing research, however, has produced mixed findings on how characters' attributes, such as gender or race, may influence people's adoption of (or resistance to) a modeled behavior. Addis and Holbrook
(2010), for example, found little impact of film viewers' gender on their level of identification with male and female leading characters. However, Valente et al. (2007) explained that male viewers may identify more with a male lead character. In fact, several researchers have asserted that the processes of character identification and its effects on viewers' responses are quite complex, and thus, more research studies particularly examining race and gender are needed (Green, 2007; Moyer-Gusé, Chung, & Jain, 2011).

Current Objectives

To address this need, the present study examined how African American viewers' gender plays a role in identifying with male and female leading characters displaying safe sex behaviors, and how these responses are related to message outcomes, including counterarguing or refuting the message and self-efficacy or confidence in performing behaviors. This study assessed whether there are gender differences in viewers' responses to an EE program that models HIV/AIDS discussion and testing by same-gender characters. If Bandura's (2001) assumption that perceived similar characters leads to greater effects, there may be an influence of samegender characters.

In addition to the issues of gender, this study examined the role of medical distrust in narrative persuasion processes. More specifically, this study examined whether viewers' medical distrust beliefs influence the effectiveness of the dramatic narratives in reducing resistance to HIV prevention messages. Historical distrust of medical research is still a prevalent problem among African Americans, and this distrust could lead to misconceptions—particularly regarding HIV/AIDS beliefs (Herek et al., 1998). Medical distrust could contribute to African American viewers' greater resistance to persuasive intentions of medical professionals (Halbert et al., 2006; LaVeist et al., 2000).

In sum, the current study contributes to previous EORM research by examining (a) the role of African American participants' gender in male/female character identification, (b) how gender of the participant gender may moderate the effects of character identification on resistance variables of counterarguing and self-efficacy regarding safe sex behaviors, and (c) how medical distrust may moderate the effects of character identification on message outcome variables stated above.

These goals were addressed through the following research questions. First, how does a viewer's gender play a role in his or her response to male and female leading characters who model the promoted behaviors of HIV/AIDS discussion and testing? Second, how are these responses related to the effects of character identification on perceived self-efficacy and counterarguing? Considering that little is known about medical distrust and EE message processing, this study explored whether medical distrust may be related to (a) greater counterarguing, (b) less perceived self-efficacy, and (c) less intention to perform safe sex behaviors promoted in the program. Third, if a participant's level of medical distrust interacts with his/her character identification, would the effects of character identification on message outcomes differ due to the level of medical distrust?

The main theoretical model which this study was based on is EORM (Moyer-Gusé, 2008), which incorporates Bandura's (2001) Social Cognitive Theory (SCT) and elements of E-ELM such as counterarguing. The theoretical basis for this study also includes literature on gender (Connell, 1987) and identification (Cohen, 2001).

Survey-based quantitative data were used to examine the relationships between gender, medical distrust, and the following key variables identified in the EORM framework: character identification, counterarguing, self-efficacy regarding HIV/AIDS testing and discussion behaviors, and safe sex intentions. The findings of this research should provide useful insights for health communication and public health researchers on effective ways to plan and develop HIV/AIDS prevention messages targeted to African Americans.

This study aims to examine factors that influence the efficacy of HIV/AIDS communication. Chapter 2 provides a comprehensive review of literature of the subject areas addressed in this study, including the role of mass communication in HIV/AIDS prevention, and background of EE research. It also provides a description of the theoretical framework that will guide this research, including the main assumptions, constructs, variables, and their application to EE messages. Chapter 3 provides a description of the proposed methodology used in this study. A discussion of procedures, data collection, and analysis is given. Chapter 4 describes the data analyses and results of statistical analyses. Chapter 5 will provides a discussion of results and limitations of the research. It ends discussing implications for future research and design of prevention messages and a conclusion.

CHAPTER TWO: LITERATURE REVIEW

The previous chapter discussed some of the internal forces can influence African Americans' sex-related decision making, including learning and adoption of safe sex behaviors. In addition to community-based influence, the media also functions as a tremendous source of socialization, as well as a distributor of health-related information on various topics including HIV/AIDS (Edgar et al., 2008). How the media can be used to address HIV/AIDS will be further discussed in the following section.

The Role of Media in HIV/AIDS Awareness

People can learn about health-related issues through various sources. One way is interpersonally through health professionals or peers, but the media has been a major source of health information for the public in the past (Schiavo, 2007). HIV/AIDS knowledge is often gained through mass media, including radio, television, newspapers, magazines, internet, and pamphlets, than from interpersonal sources, such as health workers, friends, or coworkers (Myhre & Flora, 2000). A survey by the Kaiser Family Foundation, for example, found that 70% of people relied on media to inform them about HIV/AIDS (Brodie et al., 2004). Furthermore, a 2011 Pew Research study found that 86% of Blacks are most likely to use television as their major source for news when compared to other sources (Guskin, Moore, & Mitchell, 2011).

News media served as one of the primary information sources where American people initially learned about HIV/AIDS, and played an important role in determining which issues were presented to the public (Finnegan &Viswanath, 2002). Although diagnosis of HIV/AIDS cases began in the early 1980s, it was not until 1985, when there was a substantial increase in total AIDS diagnoses to over 10,000 people, that HIV/AIDS cases were reported by the news media (Dearing & Kim, 2008). In the mid- to late-1980s, the framing of AIDS was reshaped from factual, with an emphasis on medical explanations on AIDS, to personal, which focused on

individuals personally facing HIV/AIDS. Stories on individuals such as Ryan White and Rock Hudson were shared by the media. In the 1990s coverage of Magic Johnson's announcement that he contracted HIV through heterosexual intercourse received considerable media coverage which increased public awareness about HIV/AIDS and the importance of testing, particularly in the African American community (Hollander, 1993; Wanta & Elliott, 1995).

The role of the media has evolved and varies in kind, from breaking the news of HIV/AIDS outbreaks to informing people of the HIV/AIDS epidemic/status in their local community (e.g., HIV/AIDS news coverage), disseminating HIV/AIDS preventative campaign messages (e.g., PSAs), and educating audiences to adopt preventative measures. The following section addresses these various ways the media have been utilized to address HIV/AIDS, with a special emphasis on Entertainment-Education.

HIV/AIDS Prevention Messages. Health promotion or disease prevention messages are interdisciplinary in nature, with the primary goals of enhancing health and preventing disease (DiClemente, Crosby, & Kegler, 2002). The mass media has often been the primary channel for dissemination of prevention messages addressing HIV/AIDS. Mass media campaigns are able to utilize single or multiple forms of media to promote HIV prevention messages at the national, regional, or local level in a very cost effective way (Palmgreen et al., 2008). According to DeJong, Wolf, and Austin (2001), in an effort to reach multiple audiences, PSAs designed in the 1990s to address HIV prevention were intentionally ambiguous or generic. Their content analysis of 56 HIV/AIDS PSA messages indicated that most of the messages were targeted to heterosexual males and females of no specific background from the ages of 21 to 40. However, it has been argued that a majority of the PSAs were targeted to Whites, with little attention given to racial and ethnic minorities, including African Americans (Sobo, 1993). Sobo (1993) explained

that HIV prevention messages have been designed with wording that reflects White middle-class male values and does not resonate with those most at risk within the African American community. Currently, more research is needed on the actual effectiveness of HIV/AIDS mass media campaigns (Palmgreen et al., 2008).

Researchers proposed that prevention research has greater effects when participants perceive themselves to be similar to a person modeling promoted behavior (Bandura, 2004a; Moyer-Gusé, 2008). Researchers, tested the effectiveness of an HIV/AIDS risk-reduction study with same-race and same-gender models in reducing HIV/AIDS risk behaviors among African-American women in inner-city Chicago. (Kalichman, Kelly, Hunter, Murphy, & Tyler, 1993). Results indicated that African-American women identified more with the spokesperson and expressed greater HIV/AIDS-related fear when the spokesperson was an African-American female than when it was a White male. They also found that the same race and gender condition elicited greater risk-reduction behaviors, such as HIV/AIDS testing, discussion of AIDS with friends, and requests for condoms, than when in different race and gender conditions (Kalichman et al., 1993).

In addition to HIV/AIDS news coverage and HIV/AIDS prevention messages, people may also learn about the issue of HIV/AIDS from entertainment television context. Television story lines are particularly powerful when they are based on dramatic real-life events (Usdin, Singhal, Shongwe, Goldstein, & Shabala, 2004). Television allows messages to be conveyed to a variety of people of different backgrounds, educational levels, and socioeconomic status. Television entertainment-education should be particularly powerful in reaching African Americans regarding various health issues, since television was found to be a major source of news for this group in 2011 Pew Research study (Guskin et al., 2011). This review will first explain the origin and history of entertainment-education programs in general, then discuss HIV/AIDS related entertainment-education programs.

Entertainment-Education

Background of Entertainment-Education (EE). EE involves programming intended to produce social change and promote awareness through the use of entertainment media. EE began internationally in countries such as Britain and Mexico, with government-sponsored programs designed solely to address specific social issues. Currently, EE is broadened in scope to include programming in the US and other countries by private media producers that utilizes dramatic stories with the purpose of both entertaining and educating audiences about positive change in attitudes, norms, beliefs, and behaviors (Singhal & Rogers, 1999; Singhal et al., 2004). EE has the advantage of being less overt than other forms of persuasion, making audiences less likely to reject the message (Slater & Rouner, 2002). This format has been often utilized in health issues that are sensitive and difficult to openly discuss such as sexually transmitted diseases and domestic violence (Brodie et al., 2001; Usdin et al., 2004) and related behavior (e.g., safe sex practices; Singhal & Rogers, 2003). Specifically, studies have shown various effects produced by EE, such as knowledge gain about human papilloma virus (HPV) in an episode of ER, as well as condom effectiveness on an episode of *Friends* (Brodie et al., 2001; Collins, Elliott, Berry, Kanouse, & Hunter, 2003). Another study found changes in HIV/AIDS attitudes and behaviors after participants viewed the television series Jasoos Vijay in India (Singhal & Rogers, 2003). Similarly, changes in attitudes on domestic violence and gender norms were found in viewers of the Soul City drama series in South Africa (Usdin et al., 2004).

EE overall has a longer international history than EE within the US. The British Broadcasting Company (BBC), established in the 1920s, was the earliest producer of

entertainment-education operating independent of government to produce shows that were informing and entertaining (Cody, Fernandez, & Wilkin, 2004). During the early 1970s, Miguel Sabido directed two of the earliest theoretically based Mexican shows, *Ven Conmigo* (Come With Me) and *Acompaname* (Accompany Me). Both programs were successful in changing public perception of women and behavior concerning issues of family planning (Sabido, 2004). Sabido's (2004) serial dramas allowed listeners to identify with the characters in the program, which had a greater effect on their mindset and decisions surrounding sexual behavior.

EE has been applied more frequently internationally than within the United States for various reasons. American television is driven by bottom-line concerns for large audiences and lucrative commercial sponsorship (Beck, 2004). In the US, it is less likely that an entire program will be solely dedicated to addressing a particular issue. Some of the reasons for this have attributed to greater financial risks, greater private control of media, and less government enforcement of health messages in media. It is very expensive to create a drama series that is focused on changing health behaviors, particularly a program of the high quality that American audiences are accustomed to watching (Kennedy, Beck, & Freimuth, 2008).

Although EE is more common internationally, there have been various efforts to develop EE as the US government has stepped up efforts to collaborate with other organizations and the media. Governmental and nongovernmental organizations collaborated with media companies to produce a variety of programs. The Population Communication Center was one of the earliest organizations to establish a partnership with CBS in the 1970s to produce programs that addressed population issues (Poindexter, 2004). This partnership resulted in shows such as M*A*S*H, Maude, The Mary Tyler Moore Show, and All in the Family addressing social

concerns. Governmental and nongovernmental organizations, such as population communication center, also collaborated with academic organizations to produce entertainment-education.

The production of EE has also increased as various American universities, such as Harvard University and the University of Southern California, have also collaborated with media writers and producers on EE projects. The Harvard Alcohol Project produced EE messages that addressed drunk driving in the late 1980s. The project was successful in embedding the designated driver concept within 75 television programs and changing attitudes regarding drinking and driving (Singhal & Rogers, 2004). In 2002, the Norman Lear Center at the University Southern California established the Hollywood Health and Society program from an earlier CDC funded pilot project to target diverse audiences regarding diseases. The CDC still works with Hollywood Health and Society to provide health information to producers and writers. Hollywood Health and Society also provided resources to media with tip sheets on their website, panel discussions with the Writers Guild of America, and expert consultation providing health information for EE.

Examples of HIV/AIDS Prevention in American EE. In October of 1985, actor Rock Hudson died of AIDS and coincidentally, just a month later, the earliest EE program on HIV/AIDS, the television movie *An Early Frost*, was widely viewed by American audiences (Blotcher, 2010). On November 11, 1985, after two years of development and thirteen script revisions, NBC aired *An Early Frost* (Jones, 2002). The movie told the story of Michael Pierson, played by Aidan Quinn, a successful Chicago lawyer who confronted his parents with the news that he was both gay and had been diagnosed with AIDS (Jones, 2002). The movie boldly addressed homophobia and misconceptions regarding HIV/AIDS. Director John Erman insisted the movie not only be emotionally gripping, but medically accurate. Erman hired a medical specialist and joined actor Aidan Quinn in group therapy meetings for men with AIDS (Blotcher, 2010). Despite initial criticism by broadcast executives, *An Early Frost* garnered high ratings, four Emmy Awards, and wide acclaim for its depiction of AIDS survivors. Jones (2002) commented that the movie "offered points of identification for many viewers who, at the time, would have never imagined themselves feeling emotionally affected and morally engaged by the suffering of a person with AIDS and his family (n.p.)." *An Early Frost* made it more appealing for other popular television shows to address HIV/AIDS in years to come, such as *Another World* (1987), *Oprah* (1987), *As the World Turns* (1988), *The Real World: San Francisco* (1994), and *Touched by an Angel* (1996) (Blotcher, 2010).

EE on HIV/AIDS was incorporated into the storylines of popular shows often for one episode, but some shows produced storylines with an extended HIV/AIDS message. One such show with an extensive HIV/AIDS storyline was *The Bold & The Beautiful. The Bold & The Beautiful* was one of the most popular television programs worldwide, with approximately 300 million viewers in 110 countries (Beck, 2004). In 2001, the executive producers worked with the CDC to create a storyline that addressed HIV testing, partner notification, HIV/AIDS stigma, and persons living with HIV/AIDS. On August 3, 2001, viewers were just as surprised as the character Tony to learn of his HIV diagnosis during a trip to the doctor. An analysis of the response to the show found that the CDC hotline number, aired after the program, received the largest number of calls for the entire year, after Tony revealed his status to his fiancé (Kennedy et al., 2004). Information-seeking behaviors continued to be stimulated as call numbers were 1000 times higher during the time the show aired.

Programs that incorporated EE, like *The Bold & The Beautiful*, were able to change attitudes and motivate viewers to seek information in regard to HIV/AIDS as well as other issues

(Beck, 2004). One in five daytime drama viewers indicated television as their primary source of information, half of regular television viewers reported taking some type of action after viewing a program, with African-American women even more likely to take action than other groups of viewers (Beck, 2004). The current study examines the responses of African Americans to EE-based HIV/AIDS prevention messages. It will analyze a program that was designed for African Americans in the KNOW HIV/AIDS campaign.

The Kaiser Family Foundation's KNOW HIV/AIDS campaign was monumental in partnering with Viacom executives to develop HIV/AIDS messages within their shows in order to reach most at-risk groups, such as ethnic minorities, women, people under the age of 25, and MSM. The campaign initially addressed the one million Americans who had HIV/AIDS by beginning the campaign with shows such as *Queer as Folk, Becker*, and *The District* (Needle, 2003). However, they also included HIV/AIDS prevention messages in seven additional African American situation comedy shows to address the staggering proportions of infection among African Americans.

The campaign was launched in 2003 through public service announcements (PSAs), television shows, radio, print and internet messages all with the goal of reducing HIV infection and saving lives (Needle, 2003). In 2003, Viacom was owner of Nickelodeon, BET, MTV, and several other cable networks (Needle, 2003; Tannen, 2003). After agreeing to partner with Kaiser Family Foundation for the KNOW HIV/AIDS campaign, Viacom executives implemented the first top-down requirement of writers to incorporate AIDS awareness topics within the storylines of their primetime dramas and sitcoms. Sumner Redstone, Viacom's chief executive officer, stated that, "clearly, ignorance is a direct contributor to the spread of the disease" (Tannen, 2003, p. 1440), thus the goal of the campaign was to increase knowledge on

HIV/AIDS. The Kaiser Family Foundation worked with producers and writers at Viacom to include HIV/AIDS information in television shows that specifically targeted African American audiences, such as *Half & Half, The Parkers, One on One,* and *Girlfriends* (Kaiser Family Foundation, 2003). Viacom was one of the few media companies to see the value in promoting their HIV/AIDS campaign in African-American comedies. Mel Karmazin, President of Viacom, realized that their shows reached audiences most affected by HIV/AIDS stating, "When we launched KNOW HIV/AIDS, we tailored its message to reach these at-risk audiences" (Kaiser Family Foundation, 2003).

The present study examined African American responses to HIV/AIDS prevention messages in EE context, assuming that EE format is effective in persuading people to accept promoted health behaviors. The theoretical framework on which this study is based will be discussed below.

Theories and Models Explaining EE Effects

The current study expands upon the EORM model (Moyer-Gusé, 2008). The EORM model incorporates elements from several theories, including Social Cognitive Theory (Bandura, 1986). EORM adopted the SCT assumption that it is possible for people to learn new behaviors by viewing television characters successfully perform those behaviors and this is particularly likely to occur when people identify with the characters. However, learned behaviors will not be reproduced without sufficient motivation. There is a possibility that resistance, such as counterarguing, can be exhibited by the viewer. Extended Elaboration Likelihood Model (Slater & Rouner, 2002) was developed to address how resistance can be overcome as the viewer becomes absorbed within the narrative. The current study assumes that identification should lead to lower counterarguing and greater self-efficacy, which will produce greater safe sex intentions.

It also incorporates the moderating role of distrust between identification and the outcome variables. The following section will elaborate in more detail on the basic theories and concepts used to explain EE outcomes and expectations.

Entertainment Overcoming Resistance Model (EORM). Moyer-Gusé's (2008) EORM was designed to explain how people respond to and process EE-based prevention messages by focusing on how viewers overcome resistance to the persuasive message. This study will focus on how identification with characters can help overcome the resistance of counterarguing, which is particularly relevant to creating self-efficacy through HIV/AIDS preventative messages. More understanding is needed on how beliefs and attitudes may actually precede changes in selfefficacy and behavioral intentions. Slater and Rouner (2002) suggest that vicarious learning may be more likely to occur through identification with EE characters, as role models can enhance self-efficacy and aid in the adoption of new behaviors. This study discusses how identification with characters enhances self-efficacy, decreases counterarguing, and increases behavioral intentions (Moyer-Gusé & Nabi, 2010). The following section will briefly review the contribution of theories such as SCT and E-ELM, then discuss all key variables and the relationships between and among them. Lastly, it will introduce two additional variables to the EORM which are participants' gender and medical distrust, and will explain how they may influence outcomes.

Social Cognitive Theory (SCT). Social cognitive theory is one of the earliest and most widely-used theories to explain the potential EE effects on viewers' attitudes and behaviors (Bandura, 1986, 2004a; Sood, Menard, & Witte, 2004). SCT focuses on how people learn new behaviors from others, focusing on cognitive processes and motivational factors influenced by their environment, including mediated environments as well as their personal lives. SCT

specifically describes how learning and performing a new behavior will take place, and under which conditions learning is more (or less) likely to happen and why. What is relevant to EE is that SCT asserts the ability of people to learn behaviors by observing media characters and role models (Bandura, 2004b). The two key concepts that are particularly relevant to EE are observational learning and self-efficacy (Bandura, 1982).Observational learning can occur as an individual observes a model, either in real-life or through media, to learn certain values, skills, and/or behavior exhibited by the model.

The four key cognitive processes in observational learning that facilitate behavioral learning are attention, retention, reproduction, and motivation (Bandura, 1986). The first process in observational learning is *attention*. The individual must first become aware and pay attention to the behavior being modeled in order to learn and process the information. In general, greater attention is given if the behavior is modeled in an expressive or emotional way, if the model is considered attractive, and if viewers experience emotional arousal while watching the program (Bandura, 1986). People will often reproduce the behaviors they find to be similar to themselves and with whom they can identify (Bandura, 2001). Models that share more similarities with the observer are more influential in increasing his or her self-efficacy.

The second process involves *retention* of the modeled behavior. The individual must be able to retain or remember the action being modeled. One will not be able to duplicate action until the information is stored in one's memory. Retention is enhanced through cognitive structuring of information, where one calls to mind what is already known about the topic in order to organize new information about the topic. Once the behavior is retained in the cognitive framework of the individual, it can be retrieved to apply in other situations. Reproduction refers to the stage where information cognitively stored in one's memory (i.e., the learned action) will be translated into appropriate behaviors. The process of mental re*production* is the mental performance of the action modeled.

In the final *motivational* stage, the learned behavior will be evaluated based on the perceived behavioral outcomes, such as rewards or punishments associated with the behavior. Social cognitive theory assumes that individuals would not necessarily be motivated to perform all learned behaviors, which is related to outcome expectancies. Outcome expectancies can vary in type and form, such as tangible monetary rewards or intangible verbal recognition, direct reinforcement of receiving adoration for an accomplishment, or vicarious reinforcements of seeing someone else celebrated. The support or lack of support from family and peers can also influence one's behavioral decisions. Another concept relevant to the current study is self-efficacy. Like outcome expectancies, a sense of self-efficacy may affect one's behavioral decisions.

Self-efficacy. Self-efficacy refers to one's "judgments of how well one can execute courses of action required to deal with prospective situations" (Bandura, 1982, p.122), which may affect one's motivation to learn and perform a modeled behavior. In general, people will tend to avoid situations they do not feel adequately prepared to manage. Lower self-efficacy is associated with less effort in attempting a behavior or likelihood of performing the behavior. In contrast, higher self-efficacy or perceived confidence in one's ability is associated with a greater likelihood of performing the behavior and continuing to perform behavior even in the midst of obstacles. Self-efficacy may be determined by many factors, including the complexity or difficulty of the behavior, the amount of exposure to the behavior, and one's personal experience, existing attitudes, etc. For instance, safe sex self-efficacy can be decreased by a lack

of experience, such as never using a condom. Safe sex self-efficacy could also be decreased by negative past experiences, such as previous failed attempts or experiencing a defective condom, and by negative emotions, such as feeling fearful of suggesting condom use (Murray-Johnson & Witte, 2003).

In sum, SCT suggests that people not only learn things from real-life members of their environment, but also from fictional characters on television as long as they are able and motivated to do so (Bandura, 2001). The EE message can increase the likelihood of learning by gaining viewers' attention to the behavior/model, and motivating viewers to perform the behavior through presenting rewards or punishments of the behavior in way to enhance a sense of self-efficacy.

Although SCT is helpful in explaining influences on psychosocial processes, it has been criticized for various reasons. It is critiqued for containing a bias toward individual decision-making that is limited to individual application and disregards larger cultural and structural influences (Edgar et al., 2008). SCT has also been criticized for being limited in predicting EE effects because it does not account for the cognitive processing schemas viewers bring into message interpretation (Nabi & Clark, 2008). For example, Nabi and Clark's (2008) study found that intentions to model safe sex behaviors influenced participants' personal experience of unsafe sex, more so than whether the message was positively or negatively reinforced by others. In response to these limitations, Moyer-Gusé (2008) proposed the entertainment overcoming resistance model (EORM), arguing that theoretical development of the processing of entertainment-education messages requires cognitive mechanisms that produce narrative persuasion. EORM incorporated concepts from SCT such as self-efficacy and the assumption that without sufficient motivation viewers will not perform the learned promoted behavior

(Bandura, 2004a). It also added counterarguing from Extended-Elaboration Likelihood Model (E-ELM; Slater & Rouner, 2002) to explain EE effects.

E-ELM. E-ELM places emphasis on the role of identification and absorption. E-ELM is useful to provide greater understanding of the beliefs, purposes, and motivations that viewers bring to viewing of EE (Slater & Rouner, 2002). Slater and Rouner (2002) stressed how existing beliefs may be contrary to the behavior endorsed by EE characters. In their E-ELM, Slater and Rouner (2002) addressed how EE programs draw viewers into EE narrative messages, emphasizing the role of identification with modeled characters and absorption. They suggested that how the EE content meets goals or motivations of the viewers may influence the degree to which viewers become absorbed within the narrative and identify with characters.

Counterarguing. Counterarguing is defined as the creation of thoughts that dispute or are not consistent with the persuasive message (Slater & Rouner, 2002). Narrative elements of EE, such as character identification and absorption, can reduce the ability or inclination to counterargue the message (Green & Brock, 2000, Moyer-Gusé, 2008; Slater & Rouner, 2002). Moyer-Gusé (2008) explained that entertainment-education has the greatest potential to fully engage the audience member and have the potential for less rejection when compared to non-narrative messages. This is due to the audience being less aware of persuasive goals of the message, and that identification with a character will overcome selective avoidance by creating a willingness to adopt the knowledge, attitudes, and beliefs of the character as their own (Moyer-Gusé & Nabi, 2010).

A study comparing persuasive messages on nutrition and found that narrative forms increased attitudes supporting public policy on obesity and produced less counterarguing for participants, when compared to non-narrative forms. (Niederdeppe, Shapiro, & Porticella, 2011).

Narrative forms were expected to lead to greater persuasion than non-narrative forms because they produce greater identification with characters, realistic storylines, transportation, and less counterarguing. Niederdeppe et al. (2011) discussed the need for further clarification of counterarguing into distinct categories. Their research described different types of counterarguing that emphasized cognitive arguments with the message, emotional frustration or anger regarding the position, and nonreactive counterarguments that simply state an opposing position without refuting the proposed position or displaying negative emotions. EORM addressed how EE messages can reduce counterarguing and also how identification is a key component in reducing counterarguing.

Identification. Identification is one of several ways an audience member can respond to individuals in the media (Hoffner & Cantor, 1991). Character identification has been described as a feeling by the audience member that they share common goals, interests, or values with the communicator or character (Cheney, 1983). Livingstone (1998) described identification as being able to put oneself in another person's shoes and see the world through that person's eyes. This conceptualization is applied in narrative media texts, where audience members are able to go through the cognitive process of stepping out of their own personal identities to imagine themselves as the media character. Wollheim (1974) revealed how the process of imagining oneself as the character is what distinguishes identification from imitation by having an internal process, while the act of imitation is an external behavioral process that occurs outside of oneself.

Identification has been conceptualized in different ways. The imaginative element of identification begins in our childhood and is a normal process in shaping one's own identity (Erikson, 1968). As we learn to identify with others, we begin to solidify how we see ourselves.

Burke (1969) defined identification as sharing the interests of another, or perceiving that one shares the interest of someone else. Previous studies of identification have analyzed the social effects of media on society and how identifying with others allows one to view the world from the perspective of another, shaping one's own self-identity and social attitudes (Erikson, 1968; Maccoby & Wilson, 1957).

EORM incorporated the assumption of character identification's role in increasing absorption within the narrative and reducing resistance to the message. Character identification in EORM is not the same as similar concepts of homophily (similarity to character) or parasocial interaction (pseudo-interaction with media characters), where the viewer is making judgments about the character. Rather, EORM applied Cohen's (2001) definition of identification, where someone sees him/herself as the character. For the purpose of this study, Cohen's (2001) definition was applied as consistent with the EORM utilization of this definition. Cohen (2001) defines character identification as the process that occurs when viewers are able to relinquish their own identity and fully absorb themselves within the character's goals, feelings, and thoughts. Cohen criticized how previous discussions of identification have not led to clear conceptualizations, often being compared to other audience responses such as parasocial interaction, liking, similarity, and imitation. Cohen's (2001) concept of identification involves four key components. The first component is empathy for the character, feeling similar emotions. The second component is the cognitive aspect of sharing the perspective of the character, where the viewer believes that he or she understands the character's motivations. In the third component, the viewer feels motivated to perform similar behaviors or behavioral goals as the character. In the last component, the process of absorption occurs which refers to the degree to which self-awareness is lost in viewing. Absorption is a cognitive action that involves stepping

out of one's own identity and adopting the emotions, beliefs or thoughts, goals, and motivations advocated by the media character. The dramatic nature of entertainment-education potentially creates an environment that can cause more absorption within the media message. The level of character identification can vary from a momentary feeling to a strong connection where one forgets one's role as an audience member and becomes immersed in the beliefs and goals of the person with whom one identifies.

Identification effects. Identification with a character can cause a short-term adoption of the beliefs of a media character or a more permanent change in perspective as one identifies with a social group, parent, or spouse (Cohen, 2001). Some film research argued that the production of movies with a particular perspective of the director through camera angles, as well as the act of viewing a movie in a darkened theatre without interruptions, is more conducive to establishing identification with the characters than is television (Flitterman-Lewis, 1987).

McQueen, Kreuter, Kalesan, and Alcarez. (2011) studied the effects of cancer videos on African-American women. Their study found that greater identification with African-American breast cancer survivors featured in the video produced less counterarguing from viewers. African-American women who identified with the lead characters also perceived fewer barriers to adopting preventative behaviors and engaged in greater cognitive rehearsal of breast cancer prevention information. As the women participants identified with other women who had overcome breast cancer they felt greater self-efficacy in their own ability to model successful behaviors in preventing and reducing their chance of dying from breast cancer.

How and why audiences identify with media characters has been previously questioned in research (Brown & Fraser, 2004; Cohen, 2001). Cohen (2001) discussed that effective conceptualization of identification will likely influence how messages can be designed to cause

greater identification, which can lead to positive changes in behavior. Cohen (2001) asserted that increased identification with a media character should promote greater enjoyment and positive outcomes of the message, with a lesser degree of criticism.

Identification, self-efficacy, and counterarguing. EORM provided various propositions based on the dramatic or entertainment features of EE. EORM proposed that identification with a character would increase self-efficacy of the viewer to adopt story consistent attitudes and behaviors. Identification with efficacious characters who model sexual prevention discussion should increase self-efficacy and in turn influence intentions to perform similar behavior (Moyer-Gusé, Chung, & Jain, 2011). If the viewer is stepping into the mindset of the character and the character is successful in performing the behavior, then the participant should feel greater efficacy in performing the modeled behavior. In general participants may feel, "If they can do it, so can I." Bandura (2004a) explained that when a model is rewarded for performing a particular behavior, it positively motivates and reinforces the behavior in the viewer's mind. Furthermore, when a viewer identifies with a similar or attractive model, the viewer is more likely to attend to and imitate the model's behavior. As a participant identifies with characters who overcome a challenging health behavior change, it will increase his or her self-efficacy in performing that behavior (Moyer-Gusé, Chung, & Jain, 2011). In the case of this study, viewers who identify more with the actors discussing and getting tested for HIV/AIDS should have greater self-efficacy in discussing and being tested for HIV/AIDS themselves.

EE effects on identification and self-efficacy have been studied in various countries. In 1993, in Tanzania, Population Communications International developed an EE program entitled, *Twendena Wataki* (Let's Go with the Times), that quickly became the most popular radio drama in Tanzania (Poindexter, 2004). Bandura's (1977) social learning methods were applied in the program, which was designed to enhance identification with characters, self-efficacy, and vicarious learning of the listeners. Positive characters modeled promoted behaviors and negative role models behaved contrary to promoted behaviors. Transitional characters were also created to model the transition from negative to positive behaviors. In the program, Tunu's husband Mkwaju, a negative character, lived a riotous life and eventually lost his life to AIDS. Tunu transitions to take control of her life and models more positive behaviors that will protect her from HIV. Researchers found in 1995 that over 53% of 4.8 million Tanzanians exposed to the program actually listened, and in 1997 the audience tuning into the show increased to 58% of the total population (Vaughan & Rogers, 2000). In part through identification with positive and transitional role models, *Twendena Wakati* was able to increase knowledge and self-efficacy regarding HIV/AIDS prevention, as well as increase the behavior of interpersonal communication regarding HIV/AIDS (Vaughan & Rogers, 2000).

Bandura (2001) argued how similar models are more influential than dissimilar models in increasing the self-efficacy of the observer as they identify with characters. Beck (2004) explained that minority women are more likely to reproduce behaviors when they identify with the characters in an entertainment-education program. African-American women were particularly more likely to make behavioral changes after viewing health information featured on an entertainment television program (Beck, 2004). Kreuter et al. (2010) research found that African-American women strongly identified and attended to culturally similar models. Identification with culturally-similar characters and content should produce increased attention and likelihood to adopt modeled behavior.

Greater identification with media characters should also decrease critical thoughts or counterarguing of the message (Slater & Rouner, 2002). EE messages have the potential to be

more accepted and to decrease counterarguing because the message is viewed not as overtly persuasive in intent (Moyer-Gusé, 2008). Audiences are often unaware of the persuasive effects of the message as they identify with the character and put themselves in the role of the character (Moyer-Gusé, 2010). Research has found that increased identification was associated with less counterarguing and greater self-efficacy (Moyer-Gusé & Nabi, 2010). The dramatic nature of entertainment-education creates an environment where the audience is able to become fully absorbed within the message and undergo the process of identification (Moyer-Gusé &Nabi, 2010). Moyer-Gusé (2008) stated how narrative elements allow those viewing to be "sucked in" to the dramatic world of the program where they relinquish their own objections as they identify and adopt the mindset of the character. Slater and Rouner (2002, p. 180) further argued that, "absorption in narrative and counterarguing are fundamentally incompatible" because if a person is able to offer rebuttals they are not fully absorbed into the storyline or identifying with the characters.

Further examination of the construct of identification is important in understanding EE effects. Slater and Rouner (2002) explained how identification is a vital component in reducing counterarguments by viewers, but they also acknowledge that identification is a complex construct with varying results in previous research. For example, Slater and Rouner (2002) revealed gender differences in response to persuasive messages where female identification with opposite sex characters resulted in support of the persuasive message, but male identification with the opposite sex character did not result in support of the persuasive message. More analysis of the various factors influencing identification effects, such as gender differences and medical distrust, is needed to understand how it relates to the process of identification.

Additional Factors Influencing Identification Effects. Various researchers (Moyer-Gusé, Chung, & Jain, 2011; Sharf, Freimuth, Greenspon, & Poltnick, 1996; Slater & Rouner, 2002) have discussed how character identification is one of the key variables in narrative persuasion. This study not only explores the key variables included in EORM, but also addresses how a participant's gender and medical distrust may influence the effects of character identification. In particular, the present study examined how African-American viewers' level of distrust may interact with their level of identification with male and female lead characters in responding to HIV/AIDS prevention messages.

Gender. Hether and Murphy (2010) argued that gender is one of the most important predictors of identification with a media character. Bandura (2001) argued that people should be more likely to identify with people who are similar to themselves. There are researchers that advocated that female viewers may identify more with a female lead and a male may identify more with a male lead (Singhal & Rogers, 1999; Valente et al., 2007). Research has not provided a clear understanding of how gender of the participant may influence identification with fictional characters.

Past research examining gender differences in audience response to sexual messages reported mixed findings. For example, Moyer-Gusé and Nabi (2010) examined the effectiveness of entertainment-education messages on unexpected pregnancy prevention. Their research found that participants in this study identified with both male and female lead characters in the dramatic narrative condition as opposed to a nonnarrative condition, so that the identification measures were collapsed (Moyer-Gusé, Chung, & Jain, 2011). Moyer-Gusé and Nabi (2010) also found that female participants showed a greater increase in safe sex intentions than males. Moyer-Gusé and Nabi's (2010) research findings supported their assumptions that character identification, with a male and female lead in *The OC*, a television drama, reduced counterarguing and increased perceived vulnerability to unplanned pregnancy (Moyer-Gusé & Nabi, 2010). Subsequent research on a *Sex and the City* program on sexually transmitted infections (STIs) prevention, found that identification with lead characters enhanced self-efficacy in discussing and being tested for STIs, as well as reduced counterarguing of the message by both male and female participants (Moyer-Gusé, Chung, & Jain, 2011).

Other studies have found that participants strongly identify with characters of the same gender. For example, White women's identification with Nancy on *thirtysomething*, and young Latinas' identification with female characters in Spanish telenovelas are examples of identification with same gender characters (Sabido, 2004; Sharf et al., 1996).Valente et al. (2007) looked at the effects of a male lead on male viewers' knowledge acquisition about nutrition and exercise. Although character identification was not directly measured, they found greater knowledge increases among male respondents (but not females) when a male character was featured. These results may be related to the previous assumptions regarding identification increasing EE effects (Moyer-Gusé, Chung, & Jain, 2011).

Medical distrust. The current study also addresses how identification effects may be moderated by medical distrust. There is no previous research examining the influence of medical distrust on identification effects or EE outcome variables. Therefore, it is difficult to know how medical distrust will influence the relationship between identification and variables such as counterarguing or self-efficacy. However, research has shown how medical distrust, particularly by African Americans, has been rooted in past discrimination and racial segregation (LaVeist et al., 2000). Medical injustices are often related to incongruence with and suspicion of doctors and medical information. Medical distrust in the source of HIV messages has been found to negatively influence attitudes regarding HIV/AIDS (Herek et al., 1998). For example, Herek et al. (1998) examined African American perceptions of informational videos on AIDS, and reported that African American's preexisting medical distrust of White doctors likely influenced their perceptions of the HIV/AIDS video. Other research reveals that African American audiences find same-race characters to be more credible or trustworthy, which contributes to reception of media messages (Fujioka, Ryan, Agle, Legaspi, & Toohey, 2009; Herek & Capitanio, 1993). The level of participants' medical distrust is likely to influence how identification relates to other outcome variables.

Medical distrust, counterarguing, and self-efficacy. This study examines how medical distrust is related to counterarguing and self-efficacy. Medical distrust typically hinders people's acceptance and compliance with recommended medical procedures, preventive testing, and even their uses and access to the health care system (Corbie-Smith et al., 2002; LaVeist et al., 2000). The current study will use an HIV/AIDS narrative storyline, which promotes safe sex practices by lead characters, including safe sex discussions and visiting a doctor to be tested for HIV/AIDS. Viewers' identification with the lead characters endorsing these practices should facilitate this process. This study explores how viewers' level of medical distrust may moderate the effects of identification on self-efficacy and counterarguing.

Herek et al. (1998) discussed how medical distrust is a preexisting attitude, which may influence African Americans in particular when viewing health information. It is assumed that viewers are not a blank slate when they come to view an EE message, but that people possess preexisting values, norms, and attitudes that will influence their motivation and self-efficacy to perform a behavior (Moyer-Gusé, Chung, & Jain, 2011). Cognitive rehearsal of behavior can increase self-efficacy (Bandura, 1986), and research has shown how trust is positively related to increased self-efficacy regarding health behaviors (Ye, 2010).

Low self-efficacy and high medical distrust have proven to be barriers in prevention. The current study will explore if the influence of identification on self-efficacy is moderated by the level of medical distrust of the participant. It is assumed that as medical distrust increases the positive relationship of identification on self-efficacy will be stronger. Kacanek et al. (2012) found that a lack of trust in medical information provided about contraceptives led to lowered contraceptive use. Higher self-efficacy can be attained through vicarious experiences of seeing others' performance positively rewarded or observing others experience personal fulfillment after meeting goals (Bandura, 1982). Studies have found self-efficacy to be a determining factor in the prediction of condom use among African-American college students, where students with greater perceived confidence in their ability to use condoms were more likely to use condoms on a consistent basis (Burns & Dillon, 2005). Another study found that interventions modeling assertiveness by women in addressing HIV prevention have been found to increase the selfefficacy of African-American young women regarding actual discussion with partners (Wingood & DiClemente, 2002). It is not known how these effects may differ when medical distrust is introduced. The following model has been adapted to explain how medical distrust may moderate the relationship between identification and self-efficacy.

The following heuristic model is used to aid in understanding the process and relationship of the variables used in this study. The model is based on an earlier EORM study (Moyer-Gusé, Chung, & Jain, 2011) but does not include perceived vulnerability and discussion behavior, since these variables were not a part of the current study. As shown in the model, identification should lead to lesser counterarguing and greater self-efficacy, which produces greater safe sex intentions. The model also illustrates the moderating influence of distrust on the relationships between identification and both counterarguing and self-efficacy.



Figure 3: Heuristic Model of Current Study

Current Study. The current study explored how African American college students responded to an EE message on HIV/AIDS prevention discussion, particularly based on identification with African American main characters. Participants viewed an EE program featuring African-American actors explaining the importance HIV/AIDS testing. The EE message in this study provides a social script on how to discuss HIV/AIDS with a partner, health professional, and friends. The female character, Natalie, models how to discuss getting tested with a romantic partner. The male character, Flex, displays how to address testing in a social setting and with a health professional. Through these discussions Flex overcomes his fear of being tested and eventually educates others on the importance of testing. This study sought to understand how cultural influences, such as medical distrust and gender differences, may be related to message resistance and behavioral intentions.

According to EORM (Moyer-Gusé, 2008), the narrative elements in EE help to reduce counterarguing and increase self-efficacy of viewers. The current study is based on original propositions established in Moyer-Gusé's (2008) framework of EORM, but will expand on a more recent study (Moyer-Gusé, Chung, & Jain, 2011) by incorporating gender differences and medical distrust as possible sources of message resistance. The study by Moyer-Gusé and her colleagues explored identification with EE characters in the program *Sex and the City*, who modeled STI discussion and testing behaviors. The study revealed how the program *Sex and the City* provided a social script to address taboo topics, such as sexual behavior, and the lead characters modeled how to talk to their doctor and partners about STIs. The lack of an appropriate script or model of sexual prevention discussion has been found to be a hindrance to HIV/AIDS prevention among African American participants (DiClemente et al., 2008).

EE programs abroad and within the US have revealed how EE can be a useful tool in addressing prevention (Kennedy et al., 2008; Wilkin et al., 2007). There is still more research needed in order for EE analysis to move forward in a systematic way (Greenberg, Beck, Salmon, Cole, & Patel, 2004). More knowledge is needed on why and how audiences identify with particular characters, which would require understanding of the cognitive processes involved in identification. Conversely, understanding why audiences do not identify with characters or storylines and reject the message and/or behaviors modeled by characters in the program is also important. Further understanding of how cultural influences, such as medical distrust and gender differences, may be related to counterarguing or behavioral intentions is also needed. These questions have led to the following hypotheses and research questions.

Hypotheses.

Identification with lead characters. This study utilizes Cohen's measurement of identification. Cohen (2001) defined identification as the process by which "audience members experience reception and interpretation of the text from the inside, as if the events were happening to them" (p. 245). The effectiveness of narrative videos in increasing identification with characters and enhancing recall of content has also been found in EE research (Moyer-Gusé, 2008). Narrative stories help audience members to process complex health information by grasping their attention, increasing understanding, and helping them to remember the message. Entertainment-education, as a type of narrative communication, has the ability to draw viewers, minimize resistance of the message, and increase identification (Kreuter et al., 2007).

Greater identification with media characters should decrease counterarguing of the message and increase self-efficacy as participants become absorbed within the message (Slater & Rouner, 2002). Identification with characters who model behaviors should lead to less inclination to counterargue the value of the modeled behaviors and also should increase viewers' confidence in their ability to re-produce those behaviors on their own (Bandura, 2004a). For example, research found that after watching characters in an EE program who modeled discussion of STI testing and safe sex behaviors, participants who identified more with these characters had less counterarguing and greater behavioral intentions than participants who identified less with the characters. As SCT suggested, their study also found that identification with characters who modeled safe sex behaviors increased self-efficacy of participants regarding safe sex discussion and testing (Moyer-Gusé, Chung, & Jain, 2011). This study assumes that, as in previous research, greater identification with characters will motivate participants to take on similar intentions, behaviors, and enhance their perceived ability to adopt the behaviors.

Viewers in the present study also are expected to counterargue less and be more motivated to discuss HIV/AIDS and get tested when they identify with characters that are perceived as similar to them (Bandura, 2004a). It is assumed that the dramatic influence of the storyline will reduce the need to counterargue, particularly when same race and gender characters share from their own experience. Based on this assumption of SCT, participants who identify more strongly with a same-gender character may be more likely to have greater selfefficacy in performing the behaviors promoted by the character. However, less is known about how participants' identification with an opposite gender character may influence self-efficacy or counterarguing of the message. As to viewers' identification with an opposite-gender character, past research examining gender differences in audience response has reported mixed findings (Addis & Holbrook, 2010). The current EE episode includes an African-American female lead modeling an assertive role in requiring her partner be tested before they can consider having sex. Cameron (2001) explained that a male is motivated to maintain his dominant position, whereas a female would be motivated to assert more power and improve her gender position. Cultural influences can also play a role in how a participant may identify with a character or adopt the behavior the character models.

Reflecting gender power orientation in African American community, research suggests that the African-American males may be more defensive to the females' request in discussing and being tested for HIV/AIDS (Wingood & DiClemente, 2002). It is thus possible that the role modeled by the female lead character in the episode may resonate with the African-American females, but not with the African-American males. Female participants may interpret the safe sex behaviors endorsed by the male lead character as consistent with what the female character requested. The male character is compliant with the female character, so, there is at least no

apparent reason to prevent African-American females from identifying with the male lead character.

The male lead character is rewarded in the episode with the affection of his girlfriend and support of his friends for being tested. The actual performance of modeled behaviors is reinforced as viewers see the rewards given to the character. Social cognitive theory proposed that an individual who sees the rewards associated with a behavior will be more motivated to engage in that behavior and have greater self-efficacy, particularly when one identifies with the character (Moyer-Gusé & Nabi, 2010). The negative consequences associated with an observed behavior could also persuade an individual not to engage in a behavior. In this study, viewers see the modeling of safe sex discussion and testing behaviors rewarded, which should reinforce their intentions to perform these behaviors. Based on previous research, the current study predicts the following:

Hypothesis 1a: Greater character identification with male and female leads will be related to less counterarguing.

Hypothesis 1b: There will be an interaction between male identification and participant gender such that the negative relationship between male identification and counterarguing will be stronger for male participants than for female participants.

Hypothesis 1c: There will be an interaction between female identification and participant gender, such that the negative relationship between female identification and counterarguing will be stronger for female participants than for male participants.

Hypothesis 2a: Greater character identification with the male and female leads will be related to greater self-efficacy.

Hypothesis 2b: There will be an interaction between male identification and participant gender such that the positive relationship between male identification and self-efficacy will be stronger for male participants than for female participants.

Hypothesis 2c: There will be an interaction between female identification and participant gender such that the positive relationship between female identification and self-efficacy will be stronger for female participants.

Research Question 1: Is there any gender difference in the level of identification with male and female characters?

Medical distrust and identification. Reflecting on African American cultural and historical experiences, this study examines the role of medical distrust in African American responses to HIV/AIDS narrative messages. Research has found that medical distrust can influence AIDS attitudes and beliefs and distort perceptions of risk (Herek et al., 1998). Research revealed evidence of African American medical distrust regarding HIV/AIDS information, with males being more likely to believe in conspiracy theories and distrust medical information (Klonoff & Landrine, 1999). This may be related to remembrance of the widely-publicized Tuskegee study on African American males. Past and recent discrimination has caused African-American males to be particularly skeptical of medical research (Klonoff & Landrine, 1999).

Bandura (2004a) commented on the ability of EE messages to increase character identification to motivate behavior change. This study seeks to understand previously varying results in EE effects, and how variation in a viewer's response to EE may be related to individual beliefs, such as medical distrust. Hoyt et al. (2012) explained how medical distrust may interfere with the acceptance of prevention messages. Herek et al. (1998) discussed how AIDS-related distrust, in particular, is a key issue to be addressed in understanding African American's response to HIV/AIDS messages, as it is likely to influence prevention behaviors. Herek et al.'s study predicted that preexisting levels of distrust would be related to negative evaluations of HIV/AIDS informational videos and results indicated that a percentage of the variance in video evaluation was explained by AIDS-related distrust. Medical distrust could also increase the potential of participants to counterargue the message. Kreuter et al. (2007) explained how medical distrust could serve as a form of resistance to message effects. Herek et al. (1998) further stated how suspicion based on historical medical injustices can lead participants to dispute medical messages from distrusted sources and when the source is not believed the target audience is less likely to adopt AIDS prevention strategies that the source is advocating.

For this study, it is assumed that preexisting medical distrust should increase counterarguing of the message. In addition, distrust may moderate the relationship between identification and counterarguing, such that identification reduces counterarguing more for participants high in medical distrust. Thus, the following hypotheses were proposed:

Hypothesis 3a: Greater medical distrust will be related to greater counterarguing.Hypothesis 3b: There will be an interaction between medical distrust and character identification, such that the negative relationships between identification and counterarguing (proposed in H1a) will be stronger at higher levels of distrust.

Medical distrust could also lower self-efficacy to create an additional barrier to the adoption of prevention behaviors. Self-efficacy involves the perception that one has the capability to perform a task on his or her own (Bandura, 2001). Kacanek et al. (2012) found participants with greater medical distrust to be less efficacious in performing suggested contraceptive use. Lack of trust resulted in less efficacy by participants in using prevention products as directed. It is likely that there would be less motivation to carry out the behavior of a discredited source or message that is not trusted (Herek et al., 1998). For this study, it is expected that medical distrust will possibly moderate the relationship between identification and selfefficacy, such that identification increases self-efficacy more for participants with high medical distrust. Thus, the study predicts an interaction between character identification and the medical distrust level of the participants:

Hypothesis 4a: Greater medical distrust will be related to lesser self-efficacy.

Hypothesis 4b: There will be an interaction between medical distrust and character identification, such that the positive relationships between identification and self-efficacy (proposed in Hypothesis 2a) will be stronger at higher levels of distrust.

Predicting safe sex intentions from counterarguing and self-efficacy. Finally, based on the EORM and research findings (Moyer-Gusé, 2008; Moyer-Gusé, Chung, & Jain, 2011), the current study looks at how the variables of self-efficacy and counterarguing, facilitated by greater character identification, are related to safe sex intentions. In regard to discussion and testing self-efficacy, viewers may be more likely to consider discussing HIV/AIDS or getting tested when they are confident in doing so (Bandura, 2004a).

Assessing counterarguing will reveal critical thoughts of the narrative message regarding safe sex practices that people might have in mind while watching the episode. The dramatic influence of the storyline reduces the ability to counterargue. Additional research on narrative television messages found greater viewer self-efficacy and less counterarguing after viewing an EE message that modeled safe sex discussion (Moyer-Gusé, Chung, & Jain, 2011). Moyer-Gusé and her colleagues found counterarguing to be a negative predictor of safe sex discussion intentions. In another study on HIV/AIDS, distrust and HIV conspiracy beliefs were associated with more negative attitudes about HIV/AIDS and African-American MSM with higher levels

distrust were less likely to have been tested for HIV/AIDS (Hoyt et al., 2012). Thus, the present study proposes:

Hypothesis 5: Greater counterarguing will be related to lower safe sex intentions.

Hypothesis 6: Greater self-efficacy will be related to greater safe sex intentions.
CHAPTER THREE: METHODOLOGY

This chapter discusses the methodology used within the present study. The study is a survey of African American participants. A description of the research design is presented, including the participants, recruitment, and stimuli. The study measures and data analyses are described.

Research Design

In this study, participants completed two sessions. The pre-session involved an online survey of questions via the Survey Monkey data collection website. In the subsequent study session participants viewed an EE program where the main male and female characters modeled discussion of HIV/AIDS testing and the process of being tested. After viewing the EE program, participants responded to various measures. More detailed information will be provided in the procedures section below.

Participants

This study initially recruited 248 undergraduate students enrolled at a southeastern university who self-identify as African American/Black or mixed with African American/Black, and were age 18 and over. Undergraduate students were recruited from communication and psychology courses. In order to ensure adequate numbers of African American students, a convenience sample was used to solicit participation from African American students.

Though a total of 248 students participated in the pre-session survey, it was discovered in preliminary analysis that 94 students did not complete the subsequent study session and were not included in the final analysis, leaving a total of 154 students. The reasons for the low completion of the second part of the study are not completely known, but some students were not present during the second study session for various reasons. It is possible that the taboo nature of topic

prevented them, or that some unrelated reason kept them from class that day. Because participants who personally know someone with HIV are often biased in how they will respond to messages about HIV, participants who mentioned that they or someone they knew had HIV (N = 12; 8%) were also not included in final analysis, leaving a remaining 142 participants.

The participant age range was from 18-52. The mean age for participants was 23.62 (*SD* = 6.42). Participants were predominantly female (n = 104, 68%). The remaining 38 (32%) were male participants. Students were predominantly in their second year of college (n = 50, 35%) or their fourth year (n = 39, 27%). The remainder were in their first (n = 17, 12%), third (n = 27, 19%), or fifth year or above (n = 9, 6%). Most participants had experienced sexual intercourse (n = 119, 84%), while the remaining 23 (16%) had not experienced sexual intercourse. Most participants had prior involvement in a relationship (n = 137, 96%), only 5 (4%) had not. Participants predominantly identified as heterosexual (n = 115, 81%), others identified as gay/lesbian (n = 8, 6%), bisexual (n = 9, 6%) or other (n = 10, 7%). Participants reported being in an exclusive dating relationship (n = 63, 44%), not dating (n = 60, 42%), a non-exclusive relationship (n = 14, 10%), or married (n = 5, 4%).

When reporting on their most-preferred source for health information, the internet was mentioned most often (n = 94, 61%), followed by their parents (n=29, 19%). When asked about their second most-preferred source of information, television and the internet were mentioned most often, each by a little more than one quarter of the sample (n=43, 28% for both), followed by their parents (n=36; 23%).

Procedures

Participants completed informed consent forms before participating in both pre-session and study session (see Appendix A and C). Participants completed an online pre-questionnaire to identify eligibility and to indicate personal traits, such as medical distrust, religiosity, demographic information, and other relevant information such as sexual risk level. Approximately two weeks later, participants who completed the pre-session survey and agreed to participate in a study session viewed an episode of *One on One* discussing HIV/AIDS testing in a classroom computer lab. Students viewed individual computer screens with headphones and were spaced at least one chair apart from one another. There were from 9 to 22 students in each study session. The episode was 23 minutes when commercials were deleted.

Subsequently, participants completed a web-based survey on a computer. The survey measured key response variables of, character identification, medical distrust, counterarguing, safe sex intentions, testing and discussion self-efficacy, and HIV/AIDS knowledge on a computer. In a few cases (approximately 25) where computer labs were not available, participants viewed the show as a group on a projected screen and completed written questionnaires. These responses were later entered into the computer via the survey monkey system.

Stimulus

One episode of the program *One on One* was viewed by participants. *One on One* is an African American sitcom about a single father, Flex, raising his teenage daughter. It often shows the relationship trials of both himself and his daughter. This episode features his girlfriend, Natalie, as they address sexual intimacy as Valentine's Day approaches. This program was selected as having high production quality, being produced for prime-time television by top broadcast company, Viacom, to promote awareness about HIV/AIDS in an EE format. The program was included in Viacom's Know HIV/AIDS campaign. In addition, the show included accurate health information on HIV/AIDS and prevention methods (Kaiser Family Foundation,

2003). *One on One* was produced on UPN, featuring a predominantly all African American cast. The show was also highly rated among African Americans during its airing from 2001 until 2006. In 2006, the show went in to syndication with various affiliates and was eventually bought by BET in 2009. *One on One*, as a top-rated African American sitcom, had been seen by a majority of participants (72%, n=102) and watched somewhat frequently with a mean of 4.86 (SD = 1.52) on a 7-point scale with one being never watched the show to seven, watching weekly.

The show used for the study aired in 2003. In the episode participants viewed, Flex was required by his girlfriend, Natalie, to take a HIV test before they considered having sex. Natalie was the main advocator for HIV prevention discussion and testing. If it were not for Natalie, Flex would not have been tested, as he thought of himself as healthy. When Flex went to the doctor and was asked about his sexual history, suddenly imaginary boxes of all the people he slept with and the people they slept with, entered his mind. The doctor, an African-American woman, then informed Flex about three facts on HIV/AIDS; (a) one in three people who have HIV do not know they have it, (b) HIV is a leading cause of death for African Americans, and (c) two out five people contract it from heterosexual sex. Flex appeared somewhat anxious to get the test done and less interested about the facts.

Flex was supported by others in the community, who were also tested. For example, while at the barbershop, workers shared that they were regularly tested and the importance of being tested. He initially felt he had nothing to worry about with the test, but later became anxious about the test and got upset with his girlfriend and friend over insignificant issues. He began to feel depressed and thought he may die if he had HIV, but his friends explained even if he did have HIV, it is not a death sentence. He eventually became at peace with however the test

results turned out and was willing to accept whatever his fate may be. Finally, Flex received a call from the doctor and he found out that he did not have HIV. He celebrated with Natalie and a friend who were there when he received the doctor's call. In the end, he educated his teen daughter on HIV prevention. The episode was able to address a serious topic in a light and humorous way, by including jokes throughout. However, it also served as a model of partner communication about HIV testing and the process of going to be tested.

Measures

The study used existing measurement scales, with adapted versions of these as needed, to measure key response variables. These include; character identification, counterarguing, self-efficacy, safe sex intentions, and medical distrust. Unless stated otherwise, all key variables were measured on a 7-point scale, ranging from 1 to 7. Prior to computing scales, reverse coding for some measures was performed as needed.

Pre-Session Measures. The pre-session measured medical distrust, demographic measures (gender, age, race, year in college, sexual orientation, and relationship status), and several additional control variables (religiosity and sexual risk level). Appendix B provides a copy of all the questions in the pre-session survey.

Medical distrust. Medical distrust was measured with nine items on medical distrust adapted from previous research (Corbie-Smith et al., 2002; LaVeist et al., 2000). Sample items include, "If a physician wanted me to participate in research, I trust that they would fully explain it to me" and "A physician would not ask you to participate in research if he or she thought it would harm you." The items were based on a Likert-type scale with (1) strongly disagree and (7) strongly agree. A higher score for this scale indicated a higher degree of medical distrust (α =.67). HIV/AIDS distrust was also measured by participant's agreement with two AIDS distrust items (Bird & Bogart, 2005; Klonoff & Landrine, 1999). The items included, "I believe information is being withheld from the public regarding a cure for HIV/AIDS," and "I believe that HIV is a man-made disease intentionally created by the federal government to destroy the black race." A higher score for this scale indicated a higher degree of HIV/AIDS distrust. This measure was not used in the final analyses due to its low reliability (α =.59). In addition, background variables were measured via existing instruments.

Demographics. The pre-session study included demographic items to provide a descriptive analysis of the participants and to ensure the study objectives are met. The initial survey asked participants to state their race, as the study was targeted to African American students, due to their higher level of risk for contracting HIV. Participants were also asked to report their gender, age, year in college, sexual orientation, relationship status, and medical history. Medical history asked participants if they or someone they know have various illnesses, including HIV/AIDS. As stated earlier, participants who responded yes to HIV/AIDs were not included in the study.

After the viewing session, participants were also asked about their media use. Media use questions briefly asked which sources are most frequently used in seeking health information as results were discussed earlier.

Control variables. Several measures were included for use as control variables: religiosity, ethnic identification, and level of personal involvement in sexually risky behaviors (sexual risk level).

The religiosity measure included five items from the Lukwago, Kreuter, Bucholtz, Holt, and Clark's (2001) religiosity scale (α =.84). The scale incorporated dimensions of religious

participation in spiritual acts and beliefs about God. Examples of the items include, "I often read religious books, magazines, or pamphlets," and "I rely on God to keep me in good health." The scale is based on a 7-point Likert-type scale with (1) indicating strongly disagree and (7) indicating strongly agree. A higher score for this variable indicates higher religiosity.

All respondents identified as African American. Their level of ethnic identification was measured by four items from Luhtanen and Crocker's (1992) group salience or importance to identity dimension, of the collective self-esteem scale (α =.75). Sample items included, "The ethnic group(s) I belong to are an important reflection of who I am," and "In general, belonging to ethnic group(s) is an important part of my self-image." A higher score indicated a higher level of ethnic identification. This item did not show significance as a controlling variable in preliminary research and was not used as a control in the final analysis.

Sexual risk level was assessed by 13 questions adapted from Dancy's (1991, AKFBQ) scale that measured participants' sexual behavior that may put them at risk of contracting HIV/AIDS. A few questions asked were, "Have you ever engaged in sexual intercourse with anyone?" and within the last six months, how likely participants "Knowingly had sex with someone with HIV/AIDS." The 7-point scale ranged from 1-very unlikely to 7- very likely. A higher score for this variable indicated greater sexual behavior risk (α =.76).

Main Study Survey Measures. The study session survey was given after presentation of the episode. It measured the following key variables: character identification, counterarguing, discussion and testing self-efficacy, and safe sex intentions. It also included some HIV/AIDS knowledge items. Appendix D provides a copy of all the questions in the study survey.

Character identification. Character identification with the male lead character and female lead character were measured separately by using Cohen's (2001) 10-item identification scale. A

combined total of 20 items composed of ten questions for the male and female leads. The items were rated on a Likert scale with (1) indicating strongly disagree and (7) indicating strongly agree. Sample items include, "I think I have a good understanding of Flex's/Natalie's character," and "At key moments in the show, I felt I knew exactly what Flex/Natalie was going through." The higher the score, the more the participant identified with each character. For identification with male characters, reliability was α =.86, and for identification with female characters, reliability was α =.94.

Counterarguing. Counterarguing was measured with five items adapted from earlier research (Moyer-Gusé & Nabi, 2010). Examples of the questions include, "While watching the program, I sometimes found myself thinking of ways I disagreed with what was being presented" and "I sometimes felt like I wanted to 'argue back' to what was going on onscreen." The items will be based on a Likert-type scale with (1) indicating strongly disagree and (7) indicating strongly agree. A higher score for this scale indicated a higher degree of counterarguing (α =.86).

In addition, counterarguing was measured with one open-ended item asking respondents to write down any thought they might have about the discussion between the male and female lead characters. This question was asked at the end of the closed ended questions above.

Discussion and testing self-efficacy. Self-efficacy was measured with five items adapted from earlier research (Moyer-Gusé, Chung, & Jain, 2011). The items asked participants how confident they are engaging in behaviors modeled by main characters in stimuli. For example, the measure included how confidently they could "ask a potential sex partner if he/she has ever been tested" and "get tested for HIV/AIDS." The items were on a scale with (1) indicating not at all confident and (7) indicating completely confident. A higher score for this scale indicated a higher degree of efficacy (α =.92). *Safe sex intentions.* Intentions measured the likelihood of participants to engage in safesex practices with five items from previous research (Moyer-Gusé, Chung, & Jain, 2011). For example, it asked how likely participants would be to "ask a potential sex partner if he/she has ever been tested" and "get tested for HIV/AIDS." The items were be based on a scale with (1) indicating not at all likely and (7) indicating very likely. A higher score for this scale indicated a higher degree of intention to perform safe sex behaviors (α =.95).

Additional Study Measures. The survey also included some items to be used for later analysis. On the pre-session and main study survey, knowledge items were included on HIV/AIDS information provided on the programs. The six questions were based on a true/false scale. The main study session also included message assessment factors, such as credibility, accuracy, and familiarity of the program. Participants were also asked to rate how they felt watching the program. For example, they reported the extent to which they felt fearful, motivated, insulted, or encouraged. Participants also rated various characteristics about the HIV message, such as how strongly the message was informative, believable, or accurate. Participants were also asked a few questions about their familiarity with the show and episode viewed in the study session. Additionally, participants' perceived similarity and liking of the characters was also measured. The respondents were asked to share how much they liked or felt similar to the leading male and female characters.

CHAPTER FOUR: RESULTS

Overview of Analyses

A series of hierarchical multiple regression analyses were used to examine hypotheses and research questions. The goal of the research was to observe how viewing the stimulus was related to outcome variable responses. The dependent variables for this study were counterarguing, self-efficacy, and safe sex intentions. All variables included in interactions were centered. Initially, reliability statistics and descriptive statistics were run using SPSS, version 21. Tests of normality, homogeneity, and outliers were performed using histograms, box, and scatter plots. Outliers were further assessed using Mahalanobis and Cook's distances. Multicollinearity was checked by running collinearity statistics with each regression analysis.

The study includes analyses with some missing data. Missing data is the result of incomplete surveys, where participants skipped some items. Missing items on multi-item scales were replaced with the mean of the scale. Other missing data were not included in final analyses.

The analysis began by seeking a greater understanding of the role of character identification by examining how the gender of respondents may interact with identification to influence counterarguing (Hypothesis 1) and self-efficacy (Hypothesis 2). This was examined because recent EORM research (e. g., Moyer-Gusé, Chung, & Jain, 2011) suggests that gender may influence people's safe sex intentions and other relevant variables. Next, the study examined the role of medical distrust – alone and in interaction with character identification -- in participants' responses to the message, specifically counterarguing (Hypothesis 3) and selfefficacy (Hypothesis 4). The analysis also addresses whether greater counterarguing is related to greater safe sex intentions (Hypothesis 5). Lastly, it addresses whether greater self-efficacy is related to greater safe sex intentions (Hypothesis 6). All of the regression analyses used a forced entry block procedure, which will be described below.

Hypotheses 1 and 2 were tested by running hierarchical regression analyses for each of the dependent variables of counterarguing (H1) and self-efficacy (H2). Controlling variables were entered first, which included sexual risk level, religiosity, and age, as a forced entry block. Sexual risk level was used as a control because it was more likely that a respondent's participation in risky behavior might affect his/her responses to a HIV/AIDS prevention message and future intentions toward safe sex behavior. The age of the participant may also influence sexual experiences and future intentions toward safe sex behavior decisions (Dixon, 2007). Gender was entered second, followed by character identification in the third step. Separate character identification variables were included, one measuring identification with the male character and another measuring identification with the female character. Lastly, the interaction terms between gender and each of the male/female character identification measures, were entered as a block in the fourth step.

Research question one examined whether male and female respondents differed in identification with the male versus female lead characters. This question was examined via two paired sample t-tests.

Hypothesis 3 and hypothesis 4 examined the role of medical distrust in counterarguing (H3) and self-efficacy (H4). Again, two regression analyses predicting counterarguing and self-efficacy were conducted. The controlling variables of gender, sexual risk level, religiosity, and age were entered first as a forced entry block. Sexual risk level, religiosity, and age were used for the reasons stated earlier as well as for how they may influence medical distrust. Gender was

included as a control because a participant's gender also could influence responses to the messages and self-efficacy to discuss or get tested for HIV. Medical distrust was entered as the second block, followed by male/female character identification in the third block. Lastly the interaction terms between medical distrust and character identification with the male and female lead were entered in the fourth block.

Hypotheses 5 and 6 examined whether safe sex intentions were predicted by counterarguing (H5) and self-efficacy (H6). To address this hypothesis, a regression analysis predicting safe sex intentions was conducted. The same block entry procedure described above was used for the controlling variables; gender, sexual risk level, religiosity, and age were entered first as a forced entry block. Distrust was included in the second block. The two identification variables were entered into the third block. Then self-efficacy and counterarguing were entered together in the last block.

Descriptive Statistics

The means and standard deviations for the key variables -- male and female character identification, self-efficacy, safe sex intentions, counterarguing, distrust, religiosity, and sexual risk level are given in Table 1. Mean differences between males and females on the same variables are shown in Table 2.

Overall, as shown in Table 1, participants highly identified with both the male leads in the program and had a low level of counterarguing. Participants reported relatively high levels of self-efficacy and safe sex intentions. This indicates that participants felt comfortable in discussing HIV and their ability to get tested. They also reported a relatively low level of sexual risk. Medical distrust was moderate, just below the mid-point on the rating scale.

Table 1

	М	SD
Male Identification	5.70	1.11
Female Identification	5.87	1.23
Counterarguing	2.18	1.18
Self-efficacy	6.08	1.24
Medical Distrust	3.23	.96
Safe Sex Intentions	6.46	1.00
Religiosity	4.80	1.56
Sexual Risk Level	2.51	1.16

Variable Means and Standard Deviations

Note. Results are based on the use of 7-point scales (1 to 7).

Gender Differences. Regarding gender differences in response patterns, as indicated by Table 2, female respondents indicated significantly higher safe sex intentions than male respondents. Moyer-Gusé, Chung, and Jain (2011) found a similar finding of greater safe sex intentions by females. Females also reported a significantly lower sexual risk level than did males. This may be influenced by the greater religiosity shown by female participants. As to medical distrust, male respondents possessed significantly greater level of medical distrust than female respondents.

		A 1					
	Ν	lale	Fem	ale			
	М	SD	М	SD	t value		
Male Identification	5.76	1.15	5.70	1.10	.29		
Female Identification	5.61	1.33	5.99	1.17	-1.64		
Counterarguing	2.24	1.25	2.15	1.15	.42		
Self-efficacy	5.88	1.27	6.20	1.16	-1.51		
Medical Distrust	3.63	.89	3.04	.93	3.50**		
Safe Sex Intentions	6.14	1.37	6.56	.74	-2.12*		
Religiosity	4.28	1.84	5.04	1.3	-2.46**		
Sexual Risk Level	2.80	1.18	2.32	1.09	2.43*		

Means, Standard Deviations, and t tests by Gender

* $p \le .05$; ** $p \le .01$

Note. Results are based on independent sample t-tests between males and females. The n for males ranged from to 44 to 45, and the n for females ranged from 93 to 96.

Regarding research question 1, on if there were any gender differences in the level of identification with same gender character and opposite gender character, there were mixed findings. As shown in Table 2, male and female participants identified highly on average with both opposite and same sex lead characters, with no significant identification difference between male and female participants. However, as shown in Table 3, the paired sample t-test revealed that female participants identified with the female lead (M = 6.03, SD = 1.17) significantly more

than they did with the male lead (M = 5.69, SD = 1.10). However, male participants didn't exhibit any difference in character identification based on the gender of the character.

Table 3

Means, Standard Deviations, and Paired t tests within Gender

	Male Identif	ication	Female Ider	ntification	
	М	SD	М	SD	t Value
Males	5.76	1.10	5.63	1.34	.87
Females	5.69	1.10	6.03	1.17	-3.34**
	5.09	1.10	0.03	1.17	-3.

** p ≤ .01

Note. Results are based on paired sample t-tests within males (n = 47) and females (n = 90).

Table 4

Correlations Between Variables

		2	3	4	5	6	7	8	9	10
1.	Male Identification	.70***	26**	.40***	23**	.36***	13	.10	.14	05
2.	Female Identification		32***	· .35***	23**	.54***	22**	.09	.08	.14
3.	Counterarguing			18*	.14	30***	00	.05	.13	05
4.	Self-efficacy				29***	.54***	21**	.14	.22**	.06
5.	Medical Distrust					24**	.26**	35***	.02	20*
6.	Safe Sex Intentions						23**	.16	.17	21**
7.	Sexual Risk Level							30***	.12	16
8.	Religiosity								.11	.21
9.	Age									09
10	. Gender									

*p < .05, ** $p \le .01$, *** $p \le .001$

Note. Gender is a dichotomous variable where male = 0 and female = 1. For Male Identification, Female Identification, and Sexual Risk Level, N=139. For Medical Distrust and Gender, N=138. For all other variables, N=141.

Correlation Analyses. Correlation analyses are shown in Table 4. As suggested by Moyer-Gusé, Chung, and Jain (2011), the results indicated that identification with the male and female lead were highly correlated. Male and female character identification were negatively correlated with counterarguing, medical distrust and positively correlated with self-efficacy and safe sex intentions. Female identification was negatively correlated with sexual risk level, but this was not the case for male identification.

The key variables of self-efficacy and safe sex intentions were also positively correlated with each other, supporting previous research. It is likely that if a participant feels he/she has the ability to carry out the behavior, the participant should also have greater intentions to actually carry out the behavior.

Medical distrust was also significantly related to many of the key variables of this study. It was positively correlated with counterarguing, but negatively correlated with male character identification, female identification, safe sex intentions, and self-efficacy.

Sexual risk level was negatively correlated with self-efficacy and safe sex intentions. Gender was related to safe sex intentions and medical distrust, with females having higher safe sex intentions compared to males and lower medical distrust. Lastly, age was positively correlated with self-efficacy. This suggests that as participants get older and perhaps more experienced, they are more comfortable talking about HIV with others and getting tested for HIV.

Counterarguing: Qualitative responses. In regard to the type of counterarguing by male and female participants, respondents were asked to provide comments on how they disagreed with the content of the message or how lead characters were displayed. As shown in Table 5, only 12 respondents offered counterarguing thoughts. Because of this limited number of

responses in general and a lack of male comments in particular, the study was not able to address gender differences in the type of counterarguing. However, counterarguing statements are briefly discussed below. Each statement is from a different respondent. The greatest disagreement participants had was that they did not agree with the male character's motivation in the beginning for being tested. For example, one participant stated, "I felt like Flex wouldn't have gotten tested at all if he didn't want to have sex w/ Natalie." Three other counterarguments (2, 7, 12) expressed that he should not have to be bribed or motivated, but should want to know his HIV status for his own benefit. Participants also shared moral beliefs in regard to the program, such as "I believe sex is only for marriage."

Table 5

Counterarguing Statements

- 1. "I believe sex is only for marriage."
- 2. "The only part I disagreed with was Flex taking the test for the sole purpose of sleeping with the girl rather for his own personal knowledge."
- 3. "The only thing I disagree with is I believe in sex after marriage."
- 4. "I didn't feel where both characters are coming from."
- 5. "You have to make sure you yourself are safe so is your partner."
- 6. "I felt like Flex wouldn't have gotten tested at all if he didn't want to have sex w/ Natalie."
- 7. "Flex should understand Natalie's position to get tested before sex to make certain they won't infect each other."
- 8. "Although I am aware of the fact that it is a scripted show, the characters providing information sounded coached. It was not carried out in a way believable to Black people actually knowing such facts and openly having that particular conversation about HIV."
- 9. "Not enough info for those who have HIV."
- 10. "I disagreed with Flex doing it just for sex."
- 11. "Flex was uninformed prior to taking the test."
- 12. "I only disagreed with Flex towards the beginning when he did not want to get tested, and made it seem like he had to be bribed or persuaded into taking the test."

Testing of Hypotheses

Hypothesis 1. Hypothesis 1 examined how character identification (H1a) and the interaction of character identification with respondents' gender (H1bc) related to counterarguing. A hierarchical multiple regression analysis was used to examine the hypothesis. Character identification variables were centered. Results of the analysis appear in Table 6.

Hypothesis 1a stated that greater identification with lead characters would be related to less counterarguing. Results of the regression analysis did reveal that greater identification with female character was significantly negatively related to counterarguing (B = -.26, t = -2.01, p < .05). That is, the more participants identified with the female character the less a viewer counterargued the message. Identification with the male character did not have a significant relationship with counterarguing (B = -.14, *n.s.*). Thus, hypothesis 1a was partially supported.

Hypothesis 1b proposed that there would be an interaction between male character identification and participant gender, such that negative relationship between male identification and counterarguing will be stronger for male participants. The study did not find a significant interaction between participant gender and male character identification. That is, the level of character identification with the male lead did not interact with gender of the participants (B=-.40, *n.s.*). Hypothesis 1b was not supported.

Hypothesis 1c proposed that there would be an interaction between female character identification and participant gender such that the negative relationship between female identification and counterarguing would be stronger for female participants. The level of character identification with the female lead did not interact with gender of the participants (B=.37, *n.s.*). Hypothesis 1c was not supported.

Table 6

	b	SE	В	R ² Change	
Controls				.02	
Sexual Risk Level	.03	.10	.03		
Religiosity	.02	.08	.03		
Age	.03	.02	.14		
Gender (0=male)	09	.24	03	.00	
Character Identificatio	n			.13**	
Male ID	15	.13	14		
Female ID	25	.12	26*		
Interaction				.02	
Gender x Male ID	52	.38	40		
Gender x Female ID	.46	.33	.37		

Regression Predicting Counterarguing

*p < .05, **p <.01.

Note. b's in the table represent unstandardized regression coefficients at entry and *B*'s are standardized coefficients at entry.

Hypothesis 2. Hypothesis 2 examined how character identification (H2a) and the interaction of identification with respondents' gender (H2b and H2c) related to self-efficacy. Results of the regression analysis appear in Table 7. Hypothesis 2a stated that greater identification with lead characters would be related to greater self-efficacy. According to the results, identification with the male character was significantly positively related to self-efficacy

(B = .29, t = 2.42, p = .02). That is, the more participants identified with the male character, the greater their perceived ability to discuss HIV or to get tested for HIV. However, this was not the case for female character identification (B = .10, n.s.). Hypothesis 2a was partially supported.

Regression Predicting Self-Efficacy						
	b	SE	В	R ² Change		
Controls				.14**		
Sexual Risk Level	27	.10	25**			
Religiosity	.09	.07	.11			
Age	.05	.02	.23**			
Gender (0=male)	.13	.23	.05	.03		
Character Identification	n			.12**		
Male ID	.32	.13	.29*			
Female ID	.08	.12	.10			
Interaction				.06		
Gender x Male ID	05	.36	04			
Gender x Female ID	35	.31	28			
			Adjus F (9	ted $R^2 = .24$ (119) = 5.49**		

Table 7

 $p \le .05, p \le .01$

Note. b's in the table represent unstandardized regression coefficients at entry and B's are standardized coefficients at entry.

In regard to hypothesis 2b, it was proposed that there would be an interaction between male character identification and participant gender, such that the positive relationship between male identification and self-efficacy would be stronger for male participants. The analysis revealed that the interaction of gender and male identification was not significant (B=-.04, *n.s.*). Thus, hypothesis 2b was not supported.

Hypothesis 2c proposed that there would be an interaction between female identification and participant gender such that the positive relationship between female identification and selfefficacy would be stronger for female participants. The results revealed that the interaction of gender and female identification also was not significant (B=-.28, *n.s.*). Hypothesis 2c was not supported.

Hypothesis 3. Hypothesis 3 examined how medical distrust (H3a) and the interaction between character identification and distrust (H3b) relate to the dependent variable of counterarguing. Results of the regression analysis that addressed these hypotheses appear in Table 8.

Hypothesis 3a predicted that greater distrust would be related to greater counterarguing. The hierarchical regression analysis revealed that higher distrust was positively related to greater counterarguing, (B = .20, t = 1.95, p = .05). The more participants distrusted medical professionals and research, the more likely they were to disagree with the presentation of HIV information in the stimulus. Hypothesis 3a was supported.

Hypothesis 3b stated that there would be an interaction between medical distrust and character identification, such that the negative relationship between male identification and counterarguing would be stronger at the higher level of medical distrust. The results indicated a

significant interaction between male identification and medical distrust (B=.36, t = 2.97, p<.01). The results are shown in Table 8.

	b	SE	В	R ² Change
Controls				.02
Sexual Risk Level	.02	.11	.02	
Religiosity	.03	.08	.04	
Age	.03	.02	.13	
Gender (0=male)	11	.25	04	
Medical Distrust	.25	.13	.20*	.03*
Character Identification				.12**
Male Identification	12	.14	11	
Female Identification	27	.13	28*	
Interaction				.06*
Male ID x Distrust	.42	.14	.36**	
Female ID x Distrust	26	.13	25*	
			Adjusted I	$R^2 = .24$ 8) = 3.68**

Table 8

Regression Predicting Counterarguing by Identification and Medical Distrust

*p < .05, ** $p \le .01$

Note. b's in the table represent unstandardized regression coefficients at entry and B's are standardized coefficients at entry.

The nature of the interaction was further analyzed using Preacher, Curran, and Bauer's (2006) interaction tool. Preacher et al. (2006) applied Aiken and West (1991) interaction research to develop an online utility to analyze interaction slopes. In order to show the relationship between male identification and counterarguing at higher and lower distrust levels, a plot of that relationship was done at three levels of distrust: 1 standard deviation above the mean, at the mean, and 1 standard deviation below the mean. The online tool provided a plot of the simple slope of the relationship between male character identification and counterarguing at the three levels of distrust. Figure 4 shows these results.

Hypothesis 3b predicted that there would be an interaction between medical distrust and character identification, such that the negative relationship between identification and counterarguing (proposed in H3a) would be stronger at higher levels of distrust. Figure 4 shows that this hypothesis was not supported for male identification. At the highest level of medical distrust, the slope was the opposite of what was predicted; specifically, as the level of male character identification increases, so does the amount of counterarguing, indicating a positive relationship. This finding is also inconsistent with H1a, which predicted, overall, a negative relationship between character identification and counterarguing.

The interaction between female identification and medical distrust also was significant (B=-.25, t = -2.08, p < .05), but the nature of the interaction differs from that of male identification, as indicated by the negative beta. Using Preacher et al.'s (2006) interaction tools, the study further examined the relationship between female character identification and counterarguing at different levels of distrust (Figure 5). The analysis indicated that the nature of the relationship was consistent with H3b. That is, the negative relationship between female character identification and counterarguing was stronger at higher levels of medical distrust.

Hypothesis 3b therefore was partially supported; specifically, it was supported for female identification but not male identification.





Male Identification



Hypothesis 4. Hypothesis 4 examined how medical distrust (H4a) and the interaction effect between distrust and character identification (H4b) were related to self-efficacy. The regression analysis addressing these hypotheses is presented in Table 9. As shown in the table,

distrust was negatively related to self-efficacy (B = -.23, t = -2.46, p = .02). The more participants distrusted medical personnel and information, the less likely they were to perceive that they would be able to discuss HIV information or get tested for HIV. Hypothesis 4a was supported.



--- high distrust



Female Identification

Figure 5. Relationship between Female Identification and Counterarguing, by Medical Distrust Level

In regard to hypothesis 4b, it was predicted that there would be an interaction between distrust and character identification in predicting self-efficacy, such that the positive relationships between identification and self-efficacy would be stronger at higher levels of distrust. However there was not a significant interaction between distrust and either male or female identification. Thus, H4b was not supported.

Regression Predicting Self-Efficacy by Identification and Medical Distrust					
	b	SE	В	R ² Change	
Controls				.13**	
Sexual Risk Level	27	.10	24*		
Religiosity	.08	.08	.09		
Age	.05	.02	.24**		
Gender (0=male)	.14	.25	.05		
Medical Distrust	31	.12	23*	.04*	
Character Identification	1			.10**	
Male Identification	.28	.13	.25*		
Female Identification	.10	.12	.10		
Interaction				.03*	
Male ID x Distrust	05	.14	04		
Female ID x Distrust	.21	.12	.20		
			Adjusted F (9,10	$R^2 = .30$ (8) = 5.14**	

Table 9

* $p \le .05$, ** $p \le .01$

Note. b's in the table represent unstandardized regression coefficients at entry and *B*'s are standardized coefficients at entry.

Hypotheses 5 and 6. Hypotheses 5 and 6 examined if counterarguing (H5) and selfefficacy (H6) were related to participants' safe sex intentions. The study used the same block entry procedure described above, then counterarguing and self-efficacy variables were entered together in the final block. Results of this regression analysis appear in Table 10.

	b	SE	В	R ² Change
Controls				.13**
Sexual Risk Level	18	.09	20*	
Religiosity	.06	.06	.08	
Age	.03	.02	.20*	
Gender (0=male)	.45	.21	.19*	
Medical Distrust	20	.11	18	.03
Character Identification	l			.21***
Male Identification	00	.10	.00	
Female Identification	.40	.10	.48***	
EE Processing Variable	5			.14**
Counterarguing	10	.07	12	
Self-Efficacy	.35	.07	.41***	

Table 10

Regression Predicting Safe Sex Intentions by Counterarguing and Self-efficacy

Adjusted $R^2 = .30$ F (9,108) = 5.14**

* $p \le .05$, ** $p \le .01$ ***, p < .001

Note. b's in the table represent unstandardized regression coefficients at entry and *B*'s are standardized coefficients at entry.

Hypothesis 5 predicted greater counterarguing would be related to less safe sex intentions. The regression analysis showed that counterarguing was not significantly related to safe sex intentions, (B= -.12, *n.s.*). Hypothesis 5 was not supported.

Hypothesis 6 predicted that greater self-efficacy would be related to greater safe sex intentions. As shown in Table 10, the regression analysis found that self-efficacy was positively related to safe sex intentions (B=.41, t = 5.08, p<.001). That is, the more confident participants were to discuss or get tested for HIV, the greater their intention to carry out safe sex behaviors. Hypothesis 6 was supported.

In sum, the study found that female character identification was negatively related to counterarguing, whereas male identification was positively related to self-efficacy. Furthermore, medical distrust was related to increased resistance; greater medical distrust was related to more counterarguing and lower self-efficacy. Medical distrust also moderated the relationship between character identification and counterarguing. Finally, self-efficacy was positively related to safe sex intentions. These results are discussed in depth in the following section.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

This study sought to expand current understanding of the role of character identification in people's responses to health messages. EE programs abroad and within the U.S. have demonstrated how EE can be a useful tool in addressing health messages (Kennedy et al., 2008; Wilkin et al., 2007). Previous research has shown that when viewers identify with characters in a media program they are less likely to counterargue the message presented by the characters and they are more likely to feel confident about performing behaviors presented by the characters in the program, which in turn, results in viewers having greater intentions to adapt those behaviors (Bandura, 2002; Moyer-Gusé, Chung, & Jain, 2011; Slater & Rouner, 2002).

Expanding Entertainment Overcoming Resistance Model

Moyer-Gusé's (2008) EORM served as a foundational model in this study, as it was designed to explain how people respond to and process EE-based disease prevention messages by focusing on how viewers overcome resistance to the persuasive message. EORM utilizes concepts such as self-efficacy from SCT (Bandura, 2004a) and counterarguing as presented in Extended- Elaboration Likelihood Model (E-ELM; Slater & Rouner, 2002) to explain EE effects. This study aimed to increase understanding of character identification effects on people's message responses by exploring how a viewer's gender may play a role in their responses to male and female leading characters who modeled the promoted behaviors of HIV/AIDS discussion and testing. In addition, considering the cultural and historical issue of medical injustices in the African American community, the study also addressed whether participants' level of medical distrust may interact with participants' character identification. More specifically, it examined if medical distrust impacted the relationship of character identification and respondents' message responses regarding counterarguing and self-efficacy.

General Findings

This study found that the relationship between identification and outcome variables had varying results, depending on the nature of the character identified and the nature of the responses. Slater and Rouner (2002) previously explained how identification is a vital component to reducing counter-arguments by viewers, but that identification is a complex construct with varying results in previous research. This study found that greater identification with the female lead character predicted less counterarguing; yet, greater identification with the male lead did not (H1a). Greater identification with the male lead character, however, was related to self-efficacy regarding modeled behaviors of testing and safe sex discussion; yet, identification with the female lead was not related to greater self-efficacy (H2a). The discussion will review these findings in more depth, as well as address how participants identified with the characters and the content of the message.

The study assumed that, based on SCT, identification may have a stronger relationship for same-gender characters, suggesting that the relationship of identification on message responses would be stronger when the gender of the character is the same as the gender of the participant. However, the regression analyses found no significant interactions between the gender and male and female character identifications (H1b, H1c, H2b, and H2c) when predicting counterarguing or self-efficacy. These findings will be discussed more in detail below.

Previous research had not included medical distrust as a variable with the EORM model. This study proposed that medical distrust would be another potential source of resistance to health promotional EE messages among African American participants. Greater medical distrust was related to greater counterarguing (H3a) and lower self-efficacy among participants (H4a). Distrust was found to interact with character identification variables in predicting counterarguing. Specifically, medical distrust interacted with female character identification such that the negative relationship between female identification and counterarguing was stronger at higher levels of distrust, but medical distrust did not interact with male character identification and counterarguing (H3b). In regard to self-efficacy, medical distrust did not interact with male or female identification (H4b). These unexpected findings will be discussed further below.

Lastly, the study found that greater counterarguing was not significantly related to greater safe sex intentions as predicted (H5). In this study it must be acknowledged that counterarguing overall was relatively low. However, greater self-efficacy was related to greater safe sex intentions as found in previous research (H6). As participants felt greater confidence in performing HIV prevention behaviors, they also had greater intentions to perform those behaviors in the near future.

Character Identification and Counterarguing

This study proposed that identification with the character should help increase effectiveness of disease prevention messages, in part by reducing counterarguing. Hypothesis 1a predicted that greater character identification would be related to less counterarguing. Regression analysis revealed that there was a significant main effect in regard to female identification, where higher identification with the female lead produced less counterarguing, but not for identification with the male lead. The unexpected finding that character identification with the male lead was not related to counterarguing could be due to the role of the male character, Flex, in relation to the role of the female character Natalie, in the program. Natalie, Flex's girlfriend, was the initial one to advocate that Flex get tested for HIV. She was the key positive role model of safe sex behavior, which included discussing HIV with her partner and being tested. Since Natalie was a positive model for HIV prevention, participants who identified with Natalie agreed with the message of the importance of HIV prevention and would not be as likely to counterargue the message. Unlike Natalie, Flex's character did not start off as a positive role model for safe sex behavior. He discussed the numerous women he had slept with and how he "practiced" safe sex but he was not perfect, indicating that he did not always use protection. It was clearly seen that he was reluctant to be tested for HIV. If Natalie did not insist on seeing the results before they had sex, he probably would not have been tested.

Flex's character served as a transitional model in this message. Bandura (2004a) described transitional models as models that transform during the message from a position of uncertainty and adversity, to becoming in favor of the positive behavior promoted by the program. Flex began as a reluctant participant to HIV prevention, but later became an advocate and model for HIV prevention. Identification with transitional characters should motivate viewers to overcome their own objections to the proposed message and create a positive response to the modeled behavior. However, in this study participants' identification with Flex's initial reluctance may have supported more counterarguing, instead of lessening counterarguing. Also people who agreed with Natalie may have already supported the message before viewing and would be less likely to counterargue.

This study revealed that participants identify with characters differently based on how they are presented in the program, sometimes in ways that produce expected outcomes, but other times in ways that may produce unexpected outcomes. When a model character displays prosocial behaviors, identification is more likely to lead to positive outcomes, however if the character displays some negative attitudes or behaviors, even if they do change to positive behaviors in the end, identification with this character may lead to varying outcomes, such as counterarguing the message.

Character Identification and Self-efficacy

A behavior that is modeled by a character can increase viewers' self-efficacy. In the current study, as participants viewed Flex and Natalie's discussion of HIV prevention, it was assumed that their own self-efficacy to discuss HIV prevention would increase as they identified with lead characters. In a previous study, African American women were more likely to make behavioral changes after viewing health information featured on an entertainment television program (Beck, 2004).

In this study, Hypothesis 2a predicted that greater identification would be related to greater self-efficacy. This hypothesis was supported only for identification with the male lead. The more participants identified with the male character the greater their perceived ability to discuss HIV or to get tested for HIV. This may be related to how Flex, not Natalie, was the one who actually modeled going to the doctor and being tested for HIV. It was assumed that Natalie had already been tested. Flex's character started off with very little efficacy or motivation to be tested. However, after Flex found out his results he was rewarded with the support of his girlfriend, a successful HIV result, and even became a promoter of HIV prevention in educating his daughter about HIV in the end. Bandura (2004a) explained that when a model is rewarded for performing a particular behavior, it positively motivates and reinforces the behavior in the viewer's mind. This may be why those that identified with Flex, in having, may feel greater self-efficacy in the end, in seeing that if he could get tested so could they.

Gender and Character Identification

Predictions in hypothesis 1 and 2 were based on the assumption that gender roles may influence how participants identify with particular characters. Analyses revealed that there were not any significant interactions with gender in regard to hypotheses 1bc and 2bc. However, there was a significant finding found in paired t-tests, showing how female participants identified more with the female lead (Natalie) than they did with the male lead (Flex). The findings in regard to female identification by female participants, may be due to how the lead characters were portrayed in the program and gender role expectations of African Americans. Natalie's role in regard to safe sex prevention in the relationship supports the cultural expectation for African American women to be responsible and self-sufficient (Dixon, 2007). Natalie did model how to initiate discussion with a partner about HIV testing and provided a script that other women could follow. Wingood and DiClemente (2002) found that interventions that model assertiveness by women in addressing HIV prevention have been found to increase the self-efficacy of African American young women regarding actual discussion with partners. Natalie, as the initiator, goes against traditional roles of power. However, African American girls, especially in single-parent homes, are trained from a young age to be self-sufficient and independent (Dixon, 2007). African American participants who identify with Natalie may relate to her strong and independent nature, which may also support their belief in their own self-efficacy to discuss HIV with a partner and get tested. Analyses found that the more participants identified with the male lead the greater their self-efficacy. This could be in part because participants who identified with Flex may have been skeptical, as he was, and seeing him model the behavior of HIV testing was related to higher self-efficacy, whereas Natalie was not seen being tested.

African American males have been found to support more traditional views of gender power than African American females (Buchanan & Salmon, 2008). African American females have been found to support more liberal gender roles but, when economically or socially dependent on a male partner, these women are more likely to take on lesser roles in order to maintain the relationship (Dixon, 2007). Williams et al. (2003), for example, commented on how poverty, hunger, homelessness and other circumstances among African American females, have created a context where immediate survival takes precedence over asserting themselves within relationships even when their own health may be at stake, as in the case of HIV/AIDS prevention behavior.

The way that gender roles are modeled in the program may influence how participants view their own power within relationships. Within the context of the show, it appeared that Flex and Natalie displayed equal roles of power in the relationship, possibly giving Natalie more power initially in being the one to require Flex be tested before sexual intimacy. This power shift may be seen as incongruent with the gender-related norms for some participants. Women who are less educated and come from lower SES may be more likely to find themselves in unhealthy relationships in order to survive, and may be less likely to initiate a discussion about HIV. The women in this study were in college and may not find themselves in positions where survival may cause them to be in unhealthy relationships, where they would be less likely to initiate discussed how the unequal ratio of males to females gives males greater power in sexual decision making (Ferguson et al., 2006). In regards to this study it appears that women did not find themselves powerless as they displayed high self-efficacy and safe sex intentions and gender was not a factor influencing relationship between gender and outcome variables of counterarguing and self-efficacy.

Previous research has not provided a clear understanding of how the gender of the participant may influence identification with same gendered characters. Researchers have argued that gender is one of the most important predictors of identification with a media character (Hether & Murphy, 2010). SCT assumes that observational learning is more likely to occur when the model is similar to the viewer because a similar model receives greater attention and recall of
the behavior. Based on this assumption, this study assumed that gender would play a significant role in how participants identified with the character. Researchers have proposed that female viewers may identify more with a female lead and a male may identify more with a male lead (Singhal & Rogers, 1999; Valente, 2007). In this study, though there were no significant interactions involving gender, there were differences in how gender affected participants' identification with particular characters. In fact, female participants in this study did have significantly higher identification with the female lead than the male lead, but there was no difference in male and female identification among male participants (RQ1).

Past research examining gender differences in audience response to sexual messages reported mixed findings and this research appears to also represent that trend. The study assumed that, based on SCT, identification may have a stronger relationship for same-gender characters, suggesting that the relationship of identification on message responses would be stronger when the gender of the character is the same as the gender of the participant. However, the regression analyses found no significant interactions between the gender and male and female character identifications (H1b, H1c, H2b, and H2c) when predicting counterarguing or self-efficacy.

One reason why there may have been a lack of interactions regarding participant gender could be due to the fact that identification for the male and female lead was high overall. In a similar study by Moyer-Gusé and Nabi (2010) on use of EE in preventing unexpected pregnancy, they found that participants in the study identified with both male and female lead characters in the dramatic narrative condition, as opposed to the nonnarrative condition. They actually combined the variables of male and female identification in the analysis because they were highly correlated and there was no difference in how the identified with characters based on gender. The current study had similar findings of high identification for both male and female characters. Table 2 shows that participants' identification with both the male and female lead was high for both genders, revealing that it is possible to relate to both same-sex and opposite sex lead characters in a health message. It may also be that participants can feel similarity to a character in ways beyond gender, such as in culture, religious beliefs, or goals. This study may reveal how a viewer's gender alone may not be what participant's identify with but how the character was represented in the storyline.

Medical Distrust, Counterarguing, and Self-Efficacy

This study assumed that medical distrust would be related to greater counterarguing. As predicted, greater medical distrust was related to greater counterarguing (H3a) and lower safe sex discussion and testing self-efficacy (H4a). The more participants distrusted medical professionals and research, the more likely they were to argue against safe sex messages presented by Natalie and Flex and the less confident they felt about discussing HIV information or get tested for HIV.

Previous research has shown how medical distrust, particularly by African Americans, has been rooted in past discrimination and racial segregation (LaVeist et al., 2000). Medical injustices within the African American community are often related to the unique influence of medical distrust and suspicion of doctors and medical information. Medical distrust in the source of HIV messages, for example, has been found to negatively influence attitudes regarding HIV/AIDS (Herek et al., 1998). This lack of trust could be related to ways African Americans respond to EE messages on HIV/AIDS promotional messages. In this study, medical distrust seemed to have an unfavorable effect on African American responses in regard to counterarguing and self-efficacy.

Interaction of Identification and Distrust on Counterarguing and Self-efficacy

There were intriguing findings regarding the interaction of distrust with character identification in predicting counterarguing and self-efficacy. First, it was assumed that the more participants identified with the male/female lead, the less counterarguments participants would have. The study also hypothesized that identification would have a greater negative relationship with counterarguing when participants possessed higher levels of medical distrust. This was expected because viewers with greater medical distrust should be more resistant to persuasion on medical topics, and thus character identification should have a greater potential to reduce their resistance to persuasion via counterarguing. Hypothesis 3b was partially supported in that the negative relationship between female identification and counterarguing was stronger at higher levels of medical distrust.

For male identification, on the contrary, respondents who had higher levels of distrust counterargued more than those who had lower distrust as male identification increased. So the more they identified with Flex, the more they counterargued the message, particularly at higher levels of distrust. As stated earlier, this may be due to the transitional nature of Flex's character, that the higher distrust group was the group that identified more with Flex. Individuals with higher medical distrust are more skeptical about health related issues, identifying with the male lead may be related to his reluctance to go to the doctor to be tested, increasing participants' ability to counterargue the message on HIV prevention.

Hypothesis 4b predicted that there would be an interaction between distrust and character identification, such that the positive relationship between male/female identification and selfefficacy would be stronger at higher levels of distrust. This hypothesis was not supported. Significant interactions were not found. However there was a significant negative relationship found between medical distrust and self-efficacy (H4a). The greater the distrust level the less confident participants felt in performing HIV discussions or testing. In regards to why medical distrust did not interact with identification and self-efficacy, this may be related to the negative relationship between medical distrust and self-efficacy. Perhaps the positive relationship between identification and self-efficacy was weakened rather than strengthened by the negative relationship with medical distrust.

Counterarguing, Self-efficacy, and Safe Sex Intentions

Based on the EORM Model, lower counterarguments and greater self-efficacy should be related to greater safe sex intentions (Moyer-Gusé, 2008). The current study found self-efficacy to be a significant factor in predicting behavioral intentions (H6). The higher the respondents' efficacy, the more willing they were to perform the behavior (Bandura, 1982).

The current study, however, did not support previous research that counterarguing reduces participant's safe sex intentions (H5; Moyer-Gusé, Chung, & Jain, 2011). The expectation was that the dramatic nature of entertainment-education would create an environment where the audience would become actively involved with the storyline and identify with the characters, to produce less counterarguing and greater self-efficacy, which would lead to greater safe sex intentions. Lower levels of counterarguing (M = 2.18, SD = 1.18) may have limited the ability of this variable to lower safe sex intentions, which were very high overall (M = 6.46, SD = 1.06, on a scale of 1 to 7). It is possible that identification with the lead characters had a greater influence on increasing safe sex intentions than counterarguing did to lower intentions.

Theoretical Implications

This study sought to meet the need for research and EE analysis to move forward in a systematic way (Greenberg et al., 2004). The current study was based on original propositions

established in Moyer-Gusé's (2008) framework of EORM, but expanded on Moyer Gusé et al.'s more recent study (2011) by incorporating gender within character identification and medical distrust as a possible source of message resistance. The study did suggest that the role of character identification in reducing message resistance depends on the gender of the character and how he/she was presented in the program. For example, the study provided support that identification with the female lead character, not the male lead character, was related significantly to less counterarguing (H1a). Along with that, greater identification with the male lead character, not female lead character, was significantly related to greater safe sex discussion and testing self-efficacy (H2a). Future research should better address how identification with characters can vary based on gender and how the character is represented in the content, such as the role of transitional characters in a storyline. Future research should also consider how the role of culture may influence relational power dynamics in EE studies on relational topics. Additionally, potential resistance caused by other message components, such as fear appeals or even format of show, should be explored.

This study provided greater knowledge on why and how audiences identify with model and transitional characters. This study has shown that identification with a character can influence both positive and negative outcomes in relation to counterarguing and self-efficacy, depending upon how the character is portrayed in the message. For example, participants' identification with the transitional character, Flex, led to higher self-efficacy but also increased counterarguing. When a character is a transitional model or oppositional to the message, it may be possible for viewers to identify with the negative behaviors and mindsets, which could possibly determine the nature of outcomes. It is not known for sure if participants identified with Flex's transition, but it is something that should be further explored in EE research. The role of gender in EE has presented mixed findings in previous research, as was the case in this study. Though gender did not interact with identification, it was useful to include gender to better understand varying aspects of character identification. Identification with either the male or female lead influenced outcome responses for counterarguing and self-efficacy. Female participants did identify more with the female character as opposed to the male character. However it was also interesting to see how participants identified with opposite sex lead characters, which suggests identification goes beyond gender similarity alone. Further theoretical development may explore which other similarities, besides gender, may contribute to character identification, such as age, life experiences, or cultural norms.

Gender roles and sexual discussion are often influenced by religiosity. Though this was not central to this study, participants' religiosity may also influence their responses to questions regarding future efficacy in sexual encounters. Religiosity may also be a factor in participants' efficacy to discuss sexual decisions with their sexual partners. Analyses revealed that women in this study reported greater religiosity than males. Religiosity of participants was negatively related to participation in risky sexual behaviors. Previous research has found that religiosity is related to greater safe sex practices and the practice of abstinence (Lammers, Ireland, Resnick, & Blum, 2000; Wilcox, Rostosky, Randall, & Wright, 2001). The study found that greater selfefficacy was related to greater safe sex intentions. Religiosity may serve as a moderating influence in the relation found between greater self-efficacy and safe sex intentions. That is the higher the religiosity level of the participant the greater the influence of self-efficacy on safe sex intentions.

This study provided greater understanding on key variables included in EORM, but also addressed how medical distrust may influence the effects of character identification in predicting key variables within the EORM model. This study is the first known study to explore the role of medical distrust as a source of message resistance. The current study found that medical distrust did play a moderating role in the relationship of female character identification and counterarguing. The findings suggest that increasing character identification could help reduce possible negative influence of medical distrust on message response variables, such as counterarguing. However, when character identification's influence on outcome variables is unfavorable such as producing more counterarguing, medical distrust could magnify this adverse effect. More research is needed to explore the role of character identification in the EORM model, considering both the nature of character presented in the program and possible moderating variables.

Practical Implications

As suggested above, good models can reduce negative influence of medical distrust when people respond to disease prevention messages. There is very little EE analysis of how cultural and historical factors may influence how participants identify with characters and respond to health messages. More effort needs to involve participants that are more likely to be affected by the health issue being studied. African Americans represent one of the largest racial groups in relation to HIV infection. Hopefully, this research will be one of many that explore the influence of culture on how and why participants respond to health messages, particularly through the use of EE messages. It may help researchers to be less concerned about developing storylines where characters are demographically similar to the viewers, such as being the same gender, but more focused on how viewers can relate and identify with the character and the storyline. Cultural influences on beliefs and values should not be ignored, but utilized in developing meaningful and relevant storylines. This study also explored how gender and power dynamics that place African American women as having less power may be countered by showing strong female leads as the HIV prevention initiators. Participants' identification with Natalie's character, the positive model, was found to be related to less counterarguing. The stimulus program showed a relationship where power was shared between the male and female lead character. Along with this, having a supportive male role model may in the end produce greater self-efficacy, as it did for those who related with Flex's character in this study. Hopefully this study will stimulate research that further analyzes how African Americans consider power dynamics, gender role assumptions, and the role of religiosity in sexual decision making. This study also revealed that medical distrust still has an influence, particularly for African American participants, on message response. In the stimulus used in the current study, medical information was presented by an African American female doctor as well as by lay people in the community. It is important to consider ways to present medical information in a way that increases trust in the information and source of the message.

Limitations

Though this study is useful in incorporating aspects of cultural influences, such as medical distrust, there are also limitations of this study. There are several limitations in regard to the sample used for this study. Firstly, utilizing student participants creates a fairly homogenous group, which limits how generalizable these findings are to people of different education levels, ages, or SES. College students are more regularly exposed to health campaigns and education on health issues, which likely makes them more aware of what the appropriate response should be on many survey questions. Though there is more diversity among college students today, when compared to previous generations, a college student sample cannot be utilized to generalize to society at large.

Secondly, there were twice as many female as male participants in the study which makes this study limited in its' ability to fully compare differences between males and females. Of the males that were recruited, many did not complete the follow-up study session, which resulted in fewer males than expected in the final analysis. The low number of males limited the ability to understand gender differences.

Thirdly, there was also a self-selection bias present within the study. Participants voluntarily selected to be a part of this study. Students that knowingly chose to participate in this study addressing health issues may be more likely to participate in more health-conscious activities in general.

Fourthly, the sample size was smaller than originally planned. Though 248 students completed the initial phase of this study, less than half completed the second study session. It is not known why a large amount of students did not return to participate in the second part of the study, where they would be exposed to the stimulus. These participants could not be included in the final analysis. It is possible that students who were reluctant to hear the message or were more likely to counterargue elected not to participate in this study. Though they did not know details of what the stimulus would include, the informed consent did address the fact that the study was on HIV/AIDS prevention. The pre-session survey asked participants to address sexual history and other topics considered taboo, which may have caused some reluctance for participants to participate in the second phase of the study.

The study also has limited external validity due to the environment of the study. Most participants viewed the stimulus on an individual computer with headphones. They were not able

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to interact with other participants, like they would if they were watching the program as they normally would at their home. Therefore, they may not have responded as regular viewers would.

In addition, due to the popularity of the sitcom *One on One*, many of the participants were regular viewers of the program, so it is likely that they had some familiarity with the lead characters before viewing the study stimulus. One disadvantage of participants being regular viewers of the program is the likelihood that the stimulus alone did not create identification with the characters, but this identification may have been previously established. One advantage is that it may show how regular viewers would have responded to the program at the time.

This study used a cross-sectional design, which means that the data were correlational in nature. As with any such study, the analyses can only be used to determine relationships among the variables, not causality (Cohen & Cohen, 1983). It is possible, for example, that those who already had greater safe sex efficacy were more likely to identify with the lead characters advocating safe sex behaviors. Greater understanding of the direct effects of identification in relationship to EORM response variables, such as self-efficacy and safe sex intentions is useful in the design of future research experiments. This study was more exploratory in nature, but a future experiment could lend to more direct influence of these variables upon each other.

An additional limitation of the study may have occurred because of the two-part design. Though students were told in the informed consent not to discuss the study with other students, it is possible that students could have talked about the pre-session with each other before participating in the second study session. A testing effect could have taken place as they became somewhat familiar with some of the questions that were asked in the pre-session.

Future Research

This study was designed to create a greater understanding of character identification in EE research and how identification may be influenced by factors such as gender and medical distrust. There were several unexpected findings in this study that could be further explored in future research. Further explanation of the role of transitional characters in positive and negative outcomes related to character identification could be explored in future research. For example, future research could examine if transitional characters who are reluctant to adopt promoted behaviors for different reasons, such as a lack of perceived susceptibility, a lack of knowledge, or medical distrust, elicit different responses from the audiences. Ultimately, the goal should be to understand which type of transitional character is most influential in producing a positive outcome where participants adopt behaviors modeled in the program.

Interactions between distrust and character identification may be influenced by the nature of the identification with the character, and thus warrant future research. Future research should consider how medical distrust may influence responses to EE messages on health. The younger generation of African Americans, more removed from the injustices of the past, may have less distrust of doctors overall than what was expected from previous research. However, medical distrust still played a moderating role in the relationship between character identification and counterarguing. This is useful in realizing that health messages designed for participants who may be racially or culturally similar still must account for intergroup differences in attitudes and beliefs, which may impact how the message is received.

The framing of the message must also be considered in future research. The current study analyzed a situation comedy designed primarily to reach African American audiences. The show was very humorous and the participants viewing often laughed and enjoyed watching the program. This study may not have produced the same results if the genre of the program had been a drama. There is currently extensive research on the influence of message framing, which has found that more positive messages may be more positively received, however negative messages can also use fear to produce a desired response (Entman, 1993; Scheufele, 2000). The stimulus used for this message showed positive outcomes regarding the discussion of HIV in a light-hearted and humorous way. There are relatively few studies that analyze health issues, such as safe sex, in a humorous context (Farrar, 2006).

There have been previous findings in regard to the use of humor in persuasive messages. Research has found that humorous messages are processed differently in our brains (Kirsch, 2007). Other studies have found that humor created a unique environment that lead to less counterarguing and greater intentions (Moyer-Gusé, Mahood, & Brookes, 2011). Research has also found that humorous media content produced greater attention and recall of the message (Cline & Kellaris, 2007). Previous research involving a situation comedy regarding unplanned pregnancy produced greater intentions to engage in pregnancy prevention than when the message was presented in a serious or dramatic context (Moyer-Gusé, Mahood, & Brookes, 2011). Humor was also found to produce varying responses by gender, sometimes having a more beneficial effect for males (Farrar, 2006). The humorous elements of this study may have influenced how the message was received by males or females. Future research may explore whether humor plays a moderating role in the relationship between participants' responses to HIV prevention messages and behavioral outcomes, as it has been found to enhance persuasive effects in earlier studies (e.g., Farrar, 2006; Moyer-Gusé, Chung, & Jain, 2011). A message that sought to use fear or negative outcomes may be received more or less favorably. Future research can explore more regarding how the genre of the program may positively or negatively influence program outcomes.

Outcomes may also vary over a longer period of time. Bandura (2004a) suggested that the greater exposure is to modeled behavior, the stronger the effect of perceived efficacy on risky sexual behavior. However, lasting change requires consistent messaging. There is a disadvantage of utilizing only one stimulus at a single time point to produce short-term results. A long-term, multi-method approach is more effective in making campaigns memorable, as the message is consistently repeated. Future research may address the effectiveness of multiple EE messages over time.

This study also suggests the need for more culturally-representative messages designed to reach various audiences significantly impacted by disease. Based on Bandura's assumption that people are more likely to identify with similar models, perhaps medical distrust was decreased by the message being presented by an identifiable character, an African-American female doctor, through the preferred channel of media. Research has found that African Americans prefer media as a main source of health information rather than actual doctors (Khosorovani et al., 2008). In the current study, an African-American female doctor provided health information within the media, creating an interesting dynamic. Other research reveals that African American audiences find same race characters to be more credible (Herek &Capitano, 1994). How strongly participants identified with the African-American lead characters – and probably the doctor as well -- likely influenced how credible or trustworthy they found the information.

Ideally, future research would include participants from a more diverse pool than the college campus. Though this type of sampling may be more costly and time-consuming, it would be more effective for future research in understanding how diverse audiences respond. The recent directives in the U. S. Department of Health and Human Services (2010) Healthy People 2020 report have addressed the importance of eliminating racial disparities in HIV/AIDS by

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designing messages to bring about positive behavior change in those most affected. However, there is little is known about the effectiveness of narrative prevention efforts, found in EE, to establish identification with characters among racial/ethnic minorities (Herek et al. 1998; Moyer-Gusé & Nabi, 2010; Valente et al., 2007). Hether and Murphy (2010) explained that not all role models are equally effective and that particular attention must be focused on characteristics such as gender and ethnicity. The impact of macro factors, such as socio-economic status, cultural beliefs, gender roles, and religiosity, also must be considered when developing culturally sensitive HIV/AIDS prevention messages. Early HIV prevention messages were targeted more to the general population than directly to people of color (Davis et al., 2009). Kreuter et al.'s (2010) study found that narrative stories with same race and gender characters helped female African American viewers process complex health information by catching their attention, increasing understanding, and helping them to remember the message. The study and design of messages to address culturally diverse audiences could be a key direction for future research in EE methodology.

Conclusion

This study did accomplish its goal in providing preliminary research to expand upon previous EORM research by examining the role of medical distrust and participants' gender in male/female character identification, counterarguing, and self-efficacy regarding safe sex behaviors. The study found that identification was related to lower counterarguing and greater self-efficacy, but these relationships differed depending upon the character. Identifying a character who is a stronger advocate for the position may be more beneficial for reducing message resistance at the high level of medical distrust. Identifying with a character who is a transitional character, however, can backfire, resulting in increased resistance, as observed in this study. The study also found that medical distrust was related to greater counterarguing and lower self-efficacy. Lastly, the analyses found that self-efficacy was related to greater safe sex intentions.

This study found that medical distrust played a moderating role in how character identification was related to counterarguing. However, medical distrust did not moderate how identification with the characters was related to greater self-efficacy. Analyses further revealed that medical distrust was negatively correlated with safe sex intentions and self-efficacy. The study expanded current EE research by showing how character identification may influence counterarguing and self-efficacy. This research also revealed that the relationship between character identification and counterarguing was moderated by medical distrust. Thus, this study may influence how EORM concepts, such as character identification, counterarguing, and selfefficacy, are studied in future studies.

When applying theories such as Social Cognitive Theory, researchers must consider various factors that may hinder motivation or self-efficacy to perform the recommended behaviors. Cultural beliefs and values can also influence a participant's perceived ability to carry out HIV/AIDS prevention recommendations. There exists a need for greater understanding of how concepts within theories like SCT, such as self-efficacy, are perceived and influence participants' intentions to perform recommended behaviors (Murray-Johnson & Witte, 2003). Greater understanding of the cultural attitudes and norms of respondents is imperative in designing relevant messages. In order for entertainment-education messages to be more relevant, the content should have immediate personal relevance, as well as address controversial topics such as abortion, HIV/AIDS, or STDs with sensitivity and respect for cultural traditions (Piotrow & de Fossard, 2004). It is imperative that researchers examine the most effective ways to reach participants regarding healthy behaviors. It is recommended that researchers desiring to understand African American behavior should include African American participants in their studies, utilize theory that is culturally sensitive, and focus on communal interventions (Beatty, Wheeler, & Gaiter, 2004). Research that focuses on communal interventions must address cultural barriers, racism, stigmas, economic concerns, and religious beliefs that influence decisions within the community. The findings of this study will help future research to examine how a broader application of such cultural dynamics can help eliminate racial disparities in disease and aid in future application of theoretical concepts of EE that will affect audiences in beneficial ways.

References

- Addis, M. & Holbrook, M. B. (2010). Consumers' identification and beyond: Attraction, reverence, and escapism in the evaluation of films. *Psychology & Marketing*, 27(9), 821-845.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.
- Alleyne, B., & Gaston, G. (2010). Gender disparity and HIV risk among young Black women in college: A literature review. *Affilia: Journal of Women and Social Work*, 25(2), 135-145.
- Armstrong, K., Mc Murphy, S., Dean, L. T., Micco, E., Putt, M., Halbert, C., & Shea, J. A.
 (2008). Differences in the patterns of health care system distrust between Blacks and Whites. *Journal of General Internal Medicine*, 23(6), 827-833.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
 Bandura, A. (1982). Self-efficacy mechanism in human agency. American Psychologist, 37, 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Upper Saddle River, NJ: Prentice Hall.
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, *3*, 265-299.
- Bandura, A. (2004a). Health promotion by social cognitive means. *Health Education & Behavior*, *31*(2), 143-164.

- Bandura, A. (2004b). Social cognitive theory for personal and social change by enabling media.
 In A. Singhal, M. J. Cody, E.M. Rogers, & M. Sabido (Eds.), *Entertainment-education* and social change: History, research and practice (pp. 75 -96). Mahwah, NJ: Lawrence Erlbaum Associates.
- Beatty, L. A., Wheeler, D., & Gaiter, J. (2004). HIV prevention research for African Americans: Current and future directions. *Journal of Black Psychology*, *30*, 40-58.
- Beck, V. (2004).Working with daytime and prime-time television shows in the United States to promote health. In A. Singhal, M. J. Cody, E.M. Rogers, & M. Sabido (Eds.), *Entertainment-education and social change: History, research and practice* (pp. 207-224). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bird, S. T., & Bogart, L. M. (2005). Conspiracy beliefs about HIV/AIDS and birth control among African Americans: Implications for the prevention of HIV, other STIs, and unintended pregnancy. *Journal of Social Sciences*, 61(1), 109-126.
- Bird, S. T., Bogart, L. M., & Delahanty, D. L. (2004). Health-related correlates of perceived discrimination in HIV care. AIDS Patient Care and STDs, 18, 19-26.
- Blotcher, J. (2010, November 11). An early frost: 25 years later. *Advocate*. Retrieved March 16, 2012, from www.advocate.com/Arts_and_Entertainment/Television/An_Early_Frost_25_Years_Later/.
- Boone, S. (2012). The breast cancer GAP. *Essence*, 43(1), 144.
- Brodie, M., Foehr, U., Rideout, V., Baer, N., Miller, C., Fluornoy, R., & Altman, D. (2001).
 Communicating health information through the entertainment media. *Health Affairs*, 20 (1), 192-199.

- Brodie, M., Hamel, E., Brady, L. A., Kates, J., & Altman, D. E. (2004). AIDS at 21: Media coverage of the HIV epidemic 1981-2002. Retrieved November 15, 2010, from http://www.kff.org/kaiserpolls/upload/AIDS-at-21-Media-Coverage-of-the-HIV Epidemic-1981-2002-Supplement-to-the-March-April-2004-issue-of-CJR.pdf.
- Brown, W. J. & Fraser, B. P. (2004). Celebrity identification in entertainment-education. In A. Singhal, M.J. Cody, E. M. Rogers, & M. Sabido (Eds.) *Entertainment-education and social change: History, research and practice* (pp. 97–115). Mahwah, NJ: Lawrence Erlbaum Associates.

Buchanan, T. & Selmon, N. (2008). Race and gender differences in self-efficacy: Assessing the role of gender role attitudes and family background. *Sex Roles*, *58*, 822-836.
U. S. Bureau of Labor Statistics (2011). Household data not seasonally adjusted quarterly averages. Retrieved on April 19, 2011, from http://www.bls.gov/web/empsit/cpseed16.pdf.

- Burns, M.J., & Dillon, F. R. (2005). AIDS health locus of control, self-efficacy for safer sexual practices, and future time orientation as predictors of condom use in African American college students. *Journal of Black Psychology*, *31*(2), 172-188.
- Callender, C. O., & Miles, P. V. (2001). Obstacles to organ donation in ethnic minorities. *Pediatric Transplantation, 5*, 383-385.
- Cameron, J. E. (2001). Social identity, modern sexism, and perceptions of personal and group discrimination by women and men. *Sex Roles*, *45* (11/12), 743-766.
- Centers for Disease Control and Prevention. (2010a). *HIV in the United States Fact Sheet*. Retrieved on October 17, 2010, from

http://www.cdc.gov/hiv/resources/factsheets/us.htm.

Centers for Disease Control and Prevention. (2010b). *HIV/AIDS Fact Sheet: HIV Among African Americans*. Retrieved on April 2008, from

http://www.cdc.gov/hiv/topics/aa/resources/factsheets/aa.htm.

- Centers of Disease Control and Prevention. (2010c). HIV/AIDS Basic Statistics: How Does HIV Affect Different Groups. Retrieved on August 29, 2014, from http://www.cdc.gov/hiv/basics/statistics.html.
- Centers for Disease Control and Prevention. (2011a). *Basic Information About HIV and AIDS*. Retrieved on June 7, 2011, from <u>http://www.cdc.gov/hiv/topics/basic/</u>.

Centers for Disease Control and Prevention. (2011b). HIV Among African Americans.

Retrieved March 16, 2012, from http://www.cdc.gov/hiv/topics/aa/PDF/aa.pdf.

- Centers for Disease Control and Prevention. (2011c). HIV Among Women. Retrieved March 16, 2012, from http://www.cdc.gov/hiv/topics/women/index.htm.
- Centers for Disease Control and Prevention. (2011d). HIV and Youth. Retrieved March 16, 2012, from http://www.cdc.gov/hiv/youth/pdf/youth.pdf.
- Chapman, A. (1995). *Entitled to good loving: Black men and women battle for love and power*. New York, NY: Henry Holt.
- Chen, J. Y., Diamant, A., Pourat, N., & Kagawa-Singer, M. (2005). Racial ethnic disparities in the use of preventive services among the elderly. *American Journal of Preventive Medicine*, 29, 388-395.
- Cheney, G. (1983). On the various changing meanings of organizational membership: A field study of organizational identification. *Communication Monographs*, *50*, 342-362.

- Cody, M. J., Fernandez, S., & Wilkin, H. (2004). Entertainment-education programs of the BBC and BBC World. In A. Singhal, M. J. Cody, E. M. Rogers, & M. Sabido (Eds.)
 Entertainment-education and social change: History, research, and practice (pp. 243-260). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication and Society*, *4*, 245-264.
- Cohen, J., & Cohen, P. C. (1983). *Applied multiple regression/correlational analyses for the behavioral sciences*. (2nd ed.) Hillsdale, NJ: Lawrence Erlbaum Associates.
- Collins, P. H. (2000). Black feminist thought: Knowledge, consciousness, and the politics of empowerment, (2nd ed.). New York, NY: Routledge.
- Collins, R. L., Elliott, M. N., Berry, S. H., Kanouse, D. E., & Hunter, S. B. (2003).
 Entertainment television as health sex educator: the impact of condom efficacy information in an episode of Friends. *Pediatrics*, *112*, 1115–1121.
- Connell, R. W. (1987). Gender and power. Stanford, CA: Stanford University Press.
- Conrad, C. A., Whitehead, J., Mason, P., & Stewart, J. (Eds.) (2005). *African Americans in the* U.S. economy. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Corbie-Smith, G., Thomas, S. B., & St. George, S. M. (2002). Distrust, race, and research.
- Dancy, B. L. (1991). The development of an ethnically sensitive and gender-specific AIDS questionnaire for African-American women. *Health Values: The Journal of Health Behavior, Education and Promotion, 15*(6), 49-54.
- Davis, A. Y. (1981). Women, race, and class. New York, NY: Random House.
- Davis, S., Williams, A. D., & Akinyela, M. (2010). An Afrocentric approach to building cultural relevance in social work research. *Journal of Black Studies*, *41*(2), 338-350.

- Dearing, J. W., & Kim, D. K. (2008). The agenda-setting process and HIV/AIDS. In T. Edgar,
 S. M. Noar, & V. S. Freimuth (Eds.), *Communication perspectives on HIV/AIDS for the* 21st Century. New York, NY: Lawrence Erlbaum Associates.
- DeJong, W., Wolf, R., & Austin, S. (2001). U.S. federally funded television public service announcements (PSAs) to prevent HIV/AIDS: A content analysis. *Journal of Health Communication*, 6(3), 249-263.
- Dickson, L. (1993). The future of marriage and family in Black America. *Journal of Black Studies*, 23(4), 472-491.
- DiClemente, R., Braxton, N. D., McDermott Sales, J., & Wingood, G. M. (2008). Using communication strategies in an HIV prevention curriculum to enhance African American adolescents' adoption of HIV-preventative behaviors. In T. Edgar, S. M. Noar, & V. S. Freimuth (Eds.), *Communication perspectives on HIV/AIDS for the 21st century*. New York, NY: Lawrence Erlbaum Associates.
- DiClemente, R., Crosby, R. A., & Kegler, M. C. (2002). Understanding and applying theory in health promotion practice and research. In R. DiClemente, R. A. Crosby, & M. C. Kegler (Eds.), *Emerging theories in health promotion practice and research*. San Francisco, CA: Jossey-Bass.
- Dixon, P. (2007). African American relationships, marriages, and families. New York, NY: Routledge.
- Dula, A. (1994). African American suspicion of the health care system is justified: What do we do about it? *Cambridge Quarterly of Healthcare Ethics*, *3*(3), 347-357.

Duncan, V.J. & Goodall, A.J. (1998). Race, gender, communicative competence, and perceived understanding/misunderstanding. In V. Duncan (Ed.), *Towards achieving MAAT: Communication patterns in African American, European American, and Interracial relationships* (pp. 191-202). Dubuque, IA: Kendall Hunt.

Edgar, T., Noar, S. M., & Freimuth, V. S. (2008). Communication perspectives on HIV/AIDS for the 21st century. New York, NY: Lawrence Erlbaum Associates.

Elwood, W. (Ed.) (1999). Power in the blood: A handbook on AIDS, politics, and communication. Mahwah, NJ: Lawrence Erlbaum Associates.
Entman, R.M. (1993). Framing: Toward clarification of a fractured paradigm. Journal of Communication, 43(4), 51–58.

Erikson, E. (1968). *Identity youth and crisis*. New York, NY: Norton.

- Farrar, K. M. (2006). Sexual intercourse on television: Do safe sex messages matter? *Journal* of *Broadcasting and Electronic Media*, *50*, 635–650.
- Ferguson, Y. O., Quinn, S. C., Eng, E., & Sandelowski, M. (2006). The gender ratio imbalance and its relationship to risk of HIV/AIDS among African American women at historically black colleges and universities. *AIDS Care*, 18, 323-331.
- Finnegan, J.R., & Viswanath, K. (2002). Communication theory and health behavior change. In
 K. Glantz, B. K., Rimer, & F. M. Lewis (Eds.), *Health behavior and health education: Theory, research, and practice* (3rd ed., pp. 361-388). San Francisco, CA: Jossey-Bass, Inc.
- Flitterman-Lewis, S. (1987). Psychoanalysis, film and television. In R. C. Allen (Ed.), *Channels of discourse: Television and contemporary criticism* (pp. 172–210). Chapel Hill, NC: University of North Carolina Press.

- Fujioka, Y., Ryan, E., Agle, M., Legaspi, M., & Toohey, R. (2009). The role of racial identity in responses to thin media ideals: Differences between white and black college women. *Communication Research*, 36(4), 451-474.
- Fullilove, M. T., & Fullilove, R. E., III. (1999). Stigma as an obstacle to AIDS action: The case of the African American community. *American Behavioral Scientist*, *42*, 1117-1129.
- Gaitonde, I. R. (2001). *A thief in the night: Understanding AIDS*. Chennai, Madras: East West Books.
- Garner, T. (1998). Understanding oral rhetorical practices in African American cultural practices. In V.J. Duncan (Ed.), *Towards achieving MAAT* (pp. 29-44). Dubuque, IA: Kendall-Hunt.
- Gates, H. L. (1998). The two nations of Black America. *PBS Frontline*. Retrieved April 14, 2011, from http://www.pbs.org/wgbh/pages/frontline/shows/race/.
- Gilbert, D. J. & Wright, E. M. (2003). African American Women and HIV/AIDS critical responses. Westport, CT: Praeger Publishers.
- Green, M. C. (2007). Linking self and others through narrative. *Psychological Inquiry*, 18 (2), 100 -102.
- Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, *79*, 701–721.
- Greenberg, B. S., Beck, V., Salmon, C. T., Cole, G., & Patel, D. (2004). Evolution of an E-E research agenda. In A. Singhal, M. J. Cody, E. M. Rogers, & M. Sabido (Eds.) *Entertainment-education and social change: History, research, and practice* (pp. 191-206). Mahwah, NJ: Lawrence Erlbaum Associates.

- Gregory, S. T. (1995). Black women in the academy: The secrets to success and achievement. Lanham, MD: University Press of America.
- Gupta, G. R. (2001). Gender, sexuality, and HIV/AIDS: The what, the why, and the how. *SIECUS Report*, *29*, 6-12.
- Guskin, E., Moore, P., & Mitchell, A. (2011). African American media: Evolving in the new era. The state of the news media: An annual report on American Journalism. Retrieved on April 2, 2015 from http://www.stateofthemedia.org/2011/african-american/.
- Halbert, C. H., Armstrong, K., Gandy, O. H., & Shaker, L. (2006). Racial differences in trust in health care providers. *Archives of Internal Medicine*, *166*, 896–901.
- Hammond, W. P., Mathews, D., Mohottige, D., Agyemang, A., & Corbie-Smith, G. (2010).
 Masculinity, medical mistrust, and preventative service delays among community
 dwelling African American men. *Journal of General Internal Medicine*, 25(12), 1300-1308.
- Harris, T. M. & Hill, P. S. (1998). "Waiting to Exhale" or "Breath(ing) Again": A search for identity, empowerment, and love in the 1990's. *Women & Language*, *21*(2), 9-20.
- Harvey, S. M., Bird, S. T., Galavotti, C., Duncan, E. W., & Greenburg, D. (2002). Relationship power, sexual decision making and condom use among women at risk for HIV/STDs. *Women & Health, 36*(4), 69-83.
- Hecht, M. L., Jackson, R. L., & Ribeau, S. A. (2003). African American communication: Exploring identity and culture. Mahwah, NJ: Lawrence Erlbaum Associates.
- Heintzelman, C. A. (1996). Human subjects and informed consent: The legacy of the Tuskegee syphilis study. *Scholars*, *6*(1), 23-30.

Herek, G. M., & Capitanio, J. P. (1993). Public reactions to AIDS in the United States: A second decade of stigma. *American Journal of Public Health*, 83 (4), 574-577.

- Herek, G. M., Gillis, J. R., Glunt, E. K., Lewis, J., Welton, D., & Capitanio, J. P. (1998).
 Culturally sensitive AIDS educational videos for African American audiences: Effects of source, message, receiver, and content. *American Journal of Community Psychology, 26* (5), 705-743.
- Hether, H. & Murphy, S. T. (2010). Sex roles in health storylines on prime time television: A content analysis. *Sex Roles, 62,* 810-821.
- Hoffner, C., & Cantor, J. (1991). Perceiving and responding to mass media characters. In J.
 Bryant & D. Zillmann (Eds.), *Responding to the screen: Reception and reaction processes* (pp. 63–103). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hollander, D. (1993). Publicity about Magic Johnson may have led some to reduce their risky behavior, request HIV testing. *Family Planning Perspectives*, 25(4), 192-193.
- Houston, M. (2000). When Black women talk with White women: Why the dialogues are difficult. In A. Gonzalez, M. Houston, & V. Chen (Eds.), *Our voices: Essays in culture, ethnicity and communication*. Los Angeles, CA: Roxbury.
- Hoyt, M. A., Rubin, L. R., Nemeroff, C. J., Lee, J., Huebner, D. M., & Proeschold-Bell, R.
 (2012). HIV/AIDS-related institutional mistrust among multiethnic men who have sex with men: Effects on HIV testing and risk behaviors. *Health Psychology*, *31*(3), 269-277.
- Jackson, R. L. (1997). Black manhood as xenophobe: An ontological exploration of the Hegelian dialectic. *Journal of Black Studies*, 27(6), 731-750.

Jones, T. (2002). An early frost. Retrieved March 16, 2012, from the Literature, Arts, and Medicine Database at the New York University website: http://litmed.med.nyu.edu/Annotation?action=view&annid=10137.

Kacanek, D., Dennis, A., Sahin-Hodoglugil, N., Montgomery, E., Morar, N., Mtetwa, S., Nkala,
B., Phillip, J., Watadzaushe, C., & van der Straten, A. (2012). A qualitative study of obstacles to diaphragm and condom use in an HIV prevention trial in sub-Saharan Africa. *AIDS Education Preview*, 24(1), 54-67.

- Kaiser Family Foundation. (2003). Viacom and Kaiser Family Foundation support national HIV testing day through Know HIV/AIDS Campaign. Retrieved April 15, 2008, from http://www.kff.org/entpartnerships/Press_release-Testing_Day.pdf.
- Kalichman, S. C., Kelly, J. A., Hunter, T. L., Murphy, D. A., & Tyler, R. (1993).
 Culturally tailored HIV-AIDS risk-reduction messages targeted to African American urban women: Impact on risk sensitization and risk reduction. *Journal of Consulting and Clinical Psychology*, *61*, 291-295.
- Keller, S. N., & Brown, J.D. (2002). Media interventions to promote responsible sexual behavior. *Journal of Sex Research*, 39, 67-72.
- Kennedy, M. G., Beck, V., & Freimuth, V. S. (2008). Entertainment-education and HIV prevention. In T. Edgar, S. M. Noar, & V. S. Freimuth (Eds.), *Communication perspectives on HIV/AIDS for the 21st century* (pp. 253-276). New York, NY: Lawrence Erlbaum Associates.
- Kennedy, M. G., O'Leary, A., Beck, V., Pollard, W. E., & Simpson, P. (2004). Increases in calls to the CDC National STD and AIDS Hotline following AIDS-related episodes in a soap opera. *Journal of Communication*, 54, 287-301.

- Khosrovani, M., Poudeh, R., & Parks-Yancy, R. (2008). How African American ministers communicate HIV/AIDS related health information to their congregants: A survey of selected Black churches in Houston, Texas. *Mental Health, Religion, and Culture, 11*(7), 661-670.
- Klonoff, E.A., & Landrine, H. (1999). Do blacks believe that HIV/AIDS is a government conspiracy against them? *Preventive Medicine*, 28(5), 451-457.
- Kreuter, M. W., Green, M. C., Cappella, J. N., Slater, M. D., Wise, M. E., & Storey, D., ...S.
 Woolley. (2007). Narrative communication in cancer prevention and control: A
 framework to guide research and application. *Annual Behavioral Medicine*, *33*(3), 221-235.
- Kreuter, M. W., Holmes, K., Alcaraz, K., Kalesan, B., Rath, S., Richert, M., & Clark, E. M.
 (2010). Comparing narrative and informational videos to increase mammography in lowincome African American women. *Patient Education and Counseling*, *81*, S6-S14.
- Lammers, C., Ireland, M., Resnick, M., & Blum, R. (2000). Influences on adolescents' decision to postpone onset of sexual intercourse: A survival analysis of virginity among youths aged 13 to 18 years. *Journal of Adolescent Health*, 26(1), 42-48.
- LaVeist, T. A., Nickerson, K. J., & Bowie, J. V. (2000). Attitudes about racism, medical mistrust, and satisfaction with care among African American and white cardiac patients. *Medical Care Research and Review*, 57 (Suppl.1), 146–161.
- Lewis, E. (1989). Role strain in African American women the efficacy of support networks. *Journal of Black Studies*, 20, 155-169.
- Livingstone, S. M. (1998). *Making sense of television: The psychology of audience interpretation*. New York, NY: Routledge.

- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, *18*, 302-318.
- Lukwago, S. L., Kreuter, M. W., Bucholtz, D. C., Holt, C. L., & Clark, E. M. (2001).
 Development and validation of brief scales to measure collectivism, religiosity, racial pride, and time orientation in urban African American women. *Family and Community Health*, 24, 63–71.
- Lull, J. (1995). *Media, communication, culture: A global approach*. New York, NY: Columbia University Press.
- Maccoby, E. E., & Wilson, W. C. (1957). Identification and observational learning from films. *Journal of Abnormal Social Psychology*, 55, 76–87.
- Majors, R. (1989). Cool pose: The proud signature of Black survival. In M. Kimmell & M. Messner (Eds.), *Men's lives* (pp. 83-87). New York, NY: Macmillan.
- McQueen, A., Kreuter, M. W., Kalesan, B., & Alcarez, K. (2011). Understanding narrative effects: The impact of breast cancer survivor stories on message processing, attitudes, and beliefs among African American women. *Health Psychology*, *30*(6), 674-682.
- Melby, T. (2004). Black America coping with the stigma of HIV/AIDS. *Contemporary Sexuality*, *38*(10), 3-5.
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: Explaining the persuasive effects of entertainment-education messages. *Communication Theory*, *18*, 407–425.
- Moyer-Gusé, E., Chung, A. H., & Jain, P. (2011). Identification with characters and discussion of taboo topics after exposure to an entertainment narrative about sexual health. *Journal of Communication*, *61*, 387-406.

- Moyer-Gusé, E., Mahood, C., & Brookes, S. (2011). Entertainment-education in the context of Humor: Effects on safer sex intentions and risk perceptions. *Health Communication*, 26, 765-774.
- Moyer-Gusé, E. & Nabi, R. L. (2010). Explaining the effects of narrative in an entertainment television program: Overcoming resistance to persuasion. *Human Communication Research*, 36, 26-52.
- Murray-Johnson, L., & Witte, K. (2003).Looking toward the future: Health message design strategies. In T. Thompson, A. M. Dorsey, K. I. Miller, & R. Parrott, *Handbook of health communication (pp. 473 - 495)*.New York, NY: Lawrence Erlbaum Associates.
- Musa, D., Schulz, R., Harris, R., Silverman, M., & Thomas, S. B. (2009). Trust in health care system and the use of preventative health services by older Black and White adults. *American Journal of Public Health*, 99(7), 1293-1299.
- Myhre, S. L. & Flora, J. A. (2000). HIV/AIDS communication campaigns: Progress and prospects. *Journal of Health Communication*, 5(3), 2-45.
- Nabi, R. L. & Clark, S. (2008). Exploring the limits of social cognitive theory: Why negatively reinforced behavior on TV may be modeled anyway. *Journal of Communication*, 58, 407 427.
- Needle, C. (2003, April). Girlfriends for life: Mara Brock Akil, creator of UPN's *Girlfriends*, shares with A&U's Channel Needle the inside scoop on the show's HIV story lines and the state of sexual health on TV. Retrieved April 7th, 2009, from *www.aumag.org/coverstory/april03cover.html*.

- Niederdeppe, J., Shapiro, M. A., & Porticella, N. (2011). Attributions of responsibility for obesity: Narrative communication reduces reactive counterarguing among liberals. *Human Communication Research*, 37, 295-323.
- Palmgreen, P., Noar, S. M., & Zimmerman, R. S. (2008). In Edgar, S. M. Noar, & V. S.
 Freimuth (Eds.), *Communication perspectives on HIV/AIDS for the 21st century (pp. 253-276)*. New York, NY: Lawrence Erlbaum Associates.
- Peterson, L. A. (2002). Racial differences in trust: Reaping what we have sown? *Medical Care*, 40 (2), 81-84.
- Pleck, J., Sonnenstein, F., & Ku, L. (1994). Problem behaviors and masculinity ideology in adolescent males and females. In R. Ketterlinus & M. Lamb (Eds.), *Adolescent problem behaviors: Issues and research* (pp. 165-186). Mahwah, NJ: Lawrence Erlbaum Associates.
- Poindexter, D. O. (2004). A history of entertainment-education, 1958-2000.In A. Singhal, M.J.
 Cody, E. M. Rogers, & M. Sabido (Eds.) *Entertainment-education and social change: History, research, and practice* (pp. 21-37). Mahwah, NJ: Lawrence Erlbaum Associates.
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31(4), 437-448.

Resnicow, K., Dilorio, C.K., & Davis, R. (2008). Culture and the development of HIV prevention and treatment programs. In T. Edgar, S. Noar, & V. Freimuth (Eds.), *Communication perspectives on HIV/AIDS for the 21st century* (pp. 193-220). New York, NY: Lawrence Erlbaum Associates.

- Reverby, S. (2000). *Tuskegee's truths: Rethinking the Tuskegee syphilis study*. Chapel Hill, NC: University of North Carolina Press.
- Sabido, M. (2004). The origins of entertainment-education. In A. Singhal, M.J. Cody, E. M. Rogers, & M. Sabido (Eds.) *Entertainment-education and social change: History, research, and practice* (pp.61-74). Mahwah, NJ: Lawrence Erlbaum Associates.
- Scheufele, D.A. (2000). Agenda-setting, priming, and framing revisited: Another look at cognitive effects of political communication. *Mass Communication & Society*, 3(2), 297-316.
- Schiavo, R. (2007). *Health communication: From theory to practice*. San Francisco, CA: Jossey-Bass, Inc.
- Schwarcz, S., Richards, T. A., Frank, H., Wenzel, C., Hsu, L. C., Chin, C. S., Murphy, J., & Dilley, J. (2011). Identifying barriers to HIV testing: personal and contextual factors associated with late HIV testing. *AIDS Care*, 23(7), 892-900.
- Sharf, B. F., Freimuth, V. S., Greenspon, P., & Poltnick, C. (1996). Confronting cancer on *thirtysomething:* Audience response to health content on entertainment television. *Journal of Health Communication*, 1, 157-172.
- Shavers-Hornaday, V. L., Lynch, C. F., Burmeister, L. F., & Torner, J. C. (1997). Why are African Americans under-represented in medical research studies? Impediments to participation. *Ethnicity & Health*, 2(1-2), 31-45.
- Singhal, A., & Rogers. M. (1999). *Entertainment-education: A communication strategy for social change*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Singhal, A., & Rogers, E. V. (2003). Combating AIDS: Communication strategies in action. Thousand Oaks, CA: Sage Publications.

- Singhal, A., & Rogers, E.M. (2004). The status of entertainment-education worldwide. In A. Singhal, M. J. Cody, E. M. Rogers, & M. Sabido (Eds.). *Entertainment-education and social change: History, research, and practice (pp.3-20)*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Slater, M. D., & Rouner, D. (2002). Entertainment-education and elaboration likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, *12*, 173–191.
- Smedley, B., Stith, A., & Nelson, A. (Eds.). (2003). Unequal treatment: Confronting racial and ethnic disparities in health care. Washington, DC: National Academy Press.
- Sobo, E. J. (1993). Inner-city women and AIDS: The psycho-social benefits of unsafe sex. *Culture, Medicine, and Psychiatry, 17,* 455-485.
- Sood, S., Menard, T., & Witte, K. (2004). The theory behind entertainment-education. In A. Singhal, M. J. Cody, E. M. Rogers, & M. Sabido (Eds.) *Entertainment-education and social change: History, research, and practice* (pp. 117-145). Mahwah, NJ: Lawrence Erlbaum Associates.
- Stepanikova, I., Mollborn, S., Cook, K. S., Thom, D. H. & Kramer, R. M. (2006). Patients' race, ethnicity, language, and trust in a physician. *Journal of Health and Social Behavior, 47* (4), 390-404.
- Stokes, J. & Peterson, J. (1998). Homophobia, self-esteem and risk for HIV among African American men who have sex with men. *AIDS Education and Prevention*, *10*, 278-292.
- Stone, L. & McKee, N. P. (2002).*Gender and culture in America*. Upper Saddle River, NJ: Prentice Hall.

- Tannen, T. (2003). Media giant and foundation team up to fight HIV/AIDS. *The Lancet*, *361*, 1440-1441.
- Taylor, L., & Chatters, R. (1991). Religious life. In J. Jackson (Ed.), Life in *Black America* (pp. 105-123). Newbury Park, CA: Sage Publications.
- Thomas, S., & Quinn, S. (1991). The Tuskegee syphilis study, 1932-1972: implications for HIV education and AIDS risk education programs in the Black community. *American Journal of Public Health*, *81*, 1498-1505.
- Tindall, N. J. (2009). The double bind of race and gender: Understanding the roles and perceptions of Black female public relations faculty. *Southwestern Mass Communication Journal*, 25(1), 1-16.
- U. S. Census Bureau. (2011). Educational attainment in the United States: 2011. Retrieved on April 20, 2011, from http://www.census.gov/hhes/socdemo/education/.
- U. S. Census Bureau. (2015). USA quick facts. Retrieved on April 2, 2015 from http://quickfacts.census.gov/qfd/states/00000.html.
- U. S. Department of Health and Human Services. (2010). The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Phase I report: Recommendations for the framework and format of Healthy People 2020. Section IV. Advisory Committee findings and recommendations. Retrieved January 21, 2011, from http://healthypeople.gov/2020/about/disparitiesAbout.aspx.
- Usdin, S., Singhal, A., Shongwe, T., Goldstein, S., & Shabala, A. (2004). No short cuts in entertainment-education: Designing *Soul City* step-by-step. In A. Singhal, M. J. Cody, E. M. Rogers, & M. Sabido (Eds.) *Entertainment-education and social change: History, research, and practice* (pp.153-175).Mahwah, NJ: Lawrence Erlbaum Associates.

- Valente, T., Murphy, S., Huang, G., Gusék, J., Greene, J., & Beck, V. (2007). Evaluating a minor story on *ER* about teen obesity, hypertension, and 5 a day. *Journal of Health Communication, 12*, 551-566.
- Vaughan, P. W., & Rogers, E. M. (2000). A stated model of communication effects: Evidence from an entertainment-education radio soap opera in Tanzania. *Journal of Health Communication*, 5, 203-227.
- Waldner, L. K., Sikks, A., & Baig, S. (1999). Ethnicity and sex differences in university students' knowledge of AIDS, fear of AIDS, and attitudes toward gay men. *Journal of Homosexuality*, 37(3), 117-133.
- Wanta, W., & Elliott, W. R. (1995). Did the "Magic" work? Knowledge of HIV/AIDS and the knowledge gap hypothesis. *Journalism & Mass Communication Quarterly*, 72, 312-321.
- Ward, E. G. (2005). Homophobia, hypermasculinity and the US Black church. *Culture, Health,*& Sexuality, 7(5), 493-504.
- Whetten, K., Leserman, J., Whetten, R., Ostermann, J., Thielman, N., Swartz, M., & Stangl, D. (2006). Exploring lack of trust in care providers and the government as a barrier to health service use. *American Journal of Public Health*, 96(4), 716-721.
- Wilcox, B. L., Rostosky, S., Randall, B., & Wright, M. L. (2001). Adolescent religiosity and sexual behaviour. In: *Keeping the faith: The role of religion and faith communities in preventing teen pregnancy* (pp. 31-82). Washington DC: The National Campaign to Prevent Teen Pregnancy.
- Wilcox, W. (2005). Analysis: Religion, family, and general social survey. Retrieved on May 18, 2011, from <u>http://www.pbs.org/wnet/religionandethics/week908/analysis1</u>.

- Williams, P. B., Ekundayo, O., Udezulu, I.E., & Omishakin, A. M. (2003). An ethnically sensitive and gender-specific HIV/AIDS assessment of African American Women: A comparative study of urban and rural American communities. *Family Community Health*, 26 (2), 108-123.
- Wilkin, H. A., Valente, T. W., Murphy, S., Cody, M. J., Huang, G., & Beck, V. (2007). Does entertainment-education work with Latinos in the United States? Identification and the effects of a telenovela breast cancer storyline. *Journal of Health Communication*, 12, 455-469.
- Wingood, G. M., & DiClemente, R. J. (1997). The effects of an abusive primary partner on the condom use and sexual negotiation practices of African American women. *American Journal of Public Health*, 87, 1016-1018.
- Wollheim, R. (1974). Identification and imagination. In R. Wollheim (Ed.), Freud: A collection of critical essays (pp. 172–195). New York, NY: Anchor/Doubleday.
- Wingood, G. M. & DiClemente, R. J. (2002). The theory of gender and power: A social structural theory for guiding public health interventions. In R. J. DiClemente, R. A. Crosby, & C. Kegler (Eds.), *Emerging theories in health promotion practice and research: Strategies for improving public health.* San Francisco, CA: Jossey-Bass.
- Yang, T. C., Matthews, S. A., & Hillemeier, M. (2011). Effect of health care system distrust on breast and cervical cancer screening in Philadelphia, Pennsylvania. *American Journal of Public Health*, 101 (7), 1297-1305.
- Ye, Y. (2010). A path analysis on correlates of consumer trust in online health information:
 Evidence from the Health Information National Trends Survey. *Journal of Health Communication, 15* (suppl. 3), 200-215.
Yoo, J.H. & Tian, Y. (2011). Effects of entertainment (mis)education: Exposure to entertainment television programs and organ donation intentions. *Health Communication*, 26, 147-158.

APPENDICES

Appendix A

Pre-Session Informed Consent

Georgia State University

Department of Communication

Pre-Study Informed Consent

Title: Media Health Messages Analysis Principal Investigators: Yuki Fujioka Ph. D., Tonia East

I. <u>Purpose:</u>

You are invited to participate in a research study. The purpose of the study is to examine how college students view television health messages. We are particularly interested in how college students view and evaluate health-related messages within an entertainment-education television program. Approximately 200 participants will be recruited for this study. You are asked to participate in a web-based pre-study survey session. Participation in this survey will require 40-50 minutes of your time.

II. <u>Procedures:</u>

If you decide to participate, you will be asked to share your opinions on two health information and media surveys. In this survey you will also be asked about some information about yourself (class standing, health status, gender, etc.). The total time of this study will be about 40-50 minutes. You will receive class credit for your participation in this study. Within two weeks you should receive an email requesting your participation in a follow-up survey.

III. <u>Risks:</u>

In this study, you will not have any more risks than you would in a normal day of life. However, In order to accommodate possible psychological discomfort due to the exposure to some health-related topics and/or other attitudinal questions, the study assures that (a) your participation is completely voluntarily; (b) responses will be kept confidential; and (c) you can withdraw from the study at any time.

IV. Benefits:

Participation in this study may not be of benefit to you personally. However, it may contribute to a society by providing information about how young adults evaluate health messages and media technology.

V. <u>Voluntary Participation and Withdrawal:</u>

Participation in research is voluntary. You are not required to participate in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

VI. <u>Confidentiality:</u>

We will keep your records private to the extent allowed by law. Tonia East and Yuki Fujioka will have access to the information you provide. Information will also be shared with those who make sure the study is done correctly (GSU Institutional Review Board and the Office for Human Research Protection (OHRP)). The information will be stored separately from the data to protect privacy. The information you provide will be stored in a locked filing cabinet and will only be looked at by research staff. Your name and other facts that might point to you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally. If you have any questions about the questionnaire, please feel free to contact me at the address or e-mail address listed below.

VII. Contact Persons:

Contact Tonia East in the Department of Communication at 404-413-5600 or, <u>teast3@gsu.edu</u>. You may also contact her advisor at <u>jouykf@langate.gsu.edu</u>if you have questions about this study. If you have questions or concerns about your rights as a participant in this research study, you may contact Susan Vogtner in the Office of Research Integrity at 404-413-3513 or <u>svogtner1@gsu.edu</u>.

Thank you for your support and cooperation.

If you are willing to volunteer for this research study, please click the I Accept button

below:



Appendix B

Pre-session Questionnaire

Please check ONE answer for the following questions.

- 1. Please indicate the source you most frequently use for information on health issues.
 - ____ Television
 ____ Parents/Guardian
 ____ Friends
 ____ Newspaper
 ____ Internet
 - _____ Religious leader
 - ____ Other

1a. If other was selected please write the source in the blank below.

2. Please indicate the second source you most frequently use for information on health issues.

 _____ Television

 _____ Parents/Guardian

 _____ Friends

 _____ Newspaper

 _____ Internet

 _____ Religious leader

 _____ Other

2a. If other was selected please write the source in the blank below.

3. Where do you learn information on health issues? Rank order with 1 being most often and 7 being least often.

 Television

 Parents/Guardian

 Friends

 Newspaper

 Internet

 Religious leader

 Other

4. Please state whether you agree or disagree with the following statements?

(1 = strongly disagree to 7 = strongly agree)							
a. I often read religious books, magazines, or pamphlets.	1	2	3	4	5	6	7
b. I often watch or listen to religious programs on television							
or radio.	1	2	3	4	5	6	7

c. My spiritual beliefs are the foundation of my whole approa	ich						
to life.	1	2	3	4	5	6	7
d. When I am ill, I pray for healing.	1	2	3	4	5	6	7
e. I rely on God to keep me in good health.	1	2	3	4	5	6	7

- 5. Ethnicity: (check all that apply)
 - _____Black/African American
 - White
 Asian
 Latino/a
 Native American
 Other

6. Education

1st year, undergraduate
 2nd year, undergraduate
 3rd year, undergraduate
 4th year, undergraduate
 5th year, undergraduate
 6th year, undergraduate

7. Gender: _____ Male _____ Female

8. How old are you? _____

For the following questions please indicate whether you agree or disagree with the statement. (1= Strongly Disagree and 7 = Strongly Agree)

9. I feel good about the ethnic group(s) I belong to.	1	2	3	4	5	6	7
10. I often feel that the ethnic group(s) of which I am a member a	re						
not worthwhile.	1	2	3	4	5	6	7
11. The ethnic group(s) I belong to are an important reflection of							
who I am.	1	2	3	4	5	6	7
12. In general, others think that the ethnic group(s) I am member	of						
are unworthy.	1	2	3	4	5	6	7
13. I often regret that I belong to my ethnic group(s).	1	2	3	4	5	6	7
14. I feel I don't have much to offer to the ethnic group(s) I below	ıg						
to.	1	2	3	4	5	6	7
15. In general, belonging to ethnic group(s) is an important part of	of						
my self-image.	1	2	3	4	5	6	7

16. I feel excitement and joy in my ethnic surroundings.	1	2	3	4	5	6	7
17. My ethnic group is considered good by others.	1	2	3	4	5	6	7
18. In general, others respect the ethnic group(s) that I am a							
member of.	1	2	3	4	5	6	7
19. I am a cooperative participant in the ethnic group(s) I belong							
to.	1	2	3	4	5	6	7
20. My group memberships have very little to do with how I feel							
about myself.	1	2	3	4	5	6	7
21. I often feel I'm a useless member of my ethnic group.	1	2	3	4	5	6	7
22. I am a worthy member of the ethnic group(s)I belong to.	1	2	3	4	5	6	7
23. Most people consider my ethnic group(s), on the average,							
to be more ineffective than other ethnic groups.	1	2	3	4	5	6	7
24. In general, I'm glad to be a member of the ethnic group(s)							
I belong to.	1	2	3	4	5	6	7
25. The ethnic group(s) I belong to are important to my							
sense of what kind of a person I am.	1	2	3	4	5	6	7
26. How would you define your sexual orientation? Heterosexual Gay/Lesbian Bisexual Other							
27. Have you ever been involved in a romantic relationship? Yes No							
28. Are you currently involved in a romantic relationship?							
29. What type of relationship are you involved in currently? None (Not Dating)							

- Nonexclusive Dating (more than one person)
- _____ Exclusive Relationship (only one person)
- _____ Married
- 30. Have you ever engaged in sexual intercourse with anyone? _____ Yes _____ No

If yes, please answer the following questions. If no, skip to question 61.

a. When was the last time you engaged in sexual intercourse?							
1 - 2 month ago							
2 - 6 months ago							
6-12 months ago							
more than 12 months ago							
In the next 6 months, how likely is it that you							
(1 = Very Unlikely to 7 = Very Likely)							
31. Will have sex with only one person.	1	2	3	4	5	6	7
• •							
32. Will have sex with 2 or more people.	1	2	3	4	5	6	7
33. Will have sex without a condom.	1	2	3	4	5	6	7
34. Will have sex without requesting HIV testing.	1	2	3	4	5	6	7
35. Knowingly have sex with someone with the HIV/AIDS							
virus?	1	2	3	4	5	6	7
36. Knowingly have sex with someone who had a venereal		-	-		_		_
disease (STD)?	I	2	3	4	5	6	1
	1	2	2	4	~	~	7
37. Get tested for HIV/AIDS.	1	2	3	4	Э	0	/
28 Ask a potential partner (a) if they have been							
tested for HIV	1	\mathbf{r}	3	1	5	6	7
	1	2	5	4	5	0	/
39 Discuss HIV/AIDS testing with a health care provider	1	2	3	4	5	6	7
		-	5	•	0	U	,
40. Discuss HIV/AIDS with a potential sexual partner.	1	2	3	4	5	6	7
r	_		-	-	-	-	
41. Discuss HIV/AIDS with a friend.	1	2	3	4	5	6	7
For the following questions please indicate the extent to which yo	u ag	ree o	r dis	agre	e wi	th th	e
statement.							
(1 = Strongly Disagree and 7 = Strongly Agree)							
42. If my physician wanted me to participate in research,	1	2	3	4	5	6	7
I trust that they would fully explain it to me.							
43. My physician would not ask me to participate	1	2	3	4	5	6	7
in research if he or she thought it would harm me.							

44. My physician would not ask me to participate in medical research if he or she thought it would harm me.	2	3	4	5	6	7	
45. In deciding what treatments I will get, I feel that My physicians try to protect me from harm?	1	2	3	4	5	6	7
46. My physician would protect me from being used as a guinea pig without my consent.	1	2	3	4	5	6	7
47. My physician would not prescribe medication as a way of experimenting on people without their knowledge or consent.	2	3	4	5	6	7	
48. Patients have sometimes been deceived or misled at hospitals.	1	2	3	4	5	6	7
49. Hospitals often want to know more about your personal affairs and business than they really need to know.	1	2	3	4	5	6	7
50. Hospitals have sometimes done harmful experiments on patients without their knowledge.	2	3	4	5	6	7	
For the following questions please indicate whether you agree or (1= Strongly Disagree and 7 = Strongly Agree)	disag	gree v	with	the	state	ment	t.
51. I believe information is being withheld from the public regarding a cure for HIV/AIDS.	1	2	3	4	5	6	7
52. I believe that HIV is a man-made disease intentionally created by the federal government to destroy the black race.	1	2	3	4	5	6	7
For the following questions please indicate whether the following $(1 = \text{True to } 2 = \text{False})$	g state	emen	it are	e tru	e or :	false.	
53. You can tell by looking at a person whether he or she has AII 54. HIV/AIDS is a leading cause of death for African Americans	DS.	(1) T	(2 F)			
25-34.55. One in three people don't know they have HIV.56. HIV is a leading cause of death for African Americans.	T T	F F					
57. African Americans accounted for one in 3 new HIV/AIDS cases.		Т	F				

58. Two out of five people contract HIV/AIDS from heterosexual sex.

T F

59. Please indicate your mother's highest level of schooling:

- _____ Did not graduate from high school
- _____ High school diploma or GED
- _____ Some college
- _____ College graduate
- _____ Graduate or Professional Degree
- ____ Don't know

60. Please indicate your father's highest level of schooling:

- _____ Did not graduate from high school
- _____ High school diploma or GED
- _____ Some college
- _____ College graduate
- _____ Graduate or Professional Degree
- ____ Don't know

61. Please indicate which of the following illnesses that you or someone close to you has:

Asthma	Diabetes	Substance abuse (e.g. drugs or alcohol)
Obesity	STD	Heart Disease
Cancer	HIV/AIDS	Other

Appendix C Study Informed Consent

Georgia State University

Department of Communication Informed Consent

Title: Media Health Messages Analysis Principal Investigators: Yuki Fujioka Ph. D., Tonia East

I. <u>Purpose:</u>

You are invited to participate in a research study. The purpose of the study is to examine how college students view television health messages. We are particularly interested in how college students view and evaluate health-related messages within an entertainment-education television program. Approximately 200 participants will be recruited for this study. You are asked to participate in a web-based pre-study survey session. Participation in this survey will require 40-50 minutes of your time.

II. <u>Procedures:</u>

If you decide to participate, you will be asked to share your opinions on two health information and media surveys. In this survey you will also be asked about some information about yourself (class standing, health status, gender, etc.). The total time of this study will be about 40-50 minutes. You will receive class credit for your participation in this study. Within two weeks you should receive an email requesting your participation in a follow-up survey.

III. <u>Risks:</u>

In this study, you will not have any more risks than you would in a normal day of life. However, In order to accommodate possible psychological discomfort due to the exposure to some health-related topics and/or other attitudinal questions, the study assures that (a) your participation is completely voluntarily; (b) responses will be asked to be kept confidential; and (c) you can withdraw from the study at any time.

IV. Benefits:

Participation in this study may not be of benefit to you personally. However, it may contribute to a society by providing information about how young adults evaluate health messages and media technology.

V. <u>Voluntary Participation and Withdrawal:</u>

Participation in research is voluntary. You are not required to participate in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

VI. Confidentiality:

We will keep your records private to the extent allowed by law. Tonia East and Yuki Fujioka will have access to the information you provide. Information will also be shared with those who make sure the study is done correctly (GSU Institutional Review Board and the Office for Human Research Protection (OHRP)). The information will be stored separately from the data to protect privacy. The information you provide will be stored in a locked filing cabinet and will only be looked at by research staff. Your name and other facts that might point to you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally. If you have any questions about the questionnaire, please feel free to contact me at the address or e-mail address listed below.

VII. Contact Persons:

Contact Tonia East in the Department of Communication at 404-413-5600 or, <u>teast3@gsu.edu</u>. You may also contact her advisor at <u>jouykf@langate.gsu.edu</u>if you have questions about this study. If you have questions or concerns about your rights as a participant in this research study, you may contact Susan Vogtner in the Office of Research Integrity at 404-413-3513 or <u>svogtner1@gsu.edu</u>.

Thank you for your support and cooperation.

If you are willing to volunteer for this research study, please sign below:

Participant

Principal Investigator or Researcher Obtaining Consent

Date

Date

APPENDIX D

Study Questionnaire

Please check ONE answer for the following questions.

For each item, please choose a number between 1, Not at all, and 7, A great deal. Regarding the television show you just watched rate the extent to which you felt each of the following emotions

emotions.							
1. Sad	1	2	3	4	5	6	7
2. Hopeful	1	2	3	4	5	6	7
3. Attacked	1	2	3	4	5	6	7
4. Disappointed	1	2	3	4	5	6	7
5. Encouraged	1	2	3	4	5	6	7
6. Insulted	1	2	3	4	5	6	7
7. Motivated	1	2	3	4	5	6	7
8. Upset	1	2	3	4	5	6	7
9. Optimistic	1	2	3	4	5	6	7
10. Fearful	1	2	3	4	5	6	7
11. Angry	1	2	3	4	5	6	7

Regarding the television program you just watched regarding HIV/AIDS, please indicate the extent to which you agree or disagree with the following statements.

n was.								
12. Informative	1	2	3	4	5	6	7	
13. Disappointing	1	2	3	4	5	6	7	
14. Relevant	1	2	3	4	5	6	7	
15. Offensive	1	2	3	4	5	6	7	
16. Believable	1	2	3	4	5	6	7	
17. Threatening	1	2	3	4	5	6	7	
18. Accurate	1	2	3	4	5	6	7	
19. Insulting	1	2	3	4	5	6	7	
20. Harmful	1	2	3	4	5	6	7	
21. Credible	1	2	3	4	5	6	7	
22. Have you seen the television series that you just view	ved be	fore')	Ţ	Yes			No

22. Have you seen the television set	tes that you just viewed before.	105	110
a. If yes, Have you ever seen the	s particular episode?	Yes	No

23. How often have you watched this show?

Neve	r		5				Every	Week
0	1	2	3	4	5	6	7	

Please indicate how strongly you agree with the following statements about the episode you just watched.

(1- Strongly Disagree to 7- Strongly A	Agree	e)					
24. It was familiar to me	1	2	3	4	5	6	7
25. It was relevant to me	1	2	3	4	5	6	7

26. It was relevant to my racial/ethnic community	1	2	3	4	5	6	7
27. It was something I experienced	1	2	3	4	5	6	7

Please indicate how strongly you agree with the following statements. (1= Strongly disagree and 7= Strongly agree)

28. I think I have a good understanding of Flex's character.	1	2	3	4	5	6	7
29. I tend to understand the reasons why character Flex does what be does	1	2	3	Δ	5	6	7
30. While viewing the show I could feel the emotions Flex	1	2	5	т	5	0	,
portrayed.	1	2	3	4	5	6	7
31. During viewing, I felt I could really get inside Flex's							
head.	1	2	3	4	5	6	7
32. At key moments in the show, I felt I knew exactly what							
Flex was going through.	1	2	3	4	5	6	7
33. While viewing the program, I wanted Flex to succeed							
in achieving his goals.	1	2	3	4	5	6	7
34. When Flex's character succeeded I felt joy.	1	2	3	4	5	6	7
Now in relation to Natalie (Flex's girlfriend):							
35. I think I have a good understanding of Natalie's character.	1	2	3	4	5	6	7
36. I tend to understand the reasons why character Natalie does wh	at						
he does.	1	2	3	4	5	6	7
37. While viewing the show I could feel the emotions Natalie							
portrayed.	1	2	3	4	5	6	7
38. During viewing, I felt I could really get inside Natalie's							
head.	1	2	3	4	5	6	7
39. At key moments in the show, I felt I knew exactly what							
Natalie was going through.	1	2	3	4	5	6	7
40. While viewing the program, I wanted Natalie to succeed		-			_	-	_
in achieving her goals.	1	2	3	4	5	6	7
41. When Natalie's character succeeded I felt joy.	1	2	3	4	5	6	7
Please indicate how likable the characters were overall. (1= Very Unlikeable and 7= Very Likeable)							
	1	•	0		-		-
42. Flex's character	I	2	3	4	5	6	1
43. Natalie's character	1	2	3	4	5	6	7

Please indicate how strongly you agree with the following statements. (1= Strongly disagree and 7= Strongly agree)

44. Flex is like me	1	2	3	4	5	6	7
45. Flex shares my values	1	2	3	4	5	6	7
46. Flex behaves like me	1	2	3	4	5	6	7
47. Flex has thoughts and ideas similar to mine	1	2	3	4	5	6	7
48. Natalie is like me	1	2	3	4	5	6	7
49. Natalie shares my values	1	2	3	4	5	6	7
50. Natalie behaves like me	1	2	3	4	5	6	7
51. Natalie has thoughts and ideas similar to mine	1	2	3	4	5	6	7
52. While watching the program, I sometimes found myself							
thinking of ways I disagreed with what was presented.	1	2	3	4	5	6	7
a. If so, explain how you disagreed with the message.							
53. I found myself looking for flaws in the way the HIV information	on						
was presented in the program.	1	2	3	4	5	6	7
54. I sometimes felt like I wanted to argue back to what was							
going on in the program.	1	2	3	4	5	6	7
55. While I was watching the program I disagreed with Flex's							
position.	1	2	3	4	5	6	7
56. While I was watching the program I disagreed with Natalie's							
position.	1	2	3	4	5	6	7

For the following questions please indicate whether the following statement are true or false. (1 = True to 2 = False)

(1)	(2)
Т	F
Т	F
Т	F
Т	F
Т	F
	(1) T T T T T

Please indicate the extent to whether you 1,"not at all confident," to 7,"extremely confident."

63. I am able to discuss if my partner(s) have been tested for HIV.	1	2	3	4	5	6	7
64. I know how to discuss HIV/AIDS with a friend.	1	2	3	4	5	6	7
65. It is possible for me to convince my partner to get tested.	1	2	3	4	5	6	7
66. I am able to discuss HIV/AIDS testing with a health care							
provider.	1	2	3	4	5	6	7
67. I am able to discuss HIV/AIDs with my sexual partner.	1	2	3	4	5	6	7

Regardless of your relationship status when thinking about future sexual encounters in the next 12 months, how likely are you to...

(1 = not at all likely to 7 = very likely):

68. Get tested for HIV/AIDS.69. Ask your partner(s) if they have been tested for HIV.70. Discuss HIV/AIDS testing with a health care provider.	1 1 1	2 2 2	3 3 3	4 4 4	5 5 5	6 6 6	7 7 7
 71. Discuss HIV/AIDS with a sexual partner. 72. Discuss HIV/AIDS with a friend. 	1 1	2 2	3 3	4 4	5 5	6 6	7 7
 Please indicate how strongly you agree with the following stateme (1=Strongly Disagree to 7=Strongly Agree) 73. I trusted what the program said about AIDS. 74. I believed what the program said about AIDS. 75. I feel the program gave correct information about AIDS. 	nts: 1 1 1	2 2 2	3 3 3	4 4 4	5 5 5	6 6 6	7 7 7
76. I feel that the people who made the program were experts.	1	2	3	4	5	6	7
77. I believe the program gave all the important facts about AIDS.	1	2	3	4	5	6	7
78. I believe information is being withheld from the public regarding a cure for HIV/AIDS.79. I believe HIV was intentionally create by the federal government to destroy the black race.	1 ent 1	2 2	3 3	4	5 5	6 6	7 7
Please indicate your answer to the following questions.	2			No			
so. Have you been sexually active in the last six months?	·			110			
81. Gender: Male Female							
82. Ethnicity: (Check all that apply) Black White Asian Latino/a Native American Other							
83. Which of the following issues was addressed in the episode yo	u ju	st wa	atche	ed?			
CancerHerpes			Ast	hma			

HPV ____HIV ____ Diabetes