Academic Websites and Minority Portrayal: A Content Analysis

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ABSTRACT

Academic Websites and Minority Portrayal: A content Analysis

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The Internet has changed the way society communicates with one another. One of the organizations that utilize the Internet in order to communicate with their audience is universities. The imagery and information that is featured in the homepages of university websites can portray a certain perception of that university. Universities were found to be diverse in the ethnic background of the persons used for their homepage imagery. The way minority characters were found to be portrayed in gave a general idea of what exist within academia as to how they view and portray minority groups.

Keywords: Internet, ethnic minorities, university websites, content analysis, priming
ACKNOWLEDGEMENTS

To my late father, Dr. Jorge Jimenez, who taught me to never give up until after I have tried something a thousand times.

To my loving mother, Reyna Jimenez, for her support, wisdom, unconditional love, and her confidence in me which has helped me succeed.

To my siblings, for ensuring my life is always interesting. I would not be the same without you in my life.

To the amazing faculty at the Communications Department who have made my graduate experience wonderful.

To Dr. Callahan for guiding me through this entire process and for helping me see the light at the end of the tunnel.

And finally to my fellow graduate colleagues, we laughed, we cried, we danced. Graduate school would not have been the same without you.
TABLE OF CONTENTS

Chapter I: Introduction ........................................................................................................ 1

Chapter II: Review of Literature ........................................................................................ 4
  Minorities and Imagery ........................................................................................................ 5
  Minorities and Advertisements .......................................................................................... 7
  Priming Effects and Minorities- Theoretical Background .................................................. 15
  Individuals and the Internet .............................................................................................. 21
  University image and websites ........................................................................................ 25

Chapter III: Method ........................................................................................................... 28
  Content Analysis ................................................................................................................ 28
  Artifacts ............................................................................................................................. 35
  Apparatus .......................................................................................................................... 37

Chapter IV: Discussion ....................................................................................................... 38

Chapter V: Results ............................................................................................................... 46

Chapter VI: Conclusion ..................................................................................................... 59

References ........................................................................................................................ 64

Appendix A .......................................................................................................................... 71

Appendix B .......................................................................................................................... 74

Appendix C .......................................................................................................................... 76

Footnotes ............................................................................................................................ 78
CHAPTER I
INTRODUCTION

Internet popularity has increased as everyday tasks have moved online. The Internet has allowed many activities such as banking, shopping, socializing, entertainment and basic research to be done in the comfort of an individual's home. With this much exposure to one communication source, it becomes important for the content of such a medium to be studied to understand the impact it can have on individuals’ perception of reality. One set of organizations relying on this new technology is public and private universities. Universities have seen an increase in enrollment interest with a full functioning website that can inform prospective students regarding their institution (Stoner, 2004). Prospective students have been found to visit university websites more frequently in past years (Stoner, 2004; Brunner & Brown, 2007). With students spending so much time on university’s websites, students have the opportunity to learn what the university can offer them through what is being portrayed on the university webpages. Therefore, the Internet becomes an outlet by which universities can foster a certain image with outside audiences.

If universities cultivate stereotypes by failing to portray minority groups in diverse settings and roles, the same stereotypes that society has placed on minority groups will be re-enforced and will continue to dominate individuals’ perceptions of minority groups. Mastro and Greenberg (2000) discussed how reports made by the U.S. Commission on Civil Rights, which suggest that stereotypical portrayals of African American as well as other ethnic minorities influence the way Caucasian and non-Caucasians perceive those minorities. This establishes the importance of the university’s image created by photographs and images found on academic
websites. Academic websites must appeal to a diverse consumer market without compromising the public image universities rely on to bring students to its campuses. The content of the homepages of university websites is the basis for this proposed research study. This study discovered the settings minority groups are portrayed in, and the relationships to others they were more likely to appear in. The role of each individual found in the imagery was explored as well as how minority groups were found to be represented and how that compares to past research. Finally the percentage of minority frequencies was compared to the national enrollment of minority groups in universities across the United States.

Previous research has found that there is a general perception of minority groups in media and society. Asian Americans are seen as the model minority who are technologically literate and have higher education (Hoy & Wong, 2000). Hispanic Americans are portrayed as lazy, and poorly educated (Mastro, Behm-Morawitz, & Ortiz, 2007). African Americans are seen as having low income with exceptions of individuals who become athletes or entertainers (Bramley-Solomon & Roeder, 2008). In the academic world, African Americans are seen as only attending school because of athletics and criticized for relying heavily on financial aid (Allen, 1995). Minority faculty members are seen by Caucasian colleagues as being hired in order to meet diversity quota or affirmative action initiatives that began in the late 1960’s (Allen, 1995; Rothman, Lipset, & Nevitt, 2003).

With the impact the Internet is having on individuals who view the content found on webpages as highly accurate, it emphasizes the importance of studying the content of webpages. Companies, institutions, non-profit organizations, news outlets, and the government have come to understand the impact the Internet can have on the success of their organizations and have included the new medium in their marketing mix (Ferle & Lee, 2005). Accurate information that
reflects the world in a realistic manner is essential when individuals’ primarily rely on one media source over others. Outside audiences rely on academic websites in order to gather information about a particular university. Prospective students, current students, alumni and other audiences can be impacted by what is being portrayed in university websites.

Prospective and current students are more likely to visit the websites, and will more likely be impacted by its content. Based on what is being portrayed in the academic websites, prospective students might enroll in a university with a particular expectation for that university. If the website portrayed itself in a way that is not true to what a student might encounter in their college career, students’ college experience could found to be disappointing to that student. Content analysis is the research basis that provides us with a means of exploring university websites and determining the resulting image of that university. By examining the content of academic websites, especially regarding the portrayal of minority groups, we can learn what improvements need to be made in order to more accurately portray minority groups.

The media is seen as a contributing factor in shaping individuals’ reality. People are not born with stereotypes, but learn them as they engage in society. The media’s influence on society has increased as the media has become more readily available to individuals around the world. When individuals’ are primed with a certain stereotyped perception of how a minority groups is, the stereotype will be easily retrievable upon encountering a member of that minority group. Consequently, individuals’ will be blinded by the media images and will already have predetermined ideas of what a member of a minority group should be like. Media is no longer a luxury for the well to do, it is easily accessible by all individuals. The Internet has evolved over the years, and has changed the way society communicates. It has made many things possible, and has provided a new communications medium that has just recently begun to be studied.
All these factors combined help explain the potential impact that university websites can have on individuals’ perception of minority groups. By focusing on certain aspects and characteristics of individual minority groups it can help change audiences’ perception of minority groups. Assessing current portrayal in academic websites, can lead to more accurate portrayals of the major minority groups. This research project will add to the body of literature that study minority portrayal in any communication medium.

CHAPTER II
REVIEW OF LITERATURE

In order to more fully understand the importance of researching the portrayal of ethnic minorities in university websites, it is important to understand how minority groups have been found to be represented in past research. It is important to understand the role that media imagery plays in enforcing pre-determined social stereotypes when researching minority portrayal. Scholars have explored the topic theoretically, and their research has increased as the minority population in the United States has increased. A review of previous research is first discussed in order to provide a background. Next, the role that the Internet plays on individuals’ lives and in the academic world will be explored, and the importance that universities place on their institutions’ websites will be discussed. All these topics combined provide the necessary background in order to understand how imagery is used to convey a message to individuals. The message portrayed through images of minority groups in university websites can help add to the body of literature that focuses on minority group portrayal in the general media.
Minorities and Imagery

The inclusion of images in an advertisement or media message can help in the recollection of that media message (Shepard, 1967). In the study conducted by Shepard (1967), he discovered that after seven days since being exposed to the imagery stimulus, subjects were still able to recognize the pictures that were shown to them about 87% of the time. This demonstrates that although time had passed, images remained in the forefront of the mind of the individual. Shepard’s findings validate the idea that images can have a strong impact on individuals and can stay with a person for long periods of time. The perception those images are portraying to individuals, and how those same perception aid individuals form stereotypes of ethnic minorities is something that has been studied in the last years as the minority population increases in the United States.

Individuals are being exposed to images and messages that can either influence them directly or indirectly (Ibroscheva & Ramaprasad, 2008). Ibroscheva and Ramaprasad (2008) claim that in order for people to make sense of the messages they are being exposed to on a daily basis, individuals’ stereotype. Stereotypes then become social beliefs and the only way of understanding outside groups both culturally and socially. People are not born with stereotypes, but stereotypes are learned as individuals’ are socialized in the world (Ibroscheva & Ramaprasad, 2008). According to Ibroscheva and Ramaprasad (2008), the media is seen as the major source of easily accessible and available information, which leads to creating and sustaining beliefs about minorities and target groups. Individuals then consume the world outside of them through the eyes of the media, in such a way that it becomes reality to that individual. Stereotypes are fairly stable, simplistic, and rigid in their cognitive structure. This makes them useful in helping people make sense of the messages around them; however, this comes at the
cost of over simplifying their perception of minorities and target groups (Ibroscheva & Ramaprasad, 2008).

Another way in which the media can play a role in how individuals view certain groups is through the primed stimuli that audiences consume by being exposed to the media. Priming affects behavior in the sense that an individual’s behavior can be shaped by incidental exposure to stimuli and that such effects can occur without his or hers intention or awareness (Wheeler & Berger, 2007). Individuals’ then come to link action relevant construct with the prime stimulus in memory that can be activated upon exposure to the stimuli. One example of how priming works is shown in a study conducted by Kawakami, Young, and Dovidio (2002). In their study, the researchers wanted to look at the social categories and the subjects own behaviors after priming stimuli had been conducted. After priming respondents with an elderly stereotype stimulus, respondents were asked to categorize persons or objects. In order to prime participants with the elderly prime, individuals were shown photographs of individuals and asked to specify if the photograph was of an older individual. After each photo was shown, a screen would show the words “old?” and then the latency of how quickly each individual answered was recorded. Participants were then asked to determine whether a string of letters presented in front of them was an actual word or not. Participants who were primed with the elderly prime were more likely to respond slower than those who had not been primed with the elderly category. Priming certain social categories on individuals can lead to certain actions consistent with those categories even when the participants are unaware of the priming conditions. The findings concluded that when a subject is primed with a certain stimuli, the exposed subject will then act in accordance to the stimuli.
The pre-determined stereotypes ethnic minorities have been held to not only effect the perception individuals have regarding a minority, but also how minorities views themselves. Expectancy theory states that if a negative expectation is portrayed on the media regarding a target audience, members of that target audience will more likely act in accordance with those portrayals (Taylor, Lee, & Stern, 1995). Taylor, Lee and Stern (1995) demonstrate that it is stereotyped portrayals that make it socially acceptable for Hispanic American children to drop out of school, or for African American children to see themselves as athletes or entertainers and as a result set unrealistic goals that are not achievable by the majority of the population.

**Minorities and Advertisements**

Minorities are growing in population and in market value. The three most prominent minority groups in the Untied States are African Americans, Hispanic Americans, and Asian Americans. It is estimated that by the year 2020, African Americans will constitute 15.22% of the total United State’s population. Hispanic Americans, which account for 16.03% of the population in 2010, will account for 19.63% of the United State’s population by 2020 (U.S. Department of Census Bureau, 2009; U.S. Department of Census Bureau, 2010). Asian Americans will grow to 7.02% by 2020 and accounted for 4.8% of the Unites State’s population (U.S. Department of Census Bureau, 2009; U.S. Department of Census Bureau, 2010). With the number of minorities growing in the past twenty years, and their disposable income increasing, companies have realized that not implementing target marketing strategies into their campaigns can result in possible revenue losses (Holland & Gentry, 1999). However, studies show that minority target groups are under-represented in most print and broadcast advertisements. When a minority is shown in an advertisement, they are typically held to pre-determined social
African American stereotypes consist of being musically talented, with good dancing skills, low income, low status (the only exceptions being those that become athletes or entertainers) (Bramley-Solomon & Roeder, 2008; Taylor, Lee, & Stern, 1995). Stereotypes, as previously discussed, can help individuals manage the messages they are being exposed to by simplifying a message. It then becomes important for the media to portray minorities in all ranges of human experiences in order to show multiple sides of minority groups (Dalisay & Tan, 2009).

In order for advertisers to connect with minority groups, marketing campaigns are created that pull from cultural codes which can resonate with most of the targeted audiences (Brumbaugh, 2002). Marketers know that they cannot connect with every person in an audience, so cultural codes are created to aid in the self-referencing process. In the article written by Brumbaugh (2002), culture is defined as “the beliefs, values, and norms of a specific social group”. When speaking in social terms, a culture is a group of people that share and perpetuates a specific set of knowledge. Based on this definition of culture, two sets of culture were defined, a dominant culture and a subculture. The subcultures can be categorized by ethnicity, country of origin, religion, race, gender, age and regional subculture. In the United States, for example, there exist many minorities that coexist having their own distinctive values, norms, beliefs, and
behaviors that differ in some aspects from the dominant American culture. Members of the dominant culture tend to only be socialized with one culture, while members of subcultures are socialized into both the dominant culture and the subculture to which they belong to.

Brumbaugh (2002) identified two forms of cultural models that can be activated with self-referencing: source and non-source. How well a marketer can activate cultural models on an individual depends on the strength of the association that the advertisement attempts. More visual physical traits, like skin color, hairstyle, facial structure, etc., can have a greater source cue and will therefore be processed by the customer automatically. Non-source cues are linked with cultural models. Unless active in a particular culture, the greater part of the population often misses non-source cues. Therefore, non-source cues require more involvement on the part of the consumer, and since more time is involved in interpreting the advertisement self-referencing can occur at a higher level.

Brumbaugh (2002) concluded that targeted advertisements were effective because it was proven that targeted audiences would feel a stronger link with sources cues depicted in the advertisements. This stronger link leads to an increase in self-referential processing which in turns can lead to a higher favorable attitude about the advertisement. Hirschman and Thompson (1997) identified three ways in which people recognize the self in advertisements. Advertisements can prompt one of the following customer responses: (1) inspiring and aspiring, (2) deconstruction and rejection, and (3) identifying and individualistic (Hirschman & Thompson, 1997). Self-referencing then occurs when a media can draw on a culturally-constructed and a shared idea to evoke individualized, self-related cognitions which in turn will favorably influence the viewer’s reactions to the advertisement (Hirschman & Thompson, 1997).
Inspiring and aspiring are the first response identified by Hirschman and Thompson (1997); the response drives the consumer to identify with the ad in a way in which they aspire to become like the models in the ad (Hirschman & Thompson, 1997). Striving towards that ideal becomes synonymous to striving to be one’s best with the model or icon serving as a standard to which one can assess one’s own progress.

Deconstruction and rejection are the second strategy. This drives the consumer to over-criticize the artificial and unrealistic quality of the advertisement. It is based on the idea that people should be able to clearly identify what is real with what is not real and then make self-directed rational decisions. One example that Hirschman and Thompson (1997) identified as common is the notion of the ideal women and what western nations have said she should look like. The women that were interviewed by the researchers challenged the idea and mentioned that even when they are told by the media that looking different is good, they are still made conscious of their differences and thus it challenges their self-confidence.

Identifying and individualizing is the last strategy. This measures how consumers rank their self-perceptions and personal goals in relation to the idealized image presented in the mass media. Consumers do this by looking at the endorsers perceived characteristics and relating those characteristics to themselves. One of the major obstacles in communications is the reader and consumers adoptions of cultural messages and if those messages align with what the marketers were trying to convey. Interpretations take into account the cultural code embodied in the media image. Media then provides a dream identification through which consumers can participate in a shared cultural mythology that encodes meanings about how to live one’s life. According to Hirschman and Thompson, “people then become moving targets whose knowledge about persuasion keeps changing” (1997, p. 16).
Though companies are seeing the need to engage in target marketing, minority groups are still highly underrepresented in print and television advertisements. Knoblock-Westerwick and Coates (2006) conducted a content analysis of the most popular magazine with the general United States population, and the most popular magazines read by African Americans, Asian Americans, and Hispanic Americans. They found that magazines that were popular with each minority group had a high minority representation, but minority groups were under-represented in mainstream magazines. African Americans were shown in 87% of the advertisements in the magazine popular among African Americans. Hispanics were represented in 57% of ads in their respective magazine. Asian Americans were only represented in 12% of the advertisements in the magazines catered to their demographics. In mainstream magazines, African Americans had the highest representation appearing in 18% of all ads. Hispanics and Asians came in next both with only 3% representation.

Knoblock-Westerwick and Coates (2006) findings were similar to Taylor and Bang’s findings (1997) ten years earlier. Taylor and Bang conducted a content analysis of the top ten mainstream magazines based on readership. Advertisements were coded, and their content analyzed. In their research, Taylor and Bang mostly focused on Hispanic Americans. In order to have a more accurate comparison data, African Americans, Asian Americans and Caucasians were also coded. The data showed that Hispanics were the most under-represented, with African Americans having a slightly higher representation than their percentage to the United State’s population. Asian Americans had a higher representation than the overall population. The setting in which each minority was most represented concluded that although the data was not able to find marginal significance, the data still showed that Hispanic Americans were held to stereotypes and were most prevalent in women’s magazine and special interest magazines.
Taylor and Bang concluded that Hispanic American’s appearing in more women’s magazines, it reinforced the stereotype that Hispanic Americans are more family oriented.

One of the overlooked factors in researching minority representation is how minorities feel about the portrayal of Hispanic Americans in the marketing efforts. A quarter of the American population self-identifies as something other than “white” (Ferle & Lee, 2005). Ferle and Lee (2005) discussed how ethnic minorities desire more representation in the media, and more importantly, more accurate representation. Ferle and Lee concluded that in order for marketers to successfully reach the Hispanic audience, 8% of the marketers’ money needed to be spent on target marketing. Researchers found that only about 2.4% was actually being used to target the Hispanic American market. In turn, the number of African Americans with disposable income is increasing, but advertisers have been slow to respond. Ferle and Lee found that in 2004, $1.8 billion dollars were used to target African Americans while $263.7 billion dollars were used in overall advertising efforts for the United States.

An additional finding by Ferle and Lee (2005) concluded that the Hispanic population enjoys both English and Spanish media, and their use of either depends on the length of time they have been in the United States. African Americans in turn enjoy both mainstream media and media geared specifically towards African Americans, like the BET network and VIBE magazine. Ferle and Lee’s research showed the attitudes from African American, Hispanics, and Caucasians towards the content of the advertisements that are created to target their specific ethnic group. African Americans felt strongly that the models in the advertisements shown did not represent their ethnic group well, while Hispanics saw improvements in the way they are being represented and could self-reference to the models in the advertisement better.
Torres (2007) explored another aspect of target marketing in her study. She used homophily and group position theory in order to explain how minorities feel when a member of another ethnic minority is used in an advertisement as opposed to someone from their own ethnic background. Using both of these theories, a study was constructed that gathered data from members of ethnic backgrounds. They were then asked questions about advertisements that were chosen because of their ethnic endorsers. Under homophily theory, minorities should relate to any ethnic minority endorser on the level that they are both ethnic minorities. Group position theory states the opposite; it concludes that minorities are competitive towards each other and will not react favorably to an advertisement if it contains a model from a different ethnic background than the audience member. Torres’ data confirmed group position theory: members of a minority group felt less favorable toward an ad if the model was of a different ethnic background.

Socioeconomics are also a part of the self-referencing process: the way people of different economic background see themselves within their own ethnic group and how that can change once their socioeconomic status changes. Williams and Qualls (1989) explored how ethnicity identification for African America can change once they enter middle-class society. Williams and Qualls discussed how the majority of the research done on African Americans has been in low income societies. More research is needed to determine how ethnic identity changes as African Americans increase their education level and their economic status in society. The study conducted by Williams and Qualls was conducted among 80 African Americans and 80 Caucasians. They were asked questions based on celebrity endorsed products advertisements to see who they related to the most. The data showed that middle-class Caucasians and middle class African Americans demonstrated similar self-referencing patterns. This enforces the notion that
African Americans do assimilate into majority American culture. Data also showed that although they might have similarities with Caucasians, African American subjects still understood street style language patterns typically exhibited among African Americans in lower socio economic classes.

Minority portrayal is found in news stories in addition to advertisements. Gist (1990) discussed the typically negative portrayal of minorities in news stories with the associations with street gangs, poverty, and low achievement. When minorities are portrayed in a positive light, it is typically because that member of the minority group is an athlete or is in the entertainment industry. Gist continued to discuss how many minority journalists quit the industry because they feel like their issues are not being heard, and they are expected to conform to the biases and stereotyped opinions of upper management. By not providing fair news coverage of minority issues, children and adults who never know or care to see the balance in minority portrayal find their reinforcement in their beliefs in the daily media.

Taylor, Lee, and Stern (1995) discussed how if a minority is fully and fairly represented in advertising, the models should appear in major and background roles within that advertisement. If a minority is consistently represented in a background role then that minority is seen as under-represented because the models are being shown in a peripheral rather than a central part of social life. Knowing what type of roles in which a minority model is portrayed can help in assessing the importance of the model in the advertisement in which they appear. Understanding the settings and roles in which minorities have been previously portrayed in becomes essential in order to fully being able to compare among various media outlets.
**Priming Effects and Minorities: Theoretical Background**

The impact that images can have on individuals was discussed in the study conducted by Shepard in 1967. Images are still as powerful today as they were almost 50 years ago. Accessibility theory and priming can help us better understand the impact that images can have on individuals’ perception of the world around them. Accessibility theory refers to the strength of the mental construct relevant to its environment input pre-exposure (Bushman, 1998). The more accessible a message is, the more likely it is to be used by individuals’ to interpret the world. When a message temporarily increases the accessibility of a mental construct, it is referred to as priming. Priming then is a message that an individual is exposed to that can occur without their intention or awareness; priming has the potential to shape individuals’ behavior and attitudes (Wheeler & Berger, 2007). This becomes important when researching how the media impacts individual’s perception of minority groups. When a person is not familiar with a certain target group, they look to the media to help them shape opinions regarding that minority group. Constant stereotypical portrayal of ethnic minorities can help shape perception regarding that minority group. Mastro and Greenberg (2000) found a correlation between how individuals’ perception of minority groups and the way those minority groups were being portrayed in television prime time programming. Characters in the prime time programming found by Mastro and Greenberg (2000) were proven to predetermine stereotypes, with Hispanic Americans being the most stereotyped. This theoretical background is the basis by which the results of this research project were interpreted.

The danger of having constantly stereotyped portrayal of minority groups is that those images enter a person’s availability heuristic, which makes the information easily retrievable. Priming effects can happen without the knowledge of the individual. Priming includes messages
that individuals are exposed to without their intention or awareness; priming has the potential to shape individuals’ behavior and attitudes (Wheeler & Berger, 2007). When a person is primed with a specific stimulus, the individual is more likely to act in relation to the prime for which they were exposed to. An example of this was conducted by Corcoran, Hundhammer, and Mussweiler (2009). In their study, researchers primed their subjects with a focus on similarities versus differences. In order to see the impact this stimuli would have on the participants, subjects in their study were asked to describe a day in the life of the social group skinhead. They were then asked to think of similarities or differences between two sketches, thus placing the focus of participants on similarities and differences. Once the previous tasks were completed they were asked to wait outside where a series of chairs were set up for them. The researchers had placed skinhead attire in one of the waiting chairs, and the distance by which each individual chose to sit down in relation to the skin head attire was recorded. It was found that members that were primed with the difference stimuli sat closer to the skinhead attire, while those who had been primed with similarities stimuli seated further away. Another study showed that after individuals were primed with both positive and negative primes of Asian Americans, perception regarding Asian Americans coincided with the prime for which they were exposed to (Dalisay, & Tan 2009). This shows that the impact of priming is not only seen when people change their perception of a target group, but that individual could also go as far as changing the attitude towards that target groups.

Science has shown that the same neurons are active during both perceptions and production of a specific behavior (DeMarree, Wheeler, & Petty, 2005). DeMarree, Wheeler, and Petty (2005) went on to describe how mimicry was once used as a survival role in early evolution and now it has developed to serve a social function because of its ability to facilitate
and indicate liking. Priming effects could then be magnified when participants create a self-stereotype linkage during the priming phase of the experiment. In the study conducted by DeMarree, Wheeler, and Petty (2005), they wanted to see to what extent primes could alter the self-perceptions of individuals. Subjects were primed with African American stereotypes, and used aggression as a dependent. In order to prime their participants with African American stereotypes, participants were asked to write an essay about the life of a fictional Ohio State University student, Tyrone Walker. The control group was asked to write their essay on the life of a fictional Caucasian student Erik Walker. After the essays were written, participants were flashed words and then asked to choose another word from a list that best described how they felt when the word flashed in front of them. Half of the words used were aggression-relevant words, in accordance to studies found by the researchers; hostility and aggression are common elements of the African American stereotype (DeMarree, Wheeler, & Petty, 2005). Researchers found that more low monitoring individuals were more likely to act in accordance to the prime of which they were exposed to. This was tested two other additional times with the primes of luck and professor/model primes. In all three tests the low self-monitoring individuals were more likely to change their attitude in accordance to the prime for which they were shown. When subjects were tested to see how primes could magnify self-perceptions of individuals after being primed with African American stereotypes, researchers found that subjects acted in accordance to the prime stimuli and subjects found them acting more aggressive (DeMarree, Wheeler, & Petty, 2005).

Individuals use stereotypes to make sense of the world around them. Media audiences are heavily exposed to messages that can either influence them directly or indirectly. Most individuals’ social reality is composed of what they think and what other’s around them think. Individuals are not born with stereotypes, but acquire them as they become socialized in the
world (Ibroscheva & Ramaprasad, 2008). According to Ibroscheva and Ramaprasad (2008), stereotypes are images in an individual’s heads that mark traits that help individuals distinguish formulaic and usually oversimplified conceptions and opinions regarding different subjects or groups of people. Those conceptions then become important in building a person’s sense of who they are and where they belong. Ibroscheva and Ramaprasad (2008) discussed the process of acquiring stereotypes as they become socialized rather than possessing them at birth. Stereotypes influence how individuals view others’ cultural, political or religious habits. Some have suggested that stereotyping is used as an energy-saving mechanism in order to make room to mentally process other necessary or desirable mental activities (Macrae, Milne, & Bodenhausen, 1994).

The media then aids in changing or cultivating individuals’ perception of ethnic minorities. Studies have shown that when advertisements include an ethnic minority model, the minority models is often portrayed in pre-determine stereotypes that only help re-enforce those same stereotypes (Bramley-Solomon & Roeder, 2008; Hoy & Wong, 2000; Mastro, Behm-Morawitz, & Ortiz, 2007; Qualls & Moore, 1990; Martin, Lee, & Yang, 2004). Minority stereotyping then becomes relevant when talking about international communication, and relevant in considering the way people perceive a certain ethnic or national group. How each individual views others’ cultural, political or religious habits is born out of the stereotypes society has proliferated with regards to a particular minority group. Ibroscheva and Ramaprasad (2008) state that the media has the potential to determine the success or failure of these groups by the perceptions transmitted through virtually all means of communication. Media consumers are led to see the world outside of their own firsthand experience through what the media portrays, building on a person’s developing attitudes and perceptions about certain target groups.
Racial stereotypes most accessible to a person can be activated when the person is exposed to the media message containing racial cues. When an individual is primed with either a negative or a positive prime of the ethnic group, they will react respectively according to the prime. Dalisay and Tan (2009) argued that because Asian Americans are portrayed as the model minority, a member of the majority group will be more likely to use their success as means of comparing them to other ethnic groups. In their study, Dalisay and Tan only counted responses by subjects that had identified themselves as Caucasian. The study had subjects watch one of three videos. One video was consistent with Asian Americans stereotype of model minority, the second video showed Asian Americans conducting misdemeanors, and the third video was a documentary on panthers and cheetahs. Results were consistent with the notion that former priming effects the perceptions people have of minority groups. Subjects that watched the model minority video thought highly of Asian Americans. Subsequently when asked about African Americans, they were more likely to have negative perceptions regarding that particular ethnic group. Subjects who were expose to the second video of Asian Americans performing misdemeanors thought less of Asian Americans and had a more positive perception of African Americans. Researchers concluded that although there are multiple interpretations of Asian Americans, people make up their mind about situation based on what they see being portrayed most in television. It was advice by the researchers that the media should engage in showing minority groups in all ranges of human experiences.

A study conducted by Mastro, Behm-Morawitz, & Ortiz (2007), emphasises the correlation between media primes stereotyping ethnic minorities and the shaping of individual perception of ethnic minorities. In the study conducted by the above researchers, students were surveyed in a two part study. The first part consisted of questions regarding personal media use
and how they thought that same media in their opinion portrayed Hispanic Americans. The second part took place four weeks after the first survey was conducted. It asked questions about the students’ perceptions of Hispanic Americans. Researchers discussed how portrayals of minority groups on prime time television are infrequent and often unfavorable. Televised information is most influential when it does not compete with real world experience, making the media the first exposure some members of society have with minority groups. Researchers found that the more people were exposed to a television programming, the more likely their perceptions of minority groups matched televised portrayals (Mastro, Behm-Morawitz, & Ortiz, 2007).

The way people process advertised messages is crucial when studying what message people take from advertisements, and how the prime is affecting individuals. Whittler (1989) identified two main ways in which people process advertisements and their content: systematic processing and heuristic processing. Systematic processing means that the consumer devotes considerable time attending to, comprehending and evaluating the message content of an advertisement. In heuristic processing, recipients exert little cognitive effort in processing the content of the advertisement. Instead, recipients may accept the conclusions of the message based on simple rules that they might have learned from past experiences. Whittler went on to explain that if an advertiser uses more salient cues, like physical characteristics, nonverbal behavior, voice quality etc., then that person will process the message in a heuristic fashion and use simple rules from past experiences to determine the content of the message. Thus if the person previously had a negative outlook on a certain minority, then they will more likely process the message heuristicly and pay more attention to the ethnicity of the actor than to the message the advertiser is trying to convey.
As stated before, the media has helped reinforced the portrayal of minorities, either through broadcast or print media. There is now a new type of medium that has emerged in communications arena that has changed the way people interact with the media in a way other media has not done before, the Internet (Bezjian-Avery, Calder & Iacobucci, 1998).

**Individuals and the Internet**

Though most of these studies have focused on traditional media, new media is rapidly changing the way people look at communications and the way individuals interact with one another. Fifty-nine percent of the general population has gone online, with about 86% of college students using the Internet every day (Jones, Johnson-Yale, Millermaier & Perez, 2009). The way people shop, bank, find jobs, socialize and get their news has been changed by the Internet. It is no longer a fad, and will keep changing the way individuals communicate and perform tasks on a daily basis. With the Internet’s increase popularity, it becomes another avenue to expose audiences to primes.

Jones, Johnson-Yale, Millermaier & Perez (2009) demonstrated that college students use the Internet on a daily basis with 97% of college freshmen accessing the Internet multiple times per day. Some of the activities that college students engage in involve communicating among classmates, conducting research, contacting professors, reading the news, and chatting with family and friends in other states or countries. College students are highly active in the online world, and the impact that the Internet can have on individuals can go from just a means of entertainment, to full dependency on the technology (Dowling & Quirk, 2009). Dowling and Quirk (2009) talked about individuals who develop dependency on the Internet; their entire perception of what is real is based on what they see online. It was found that among the college students participating in their study, 4% were dependent on the Internet. Dependent groups,
according to the research, showed high levels of psychological dysfunctions like low self-esteem, loneliness, depressive moods, anxiety, phobic anxiety, compulsiveness, suicide intentions, and higher Internet use when stressed by work or depressed.

Online activities not only vary among age groups, but also between men and women. Jones, Johnson-Yale, Millermaier and Perez (2009) conducted a study to see how race and sex effected the way people use the Internet. In order to gain a wide range of opinions and to ensure that the sample would represent a diverse variety of people, 29 colleges were selected and the survey was sent via email to all students within those universities. Universities ranged from public, private, flagship, regional, rural, urban, etc. The researchers gained a response rate of 7,421 surveys. It was concluded from the finding that women are more interpersonally oriented when going online, and usually use the Internet for educational purposes and for social reasons. Men were found to be more task oriented and use the Internet for entertainment purposes, whether it was to check the score of a game, or participate in online gaming. The same study found differences among ethnic groups. Hispanic Americans were found to use the Internet for entertainment purposes, while Caucasians and African Americans go online more for social purposes.

It is not just students who rely on the Internet to accomplish everyday tasks. A study conducted by Zimmerman and Bar-Ilan (2009) surveyed and interviewed university faculty and staff. It was concluded that when individuals are more e-mail literate, they are more likely to use it on a daily basis. E-mail has become another form of communication because of the efficient manner and fast way in which information can be exchanged among individuals. E-mail also became part of the work culture, and scholars with a high level of email use were found to be more productive than their peers with lower levels of email use. This is evidence that the use of
the Internet is for all ages, and the dependency on this form of communication tool has only grown.

Research has found that in order for any website to appear trustworthy to consumers, human images must be added (Cyr, Head, Larios & Pan, 2009). The use of human images is one strategy that companies use to increase the trustworthiness of their website. Images can also increase individuals’ retention of the information found on websites (Cyr, Head, Larios & Pan, 2009). When any sort of image is found on an advertisement or marketing tool, retention of the information increases (Shepard, 1967). Retention of information can then help prime stimuli that can help individuals’ formulate feelings regarding a certain concept. Accurate portrayal of ideas is critical when individuals’ concept of reality can be shaped through that information medium.

According to Cyr, Head, Larios and Pan (2009), four concepts linked website design and overall website trustworthiness: aesthetics, symbolism, affective property, functional property. Aesthetics was defined as the visual design elements of a website that leads to a sense of attractiveness or pleasant appearance to the website, with references from consumers that describes the website as pretty, colorful, and bright. Symbolism was defined as the meaning behind the images, animations, graphics, and words. For example an image showing a man and a little girl may be interpreted as a father and daughter though this relation was never explicitly stated. Affective property referred to the design elements that evoked an emotional response. Qualities include friendliness, seriousness, and how fun a person or website seems. Functional property referred to elements of the website that apply to the structure, including information design, navigation, and layout. Images are powerful because they can enhance consumer trust in a vendor, and are often used by website designers as a strategy measurement to increase that trust (Cyr, Head, Larios & Pan, 2009).
Aesthetic in this context becomes one of the most important concepts because it is through this that people begin to formulate an opinion of a website based on pure imagery. As discussed, human images play a role on helping people formulate an opinion about the websites they are visiting. It is not just recollection that makes images an important aspect of advertisements, Messaris (1997) explains that there are inherent aspects of pictures and images that clearly distinguish them from language and from any other type of human communication. It is the combination of shapes, lines, colors, etc. that creates visual information that our eyes and brain can use to make sense of the information and relate it to the real world. Images can be seen as direct copies of reality; making images a way for individuals to have interaction with perceived real world people and places (Messaris, 1997).

Because of the impact that images can have on individuals, companies have been using images to relay messages that can be better expressed through the use of images. One of those messages is of diversity. Diversity in college campuses has been found to benefit all individuals in that particular college campus (Carnevale, 1999). Carnevale (1999) discussed the advantages that come with having a diverse student body, including a more skilled student body that can compete in the increasingly global market. It then becomes important to not only showcase a diverse student body on university websites, but to accurately portray minority students in those same websites. Minority groups have found themselves being portrayed with the social stereotypes that have governed their existence in any marketing tool used by companies (Hoplamazian & Appiah, 2009).

As a result of the impact the Internet can have on individuals, it has become important to investigate the potential role the Internet can play on shaping perception about certain minority groups. Primes that occur online can have as much impact on an individual as any prime that can
occur in traditional media, especially among college students who spend a majority of their time surfing the web for various reason. When you combine the influence a prime can have on changing the behavior of an individual after exposure, and incorporate that into the impact the Internet is having, it becomes important to explore further what is actually being portrayed in online websites.

**University Image and Websites**

Organizational image is important in establishing a corporate identity that will be both viable in the marketplace and accepted by society. One type of organization that relies heavily on its image in order to prosper and even survive are university institutions (Kazoleas, Kim, & Moffitt, 2001). With the decline of enrollments and declining birth rates, universities have been working on marketing themselves in order to increase enrollment. One way by which universities are increasing awareness of their institution is through the university’s website. Students use universities websites to learn more about the school instead of doing campus visits or requesting viewbooks. Universities administrations know that regional bias, interpersonal communications, third party raking and rating, and news coverage have the possibility to affect perception of a given university (Arpa, Raney, & Zivnuska, 2003).

Since the image of any organization is shaped by the public with the help of the media, universities also rely more on the media and the relationship with them in order to get the name of the institution out to the public. This increases the interest for the university home page; universities can feature stories of interest to potential students without having to rely on the press for publicity. Rowe and Brass (2008) conducted a study to see how often local and international newspapers would feature a story regarding a local university. Several local newspapers in Australia and a few well-read international newspapers were included in the coding. It was found
that the newspaper devotion to university related stories were small and that newspapers for the most part found universities’ research to be outdated and irrelevant to the world outside of academia.

The university website is now the top source of information during the college search process (Stoner, 2004). The University of the South asked prospective students in an admissions survey how often they visited the university website. Thirty percent said “2 to 3 times” and 42.2% reported to have visited “4 to 10 times” or “lots” (Stoner, 2004). When a university redesigned its website to meet the standards of external audiences, that school saw a boost of website visits from 33% to 42% (Stoner, 2004). The first impression that universities make is critical as students’ assess institutions to see if they will fit in and if students are similar to them. Glass (2004) found the importance the university website plays on future students’ desire to attend an institution. His findings indicate that students want to be able to relate to the students that attend a particular university. Asking questions like: Will I like it? Will students like me? What do the dorms look like? are ways of determining which university to attend. Universities must be careful about the content on their websites, especially because they are so visible and widely accessed (Brunner & Brown, 2007). In order to be able to answer the three questions prospective students ask, marketers collaborate to come up with the best taglines and devote power and energy to organize a campus photo shoots (Glass, 2004).

Students’ desire to fit in is explained by social identity theory, which explains that people classify themselves and others into categories, such as organizational membership (Ashforth & Mael, 1989). Ashforth and Mael (1989) go on to explain that people define themselves in terms of self-definition. Choosing the right university where students will feel a strong identification will secure a more pleasant college experience. University marketers know this, and as a result
tend to work along with the IT department to come up with marketing oriented initiatives that will best showcase the university to outsiders (Glass, 2004). Many universities have also incorporated current students’ lives into their university’s website so prospective students can get an idea of what it is like to attend their university. One such institution is Lewis & Clark College which introduced its “Real Life at Lewis & Clark College” feature wherein seven students were chosen by the university to publish blogs about life as a student in Lewis & Clark College (Stoner, 2004). Features like this have been linked to increased return visits to the site, increased engagement with prospective students, and increased yield in universities’ communications strategies (Stoner, 2004).

As more audiences begin to rely on Internet content in order to formulate their opinions about various organizations, it becomes important to portray minority groups in a variety of roles. Allen (1995) discussed the importance of including minorities in research because of the rapid population growth minorities have been experiencing. It allows investigation that can confront social issues, while providing insight and direction for developing and refining theories regarding minority groups.

Though perception about minority groups has changed in the past few years, corporations looking to hire college graduates are looking for students who had the opportunity to work along-side a diverse group of students (Carnevale, 1999). Carnevale (1999) describes how important it is to have a diverse experience while in college because it promotes thinking outside of the box, creativity, multilingualism, and the development of useful skills for the global marketplace. In order for universities to attract a diverse student body, ethnic models need to be included in the images on academic websites. However, if those ethnic minorities are still being held to stereotypes in academic websites, it can still cultivate the same societal roles that ethnic
minorities have been trying to break. In order to discover the current portrayal of minority models in academic websites, the following research questions have guided this study:

RQ1: In what setting are ethnic minorities represented in academic websites?

1A: How do the settings differ among ethnic minorities?

RQ2: Are minority characters found in academic websites given a major, minor, or background role in the homepages imagery?

2A: How do the roles in which minority characters are portrayed differ among ethnic minorities?

RQ3: In what relationship to others are ethnic minorities represented in academic websites?

3A: How do the relationships to others differ among ethnic minorities?

RQ4: Are there differences in the percentage of minority representation found in university websites compared to the most current United States minority enrollment?

CHAPTER III

METHOD

Content Analysis

In order to explore how academic websites portray minority groups in their homepages, a content analysis was conducted. Content analysis was chosen because of the efficient way in which one can investigate the content of various types of media (Wimmer & Dominick, 2006). Krippendorff (2004) defines content analysis as the analysis of the manifest and latent content of a body communicated material through classification, tabulation, and evaluation of its key symbols and themes in order to assess its meaning and probable effect. Simply put, it is a
systematic technique for analyzing message content and message handling (Budd, Thorp, & Donohew, 1967). Budd, Thorp and Donohew (1967) say content analysis is a method of observation, where instead of observing people’s behavior directly or asking questions that are to be answered in a scale response or through interviews, the researcher takes the communication that people have produced and asks questions regarding that same communication. The purpose of content analysis is to identify and count the occurrences of specific characteristics, dimensions or texts and through this analyze messages, images, and representations of the texts and their social significance (Hansen, Cottle, Negrine, Newbold, 1998). Content analysis provides an objective account of what messages a text actually contains. It also views data as a representation not of physical events, but of texts, images, and expressions that are created to be seen, read, interpreted, and acted on (Krippendorff, 2004). It is those messages which are found in the media that can help shape an individuals’ perception of the world around them.

When executed correctly, content analysis can provide reasonably complete and accurate descriptions of what the content of the media currently is (Rourke & Anderson, 2004). Content analysis has a wide range of materials amenable to its techniques and uses, making it a tool that could be useful to any type of communications research. One critical difference which sets content analysis apart from other forms of research is its ability to manifest content that is on the surface and is easily observable (Potter & Levine-Donnerstein, 1999). The content being projected also has the potential of finding itself enforcing pre-determined social stereotypes. Content analysis provides a way to research what academic websites are portraying in these homepages. Exploring this topic will add to the body of literature which is beginning to explore the impact the Internet is having in shaping individuals’ perception of reality.
Content analysis has four stages; the first step being formulating research questions or finding an area to explore further (Budd, Thorp, & Donohew, 1967). Step two is selecting a sample and defining categories. Next the researcher reads and codes the content according to objective rules. Finally the data is analyzed and conclusions are drafted. Content analysis depends on a blend of researchable questions and materials. Budd, Thorp and Donohew (1967) discussed how the researcher must have a question that can be answered or that lends itself to be answered by a systematic method like content analysis. At times theories are looked at and questions are formulated from those theories; other times a theory is linked to the data that has been collected and analyzed.

One important aspect of systematic research is that it must be carried out in such a way that other investigators or researchers will be able to follow the same steps and arrive at essentially the same results (Budd, Thorp, & Donohew, 1967). When conducting content analysis, the researcher is not out to prove something, but is merely investigating what is being communicated by the media. Content analysis is not a theory; it is a method that is based on theoretical research that seeks to fill the holes found in previous research (Hansen, Cottle, Negrine, & Newbold, 1998). Holes in research can vary from updating research in keeping with methods more common in recent years to studying areas left unexplored by previous researchers.

Once research questions have been formulated, a sample is chosen that will help answer the research questions formulated by the researchers. Properly selected samples can give an adequate description of a very large quantity of content (Budd, Thorp, & Donohew, 1967). Things to consider when choosing the sample size include which media outlets will be used to answer the research questions, what issues or dates of the sample will be looked at, and whether the sampling is relevant to the content (Hansen, Cottle, Negrine, & Newbold, 1998). After the
sample is chosen, the next step in content analysis is to assign numeric value to the various characteristics of the individuals, objects, or events by setting specific criteria to each value (Budd, Thorp, & Donohew, 1967). Budd, Thorp, and Donohew (1967) discuss how once variables are defined through operational definitions, a system of observation through coding units and categories should be established. A coding unit described by Budd, Thorp, and Donohew, has the smallest segment of content that can be counted. The most common forms of coding units can include a word, a theme, an item, a character, a group, object or institution. Categories are variables that are linked to the problem and theories on which the research is based. They are compartments with explicitly defined boundaries into which material is grouped for analysis.

The categories chosen must also be mutually exclusive, and each item must be thoroughly defined by stating what material is to be included and what is going to be disregarded. It is critical that proper thought goes into making coding categories (Hansen, Cottle, Negrine, & Newbold, 1998). Hansen, Cottle, Negrine, and Newbold (1998) discussed ways by which a researcher can narrow down the scope of the content they are analyzing. One way is to take into consideration the actors, sources and primary definers. Another way is to let the subjects, themes and issues help classify sub-categories within an area that is being investigated. Defining terms accurately with dictionaries or symbols can also help narrow down scope being explored. Lastly value dimensions or stances should label clear guidelines that will help coders ensure that the same things are being examined.

After categories have been created and defined, an actual coding sheet is created. Hansen, Cottle, Negrine, & Newbold (1998) compared a coding sheet to a questionnaire. The coding sheet contains a listing of the variables which are to be coded for each sample of the media that
was chosen by the researcher. In addition to containing the variables, a coding sheet also sets out the value or coding possibilities associated with each variable. The researcher must ensure that each category adheres to a single level of classification; at times a category may not have enough detail and will need to be modified (Hansen, Cottle, Negrine, & Newbold, 1998). Creating a coding sheet should allow the researcher to relate different categories and dimensions to each other. Holding preliminary tryouts of the coding sheet will allow the researcher to ensure that the coding protocol neither leaves out behaviors that should be included nor includes behaviors that should be left out (Rourke & Anderson, 2004).

Part of collecting the data is determining reliability and validity. Reliability is the ability of the experiment to be repeated with consistent results (Budd, Thorp, & Donohew, 1967). It does not need to be difficult to establish, and it means that if another researcher were to recreate the study, he or she would also come to the same results. Stability, reproducibility and accuracy are three distinct ways to test reliability in content analysis (Potter & Levine-Donnerstein, 1999). Having strong operational definitions will always help to establish a strong reliability, and will decrease the tendency of coders to bring their own schema into the analysis (Potter & Levine-Donnerstein, 1999). Potter and Levine-Donnerstein (1999) argue that although accuracy is the strongest form of reliability, it is not always possible or achievable because of differences in expert set of standards. Reproducibility then is the most realistic method to achieving reliability.

The second component of ensuring the data a researcher is collecting is viable to the research questions is achieving validity. Validity is determined when a researcher is actually researching what he or she said set out to research. Validity can be seen as a two-step process, where the first step is the actual development of the coding sheet discussed earlier, and the second is assessing the decisions made by coders against some sort of predetermined standard
(Potter & Levine-Donnerstein, 1999). By establishing validity, the researcher is ensuring that the method chosen to answer the research questions fits the overall goals of the research project (Budd, Thorp, & Donohew, 1967). Rourke and Anderson (2004) defined validity as an integrated evaluated judgment of the degree to which theoretical rationales and empirical evidence support the adequacy and appropriateness of interpretations and actions based on test or other methods of assessment. The importance of inter-coder reliability in establishing validity was emphasized by Rourke and Anderson (2004), who stated that training procedures for coders’ and viewing a sample of the coders’ transcripts will ensure that any discrepancy can be addressed and solved. This was also emphasized by Potter and Levine-Donnerstein (1999) who discussed how providing strong operational definitions minimizes the need for coders to use his or her own schema. When previously-used operational definitions are not available, operational definitions can be set by coders working together and through what they agree on establishing the standard for the operational definition.

Once the data is collected and reliability and validity have been established, analysis can be done on the data that has been collected. There are many ways to analyze the data, but a statistical approach is the most common way to perform a content analysis (Budd, Thorp, & Donohew, 1967). One criticism of content analysis is found in the action of counting frequencies or occurrence of symbols, stating that this does not capture the way in which meaning arises from the interaction of symbols in the text (Hansen, Cottle, Negrine, & Newbold, 1998). Hansen, Cottle, Negrine, and Newbold (1998) defended content analysis by stating that it analyzes content occurrences of specific dimensions and the relationship between them. Another criticism of content analysis is coding unnecessary content because of how easily it is so measure (Hansen, Cottle, Negrine, & Newbold, 1998). Researchers should make operational definitions
and good research questions critical to the process so that the scope of the measurement is kept to the goal of the overall research project.

The Internet has changed the way that content analysis is performed. The World Wide Web has provided the ability to connect multiple media modes including text, audio, graphics, animation, video and messages (Weare & Lin, 2000). Computers have provided the ability to connect communication over time and space. User control over the programs navigated has moved the media from being author-centered to being user-centered (Weare & Lin, 2000). The Internet is allowing people and organizations to interact with it and disseminate materials widely. It also provides a wide range of previously unavailable data. One of the problems of having so much information available emerges when a scientifically random sample is being developed. With over 800 million accessible pages, sifting through information can be a daunting task. Weare and Lin (2000) commented that selecting a random sample may be next to impossible, but there are ways in which acquiring random sample can be accomplished. Knowing the addressing system for host computers and individual web sites can help generate a scientific random sample. Utilizing the search engines available can also help generate a random sample of websites, especially when supplemented by using the links provided by the same search engines to look for related sites that could be used to gather data. Another issue that arises when conducting content analysis using the Internet is that there are multiple items within a site that can be analyzed. There are theoretical and practical issues that arise when text, graphic, and audio are incorporated into a single medium. Researchers have not tackled the task of addressing these issues in detail; instead researchers have looked at one aspect of the site instead of considering all aspects at once (Weare & Lin, 2000). Because of the nature of how websites work, and
because sites seem to change constantly, it is important that researchers provide operational
definitions for all possible questions a coder might encounter (Weare & Lin, 2000).

**Artifacts**

The purpose of this research is to investigate how ethnic minorities are portrayed in top
academic university websites. In order to accomplish this, the top 100 universities were selected
for analysis. The sample was chosen from *U.S. News and World Report* annual ranking of
national universities for 2010. *U.S. News and World Report* base its ranking on seven categories:
assessment by administrators at peer institutions, retention of students, faculty resources, student
selectivity, financial resources, alumni giving, and graduation rate performance. Only the top 100
universities were chosen from their list (see Appendix A).

Only the featured stories of each ranked university were coded. A feature story is a story
in the homepage in which the related image is larger than other images included in the
homepage. Featured stories are used to draw attention of the reader to something that might be of
interest to a wide audience. Feature stories are better known in journalism. There is a consensus
among journalist that the feature story is the most remembered article of an entire newspaper
(Hallman, 2003). Hallman (2003) says that a feature story fills a unique and important role in the
communities, giving the feature story a remarkable power. Feature stories show readers what it is
like to experience something, as opposed to just telling them (Meyer, 2000). A well written
feature story has the ability to touch all readers by using universal themes that resonate with most
of society.

Once the feature story on a university homepage was identified, coders coded for any
human image that was found within that featured story. Coders determined the models’ ethnicity,
gender, age, role of character, setting, and the human relationships to one another (see Appendix
B and C). Ethnicity was determined by phenotypic expressions grounded in previous research, such as skin color, shape and size of facial features, hair texture, and physical appearance (Bramley-Solomon & Roeder, 2008; Taylor & Bang, 1997). In order to ensure that the model’s ethnicity was properly measured, only images where the entire face was visible were coded. If a human image were the person’s ethnicity was hard to measure --- either because only the human image’s back was visible or because the image was blurred to the extent that the physical traits could not be determined --- the human character was still coded if others characters in the image were interacting with the human character in question. Their ethnicity was marked as unrecognizable and their gender, age, role of character, setting, and the relationship to others was not coded. Feature stories where the models were too small to be identified were not coded, so their ethnicity would not be miscoded. If more than 10 people were found in an image, the image was not coded.

Two graduate students were recruited as coders. Coders consisted of two females in their mid-twenties. Coders were trained as to what to look for during the coding process and a codebook was provided for reference if any questions arose during the process. Operational definitions were modeled after and modified from definitions used by Taylor and Bang (1997) in their content analysis of minority characters in mainstream magazines. Once training had occurred, coders were asked to determine the role of human characters found in universities home pages, and whether the minority character was being portrayed in a major role, minor role, or background role. Coders then looked at character setting within the image and the relational status among characters of those same images.
Apparatus

Characters in the homepage images were coded on an individual level. Ethnicity was focused on the major United States ethnic groups which are Asian Americans, African Americans, and Hispanic Americans. Mixed, other and unrecognizable were also coded along with Caucasian for comparability purposes once interpretation of the data took place. Gender and age of characters were coded in order to get a demographic overview on the characters being used for university homepages.

Role categories included major role (a character that is very important to the image or layout, shown in the foreground of the image), minor role (a character who is of average importance to the image theme or layout), background role (a character who is difficult to find in an image), individual role (only person in the image), and unrecognizable (can make out the figure of a human image, but the details of their physical characteristics are difficult to infer or only their back is shown).

The setting of the image was divided by the following settings: classroom setting, campus setting, home, indoor or outdoor, outdoor/natural scenery, social setting outside of the home and other. The settings for this research were modified from the original settings included in the Taylor and Bang (1997) in order to better incorporate a setting that might be seen in a university homepage. The definitions provided by Taylor and Bang (1997) were focused on what a coder might encounter when coding advertisements, and not on what a coder might find when looking at collegiate feature website imagery.

There were seven “relationships to others” categories that were chosen in order to determine how minority characters were seen as interacting with other characters around them. Extracurricular team context and academic team context were added to the original relationships
used by Taylor and Bang (1997) in order to accommodate relationships typical to a university student. Business setting was not coded for because of the low number of possible cases depicted in university websites.

Coders discussed any discrepancies that arose during the coding process, and made corrections as necessary. Coders were allowed to return to the university homepage in order to clarify any questions that arose. In order to establish reliability, coders analyzed 10% of the websites (10) and the results were entered into SPSS to run a Cohen’s Kappa reliability test. The Cohen’s Kappa results for each of the coding variables are as followed: ethnicity 88%, minority role 63%, setting 78%, relationships to others 61%, gender 100% and age 88%. The reliability percentages are above the substantial agreement needed in order to acquire inter-coder reliability. Fleiss’s guidelines characterize Kappa over 75% as excellent, 40%-75% as fair to good, and below 40% as poor (Fleiss, 1981; Viera & Garrett, 2005).

The results found by the given test helped determine how each minority group is being portrayed in academic websites. Content analysis will provide data by which proper assessment was made about how universities are portraying minority groups in their homepages.

CHAPTER IV

RESULTS

Out of the 100 university websites that were chosen as a sample for this research project, 21 did not contain any human images. Out of the 79 university websites that did contain human images, there was an accumulative of 227 images that were found to be featured stories on the university websites. Those images contained 584 characters which were individually coded, and 159 of those characters coded as a minority character and were used for analysis for the purpose
of the research study. A total of 146 individual characters that were coded as mixed, unrecognizable or other and were therefore not used for the results of the study. The remaining 279 characters were coded as Caucasian and were used in the results for comparison purposes. Out of the individual characters that were coded 215 were males and 223 were females. The majority of the characters were young adults’, with 81 being adults. There were 19 characters coded as child/teenager and 14 coded mature adult. A breakdown of the count of minority characters found in each university homepages is shown in Appendix A.

**RQ1: In what setting are ethnic minorities represented in academic websites?**

**1A: How do the settings differ among ethnic minorities?**

Overall the settings for the characters found on university homepages were unequally distributed based on percentages (see Table 1). Some numbers that stand out are the representation of Hispanic Americans in a home, indoor or outdoor setting. Hispanic Americans when present appeared in 16% of the time in a home, indoor or outdoor setting. African Americans only appeared 1% of the time in the same setting and there was no representation of Asian Americans. Hispanic Americans, when present, were more likely shown in a campus setting. This was also true for all ethnic minorities, which was expected because of the nature of the websites that were coded. Caucasians took the top spot of representation in all settings which were coded for. In a classroom setting Hispanic Americans had the most representation with 27%, and African Americans had the most representation in campus setting with 54%. Home setting had the most Hispanic American representation with 16% being coded as Hispanic Americans, even when compared to the Caucasian majority who only had 4% representation in that setting. In outdoor/natural scenery setting African Americans appeared in 11% of the setting. Hispanic and Asian Americans followed in the outdoor/natural scenery with Hispanics being
shown in 8% of images and Asian Americans 7%. In social setting outside of the home, Asian Americans were shown 29% of the time, with African Americans coming next with 16% and Hispanic Americans coming in last with 8%. A two sample Chi-Square Test was used to determine the relationship between ethnicity and setting, which was found to be significant, $X^2 (12, N = 438) = 35.04, p < 0.001$. Based on the statistical finding, the null hypothesis was rejected. Three cells (15.0%) had expected count less than 5, making the data valid.

Table 1

Setting of Characters on University Website Homepage

<table>
<thead>
<tr>
<th>Ethnicity of Characters</th>
<th>Classroom Setting</th>
<th>Campus Setting</th>
<th>Home, Indoor, or outdoor setting</th>
<th>Outdoor/Natural scenery setting</th>
<th>Social Setting Outside Home</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Hispanic American</td>
<td>10</td>
<td>.27</td>
<td>15</td>
<td>.41</td>
<td>6</td>
<td>.16</td>
</tr>
<tr>
<td>African American</td>
<td>14</td>
<td>.17</td>
<td>44</td>
<td>.54</td>
<td>1</td>
<td>.01</td>
</tr>
<tr>
<td>Asian American</td>
<td>9</td>
<td>.22</td>
<td>17</td>
<td>.42</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Caucasian</td>
<td>82</td>
<td>.29</td>
<td>101</td>
<td>.36</td>
<td>12</td>
<td>.04</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>.26</td>
<td>177</td>
<td>.40</td>
<td>19</td>
<td>.04</td>
</tr>
</tbody>
</table>

RQ2: Are minority characters found in academic websites given major, minor, or background role in the homepages imagery?
2A: How do the roles in which minority characters are portrayed differ among ethnic minorities?

The role in which minority characters they were portrayed on university homepages were evenly distributed over all the roles coded for (see Table 2). When present, Hispanic Americans were represented in a major role 49% of the time and were shown in 5% of the background roles. African Americans were depicted in a major role in 56% of the images in which they appeared. Asian Americans when present were shown in a major role 59% of the time. African Americans had the most representation in major role when compared to the other ethnic groups.

When a minority character was present it was usually with other ethnic minorities in the same homepage image. Minority characters were only depicted 30% in an individual role of the time with Caucasians filling the other 70% of the individual roles. Across the board, all ethnic groups were represented close to or at the expected amount of characters in each character role. African Americans came second, after Caucasian, in appearing in major roles, with Asian Americans coming third and Hispanics Americans last. In minor roles Hispanic Americans came first with 35% if the minor roles; this is a higher number than Caucasian representation which only had 23% of characters in minor roles. All ethnic groups were low in number of representation in background roles. A two Chi-Square Test was used and the relationship between ethnicity and minority character role was found to not be statistically significant, $X^2 (9, N = 438) = 7.23, p < .613$. The null hypothesis could not be rejected. The data still showed the extent to which universities websites try to portray minority characters in various roles. Two cells (12.5%) have expected count less than 5, making the data valid.
Table 2

*Role of Characters in University Website Homepages*

<table>
<thead>
<tr>
<th>Ethnicity of Characters</th>
<th>Major Role</th>
<th>Minor Role</th>
<th>Background Role</th>
<th>Individual Role</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Hispanic American</td>
<td>18</td>
<td>.49</td>
<td>13</td>
<td>.35</td>
<td>2</td>
</tr>
<tr>
<td>African American</td>
<td>45</td>
<td>.56</td>
<td>19</td>
<td>.24</td>
<td>8</td>
</tr>
<tr>
<td>Asian American</td>
<td>24</td>
<td>.59</td>
<td>7</td>
<td>.17</td>
<td>2</td>
</tr>
<tr>
<td>Caucasian</td>
<td>146</td>
<td>.52</td>
<td>63</td>
<td>.23</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>233</td>
<td>.53</td>
<td>102</td>
<td>.23</td>
<td>33</td>
</tr>
</tbody>
</table>

*RQ3: In what relationship to others are ethnic minorities represented in academic websites?*

3A: *How do the relationships to others differ among ethnic minorities?*

The distribution of minority characters with relation to relationship to others in the website images were less equally distributed than the other coded variables (see Table 3). Across the board, all ethnic minorities had the highest representation in a social context based on percentages, with African Americans coming in first with 39% of characters being portrayed in a social setting. Extracurricular team context also had African American with the most representation with 32%, while Hispanic Americans had 28% and Asian Americans had 13% of the representation. One interesting find was the lack of Hispanic Americans in a family context, with 0% of the characters in a family context being Hispanics. Asian Americans and African
Americans had 6% and 3% respectively in the family context representation. In Academic team context the percentages were as followed: African American 15%, Asian American 25% and Hispanic American 28%. A two Chi-Square Test was used and the relationship between ethnicity and relationship to others were found to not be significant and the null hypothesis failed to be rejected, $X^2 (12, N = 416) = 15.63, p < 0.209$. Three cells (15.0%) have expected count less than 5, making the data valid. Impersonal relationship context was taken out because of its low cell count.
### Table 3

*Characters Relationship to Others in Image on University Website Homepages*

<table>
<thead>
<tr>
<th>Ethnicity of Characters</th>
<th>Social Context</th>
<th>Extracurricular Context</th>
<th>Family Context</th>
<th>Nobody else in Image</th>
<th>Academic Context</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Hispanic-American</td>
<td>12</td>
<td>.33</td>
<td>10</td>
<td>.28</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>African-American</td>
<td>30</td>
<td>.39</td>
<td>25</td>
<td>.32</td>
<td>2</td>
<td>.03</td>
</tr>
<tr>
<td>Asian-American</td>
<td>10</td>
<td>.31</td>
<td>4</td>
<td>.13</td>
<td>2</td>
<td>.06</td>
</tr>
<tr>
<td>Caucasian</td>
<td>92</td>
<td>.34</td>
<td>61</td>
<td>.23</td>
<td>4</td>
<td>.02</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>.35</td>
<td>100</td>
<td>.24</td>
<td>8</td>
<td>.02</td>
</tr>
</tbody>
</table>

**RQ4:** Are there differences in the percentage of minority representation found in university websites compared to the most current United States minority enrollment?

According to the U.S. Census data for college enrollment for the year 2007, 13% of students attending all levels of colleges were African American, with 11% being Hispanic American, and 7% being Asian Americans (U.S. Department of Census Bureau, 2007). In the images associated with feature stories on homepages of the top 100 universities in the United States 18% of the human images coded were African American, with 8% being Hispanic and 9% being Asian American (see Table 4). Although African Americans and Asian Americans seem to have an over-representation of their ethnic group, Hispanic Americans seem to have a lower representation in relation to the overall enrollment of universities across the United States. A
one-sample Qui Square test was used to determine the relationship between ethnicity and college enrollment in the United States, $X^2 (3, N = 438) = 14.35, p < 0.002.$
Table 4

Actual College Enrollment vs. Found Representations

<table>
<thead>
<tr>
<th>Ethnicity of Characters</th>
<th>Actual College Enrollmenta</th>
<th>Website Representations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American</td>
<td>2,076.2</td>
<td>.11</td>
</tr>
<tr>
<td>African</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American</td>
<td>2,383.4</td>
<td>.13</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American</td>
<td>1,217.9</td>
<td>.07</td>
</tr>
<tr>
<td>Caucasian</td>
<td>11,756.2</td>
<td>.64</td>
</tr>
<tr>
<td>Total</td>
<td>18,248.1b</td>
<td>100</td>
</tr>
</tbody>
</table>

Note. aNumbers are in thousands (18,248.1 represents 18,248,100).

bTotal includes ethnic groups not represented in the chart.

CHAPTER V

DISCUSSION

The result found in this research study showcase what audiences see as they encounter university websites. There has been an increase in Internet use as information seeking and everyday tasks have moved online, resulting in the Internet becoming a powerful communication medium (Hoffman & Novak, 1996). As of June 2010, 77.3% of the United State’s population was Internet users (Internet usage and broadband usage report, 2010). With this phenomenon of increased exposure of one medium of communications, it becomes important to research what is
being portrayed within that communication medium. The power this communications medium has to shape people’s perception can be seen through the work communications scholars have done to explain the power that the media can have on individuals. University websites were chosen for this research study because of the possible impact of these types of websites on young adults. College students have been found to spend a large portion of their time online and researched has just begun on how the Internet is changing people’s view of their real world (Stoner, 2004). University websites are geared towards potential and current students as well as alumni. Since universities rely so heavily on website appearance, marketability, and the message they are communicating, careful planning and strategy have become part of the universities’ norm for website design.

University homepages are frequently visited by prospective students who are trying to decide which school to attend for their college education. Universities with well-maintained webpages have seen an increase in their enrollment rates (Stoner, 2004; Brunner & Brown, 2007). Universities are also seeing the importance of marketing their institution like a business and the marketing staff is working closely with the webmasters in order to strategize and carefully select what is being shown on the university web pages (Glass, 2004; Brunner & Brown, 2007).

This research project took it upon itself to analyze how university homepages portray their institution, particularly how they portray ethnic minority to the outside world. First discussion will focus on the over-representation of certain minority groups. Next, the settings and relationships to others in which each minority group is represented will be analyzed with consideration given to how priming can effect individuals’ perceptions of minority groups by what is being portrayed on the Internet. Then the character role that minority groups were found
to be represented in will be discussed. Finally, the importance of the results will be discussed to demonstrate what the results mean to communications scholarship.

*U.S. News and World Report’s* top 100 universities for 2010 were coded and were found to over-represent African Americans and Asian Americans in their universities’ homepages. Hispanics Americans, on the other hand, were under-represented according to percentage of actual enrollment of minority groups in higher education universities (U.S. Department of Census Bureau, 2007). There could a number of reasons as to why there is an over representation of minority groups in university homepages. One of those reasons could be for recruitment purposes. Universities try to appeal to a diverse population and showcasing diversity in their websites could help encourage students to choose that particular university. Universities try to make the decision easier on students by showing them what student life could be if they choose to attend their university. Showcasing a more diverse student body could encourage other minority students to enroll. The literature shows that some of the most common questions students ask when searching for a college to which to attend are: Will I like it? Will students like me? (Glass, 2004). These types of questions could be easily answered by looking at the university website. As stated previously, students in past years relied on viewbooks sent by universities in order to compare and contrast potential universities. The Internet has made it convenient for students to browse the university’s website to get the same information that was once found in viewbooks and campus visits.

Universities were among the first public institutions to take advantage of the Internet and soon others organizations followed (Wackett & Ellis, 2002). Although the first uses of the Internet by a university were only for individuals to be able to access files and campus information through local networks, universities now use the Internet to speak to audiences
around the world. The importance that universities place on the image and message they project to outside audiences impacts the way potential students view the institution. Image is one of the most important tools a university has in order to prosper and survive in the collegiate world (Kazoleas, Kim, & Moffitt, 2001). That same image is what influences students to attend a certain institution and what helps beneficiaries to decide which school to endow with their monetary help.

It has been found that when future employers evaluate college graduates for job placements, a degree from a school widely-known for its diversity is desired by potential employers. A diverse student body provides an educational environment where different points of view are expressed and out of the box thinking is encouraged (Carnevale, 1999). It also provides an opportunity for students to be exposed to different cultures which will become valuable experience should overseas business be conducted. In order for universities to provide that type of environment for their students, recruitment of ethnically diverse students must occur. Showcasing a more diverse student body in their university website could encourage other diverse students to enroll.

Historically, ethnically diverse characters have been under-represented in print and broadcast communication mediums. That is not the case in university websites, which were found to over-represent their ethnic student body. However, one group that was still under-represented was Hispanic Americans. Hispanic Americans are among the fastest growing ethnic groups in the United States; by the year 2020, it is projected that Hispanics Americans will account for 19.63% of the United State’s population. An increasing population could result in an increased enrollment rate in higher education institutions among Hispanic Americans.
Representation of this ethnic group has been increasing over the last several years, but it has not been enough. There is still an under-representation of Hispanic Americans in the media.

An outcome of the under-representation of Hispanic Americans could be attributed to the fact that Hispanic Americans have historically been portrayed as uneducated people holding blue collar jobs. By not representing Hispanic Americans in higher education websites this stereotype that society has placed on Hispanic Americans is reinforced to outside audiences. This could also be discouraging to future college students of Hispanic American descent since finding a university with a high representation of their ethnic background will be difficult. Another possible outcome of low representation could be universities sending the message that Hispanic Americans do not belong in higher education. As students research universities that will best fit their academic and social goals, they will be greatly discouraged to find that there is not one university that properly represents Hispanic Americans. They will not be able to identify with the university and will be less likely to take action toward college enrollment. By not providing an opportunity to identify with the university homepage’s characters, stereotypes will continue to resonate in society’s mind. Universities will be excluding a group that will only continue to grow and become a strong presence in society.

African Americans and Asian Americans both have a high representation rate compared to the actual enrollment of students in a higher education institution. Though an increase in representation is desired by minority groups, this could also represent some problems for students who choose an institution based on what is being portrayed on the university websites. That same high percentage of ethnically diverse student body could be expected by the students who were initially drawn to the university based on the homepage’s image of diversity. Students could come to a realization that the highly diverse campus that was portrayed on the Internet
homepage is not representative of the actual student body of the university. This could potentially discourage students from continuing their education in that particular institution and they could move institutions as a consequence. This could also mean that as individuals encounter these top university websites, they are seeing images that do not reflect the world around them. These findings are very different from past research, which found under-represented minority groups in its imagery.

Establishing the correct balance when representing minorities also depends on the way in which those minorities are represented. One way to ensure that minority portrayal is diverse depends on the setting and relationships to others in which each minority group is shown in. As the research from the content analysis shows us, Hispanic Americans were shown in a home, indoor or outdoor setting 16% of the time. The percentage was higher even when compared with Caucasians. Past research has shown that for the majority of the time Hispanic Americans are stereotyped to having big families and being family oriented. This pre-determined stereotype was enforced by the universities websites that were analyzed. As universities showcase a certain image of a minority group, the audience is being primed with stereotypes that could then be recalled when that individual is encountering a member of that minority group. We then learn from priming theory that priming effects can happen without the knowledge of the individual, making priming a strong and powerful tool. Priming has the potential to shape an individual’s attitudes regarding an ethnic minority without their intention or awareness (Wheeler & Berger, 2007). Effects of priming can be magnified if participants create a self-stereotype linkage during the prime.

One finding that was not expected was the high percentage of Asian Americans that were shown in a social setting outside of the home. It is interesting to point out the differences in
setting in which these minority groups found themselves in. Asian Americans were represented 29% of the time in a social setting, which is the second highest setting after campus setting. This is a change from the typical “model minority” Asian Americans are typically represented in. Though the representation of Asian Americans has increased in the last ten years, they were still heavily represented in technology based products, in business and science roles and relationships (Taylor, Landreth, & Bang, 2005). Universities placing minority groups in atypical roles is a stride forward in racial representation in the media. However, improvement is still needed as Hispanic Americans are still being shown in typical family setting. Additionally African Americans’ settings could be improved as well. African Americans had the highest representation in the campus setting having 54% of the representation. It is important to note that as part of the operational definition, campus setting also included extracurricular activities which included sport activities. African Americans are stereotyped as being athletically talented and if they are present in a university campus they are seen as being part of an athletic team. This stereotype was also enforced by the results of the content analysis. Effects of priming can be magnified if participants create a self-stereotype linkage during the prime. Researching how minority groups are being portrayed in university websites can help us understand what type of images individuals are being exposed to. Exposing individuals to correct and varied roles of every ethnic minority can help to break the stereotypes that society has placed on African Americans, Hispanic Americans, and Asian Americans.

Results found from looking at the relationship to others in which each minority group was portrayed can also help to establish a balanced diverse portrayal of ethnic minorities. All of the ethnic groups had most of their representation in a social context which could mean that universities are trying to showcase the student life a potential student could have if they were to
enroll to that particular university. Extracurricular context had the most African American representation. This could be a result of the operational definition used for this variable, which included sports. A large portion of the settings within this variable in which African Americans were shown was an athletic extracurricular. An interesting find was that despite Hispanic Americans being shown largely in a family setting, 0% were shown having a family relationship to others in an image. When a Hispanic American was shown in an image, they were first shown in a social setting with extracurricular and academic context second.

Merging the settings and relationships to others codes in the image can help us understand the way minority groups are being portrayed in university homepages. While racial stereotypes were not shown in the majority of the images that were coded, stereotypes still appeared in the way certain ethnic groups were portrayed. African Americans, as previously stated, were heavily featured in an extracurricular content which included athletics. African Americans have been previously stereotyped as having a high level of athletic ability and were therefore shown in this role in many of the websites that were coded. Hispanic Americans were shown in a family setting but were left out of the family relationship when coding the relationship to others in the image.

Perhaps because of the nature of the overall research project and the universities’ desire to showcase a diverse student body in order to appeal to as many students as possible, only a few stereotypical representations of minorities were present. African Americans were still first in being portrayed in an extracurricular team context which according to the operational definition provided, included university athletic clubs. Previous research has not found Asian Americans represented in social situation; this research showed the exact opposite with Asian Americans having a high percentage of representation in social setting. Because of the nature of university
websites, which are often used to formulate an opinion regarding a university or a group of people attending a university, the involvement level of the reader is high. The individual wants to ensure that his or her experience at the university in question will be the best fit for him or her. Therefore, close attention is paid to everything that the university features in their websites. With a high involvement on the audience’s part, the potential of internalizing the message increases. In turn, this could affect how an individual views an ethnic group featured in the university homepage. If minority characters are portrayed a certain way, the chances of outsiders that do not interact with this minority group on a daily basis will change as their opinion is shaped to match that which is being portrayed on the website.

As previously discussed, the importance a university communications staff member places on putting together a well-executed marketing campaign that will appeal to a wide audience is high. Because of the higher-than-normal representation that of African Americans and Asian Americans on university websites, universities were able to portray them in a wider range of settings and relationships to others in the image. Hispanic Americans were under-represented and as a result were left out of possible variables which could have added a diverse portrayal of the ethnic group. Because of the goal that universities have of showing a diverse student body, the improvements that have been made by including both Asian and African Americans in varied roles was overshadowed by not putting an effort into including one of the fastest growing minority groups, Hispanic Americans. Institutions are consequently taking a step back from the improvements that have been made with the other two minority groups.

The roles in which minorities are represented in homepage imagery can also impact the way that people view minority groups. When minorities are present in an image, they are mostly shown in a major role. Minority characters are also not shown individually or in all same race
groups, but are mostly shown with other minority models in the same image. This was also the case when minority models were studied in children television commercials (Bramley-Solomon & Roeder, 2008). In their research, Bradley-Solomon and Roeder (2008) found that whenever a minority character was shown in a commercial, they were surrounded by other minority characters but were rarely shown in a commercial by themselves. In university websites, when a minority is present they are usually in a group of other minority students. Although there was a variety of minority characters shown in the university websites, there was not a single race group image. When minority characters were present, they were in a multi-racial group. Caucasian models, on the other hand, appeared in single race imagery. Across the board, all ethnic groups were well represented in all roles with a close-to-expected amount of characters in each role for each minority. African Americans had most of the representation in major roles, with Asian Americans second and Hispanic Americans last. In all of the roles, Caucasians came in first for all minority character roles.

Overall Caucasians dominated the imagery found in university websites in term of visibility by having the majority of the major roles and being the only ethnic group that was shown in same ethnicity group portrayals. Therefore, even when there was an obvious increase in the representation of people of ethnic background, the public that is going to academic websites is still being exposed to a mostly Caucasian world. Minority representation that was showcased was increased in order to appear diverse (based on the actual enrollment and the percentage of minority portrayal on the websites).

Multi-racial group imagery is a great way to showcase harmoniously diverse college campuses; however, some students might want to interact with members of their same ethnic group. This type of interactions is seen across all college campuses and it should be represented
in the university homepages. Minorities involvement in the university and in their community could only enhance the image that the university has with supporting groups who want to increase the awareness of their ethnic background. The effort that is already put into staging photo shoots around campus could be maximized by ensuring that all major minority groups are being well represented in all possible settings and relationships to others. Since universities rely on the image that is being portrayed to the world, maximizing the marketing effort and showing proper portrayal could only enhance the image that institution has with Internet audiences. One aspect of priming that is not often discussed is effects on minority groups’ views of other minority groups. It has been found that there is a possible competitive gap that can come from one minority groups being favored to others (Dalisay & Tan, 2009). University websites have done a good job of including minority groups in their imagery; however one group that is still under-represented is the Hispanic American community. It is not just the Hispanic community that is growing: as previously discussed, all major minority groups will see an increase in population by 2020. With an increase in population, a strong portrayal of all minority groups will become even more important. When an individual is primed with either positive or negative primes regarding certain minority groups, they will react according to the prime to which they were exposed. Showing more non-Caucasian single-race groups around campus can increase the positive perceptions of those minority groups among individuals.

The effect the Internet can have on individuals can be described using Lewin’s priming theory. Priming effects occur when individuals are exposed to certain stimuli. That information then enters a person’s availability heuristic which makes the information easily retrievable. Activation of one thought may trigger related thoughts in audience members. As previously stated, priming effects can happen without the individual’s awareness. Individuals’ experiences
and exposure affects their perception of the real world. The Internet has the potential of creating priming stimuli by which an individual can shape his or her perception of minority groups. If an individual is repeatedly exposed to a certain stimuli, that perception will become the individuals’ reality in the long term. When asked how often students visited the university website, many marked “4 to 10” or “lots” of times (Stoner, 2004).

Given the impact that the Internet is having on individuals’ everyday activities, it has become important to understand the content that exists within this powerful tool of communication. University homepages has the potential to demonstrate the importance of people of ethnic backgrounds to a wide audience that relies on these websites to create a judgment of what a university has to offer to potential students and to society. By depicting ethnic groups in a variety of roles, university websites can help to enlarge the roles given to minority groups and therefore help break the stereotypes, which have governed many of these minority groups for decades.

Communications media have been found to help internalize certain portrayals that minority groups face. Throughout the years, the media has added more and more diversity to their programming as the population of those minority groups increases. However, the media continued to portray minority groups in the same social stereotypes common to society. Minority groups have been fighting the constant public imagery presented to the majority of populations regarding their ethnic group. As a result some members of these minority groups have begun following the stereotypes by allowing their self-identity to match that which is being portrayed in the media. Expectations for certain minority groups are created, and when an individual from an ethnic group does not follow these social expectations, that person’s ties to his or her ethnic background might be questioned.
It will take time in order for social stereotypes to disappear. However, the media can help break the social stereotypes that society has created and the media has helped maintain by ensuring that when using any ethnic character in their imagery, that ethnic character is portrayed in a variety of roles. The minority population is growing at a fast pace and when ethnic minority individuals are being exposed to the media they will be looking for an accurate portrayal to which they can relate.

Universities are not excluded from ensuring an accurate portrayal of ethnic minorities. Because of the nature of university websites to be used for informational purposes, greater attention should be paid to what is being communicated to audiences. When students are on the search for the perfect university to attend, they are heavily involved in the information-seeking process. One of the first mediums on which the student relies on is the websites of potential institutions. Homepages are a strong indication of the type of institution a particular university may be. The proper image needs to be projected, and minority groups are often featured in the homepages of universities. If universities are ensuring that their campus appears diverse in student body, proper portrayal of those minority groups should be carefully considered. By adhering to more a varied portrayal of minority groups, university websites can help lead the way for other communications mediums to follow.
CHAPTER VI

CONCLUSION

The research project provided data that allowed analysis to take place and conclusion to be drawn. Those findings are summarized and suggestions for future research will be made. Content analysis does have some limitations, and these are discussed along with final thoughts regarding the overall findings of the research study.

After conducting a content analysis of what existed among homepages of university websites, we learned that some minority groups are over represented. This could be a result of universities trying to put a diverse front to prospective students. This however, could also be dangerous if students go to a particular university expecting something only to find out that the portrayal shown in the university website was inaccurate. Although there are minority groups in almost every university across the nation, some students might enter a university expecting to see peers of their ethnic background throughout campus and be surprised to find out that there are a limited number of minority students at the college they chose to go to.

Universities prosper and survive based the public image they have with outside audiences. It is important for them to continue to have a competitive advantage with other institutions by the well-rounded education they can offer their students. A diverse student body encourages thinking outside the box and is more appealing for student to have experience dealing with other ethnic groups as they enter the job market.

The over-representation of minority models in two of the three most prominent minority groups in the United States is different than what has been found in most of the media studies that have been previously researched. The nature of universities’ websites is to inform current and potential students as well as alumni. Universities have learned that they need to use
professional marketing strategies in order to market their institution. This includes working together with the IT department in order to ensure that the right image is being portrayed to public audiences. Staging photo shoots, and carefully selecting the data that will be featured in the homepages can help students to make the decision to attend a particular university.

One group that was under-represented was Hispanic Americans. Hispanic Americans are one of the fastest minority groups in the United States. Stereotypes of Hispanic Americans have typically portrayed them as uneducated. If universities under-represent this minority group, perspective Hispanic American students might think that there is no place for them in higher education.

The settings and relationships to others that minority groups were represented in were almost evenly spread out across the board. Some surprising finds consisted in Hispanic Americans being portrayed in about 16% of the home setting, and being completely left out of the family relationship to others. Asian Americans had a high representation in impersonal relationship to others but were found to have a high representation in a social setting which shows improvement in typical Asian American portrayal from what other researchers have found. African Americans were mostly shown in extracurricular settings which, in alignment with the operational definitions, included sports teams. This is in keeping with one of the stereotypes that surround the ethnic group.

The role in which each minority group found himself or herself in the homepage imagery also had some interesting results. Minority characters were mostly shown in a major setting, but university webpages failed to showcase same race groups. Same race groups were reserved for Caucasian groups, and minority characters only appeared in multi-race groups. Same race group images have the potential to empower the ethnic group being portrayed and should be included
in the homepage imagery of university websites. Caucasians were also the prominent ethnic group in all categories and this was expected because of the high percentage of Caucasian students enrolled in higher education institutions.

Priming theory states that constant exposure to certain stimuli can enter an individual’s availability heuristic and then become easily retrievable. Imagery and portrayal of an ethnic group have the potential to prime a certain image regarding that particular ethnic group to audiences. If an audience member is not familiar with a certain minority group, what is being portrayed in the media will be seen as reality by that same individual. Furthermore prospective students can enter a college campus with a certain false perception of the diversity of the student body. With the effects of priming being able to change the perception of an individual regarding a certain minority groups, accurate and diverse portrayal of minority groups become even more important. Since the world is becoming more diverse, future employers are looking for students that have a more diverse experience in their undergraduate college experience (Allen, 1995). Part of having a diverse experience can be more easily attained if students are open minded about individuals of other ethnic backgrounds. If a student is primed with a particular stereotyped regarding a certain ethnic group, this stereotyped can hinder their learning experience as they interact with a diverse student body.

This research project only looked at a small sample of university homepages; future research could focus on other areas of the university website pages. The constant growth of the Internet only opens up an area of study that can expand as interest grows. This study has revealed interesting empirical findings concerning minority group portrayals in university websites; qualitative research is needed in order to probe more deeply into the underlying meaning conveyed by the images. Only the three prominent minority groups in the United States were
researched; research on other minority group is still very limited and holds a high opportunity level for future research. Periodical research on the topic will be needed in order to update data and determine how university websites change as more minority groups are projected to enroll in higher education institutions.

One of the limitations found with content analysis is that it does not permit measurement of the responses one might get from people who are visiting the sites. This could help to further understand the process portrayed minorities go through. It could also correctly build a solid core of what can be done to break the social stereotypes to which minority groups are held to. In order to stay within a time frame for the completion of this research project, only the top 100 university homepages were coded. The universities chosen were limited to four-year institutions; two-year colleges were not included in the research. The intent behind the imagery found on the university homepages was not able to be quantified by content analysis. It would have been interesting to know the strategy the university homepages were planned out.

This study provides valuable information regarding what is found on university homepages. Home pages were chosen because of the high visibility they have among prospective and current students along with the rest of the population who are interested in that particular institution. Seeing how minority models were portrayed in these websites is of importance because as minority groups grow in population, there will be a need for more accurate portrayals of minority groups. Stereotypes can be avoided if minority groups are showcased in a variety of roles, settings, and relationships to others. It is important that universities across the nation understand the importance the Internet is having on the current media. Generations of future media consumers are growing up in a society that places high importance on using the Internet for everyday tasks. An accurate portrayal of the outside world will benefit media consumers in
better understanding the world around them and becoming more accurately acquainted with the races of the world.
REFERENCES


DOI: 10.1089/cpb.2008.0162


responses towards advertisements with Asian models. World Communications, 29(2), 49-62.


Mastro, D., Behm-Morawitz, E., & Ortiz, M. (2007). The cultivation of social perception of


Wackett, L., & Ellis, L. (2002). *Encyclopedia of Bioprocess Technology*. Published online. DOI: 10.1002/0471250589.ebt025


Zimmerman, E., & Bar-Ilan, J. (2009). PIM @ academia: How e-mail is used by scholars. *Online Information Review, 33*(1), 22-42.
## Appendix A

### TOP 100 UNIVERSITIES

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Appendix B
Operational Definitions Pertaining to Perceived Importance of Characters, Setting, and Relationships between Characters in image.

B. Perceived Importance of Minority Characters

*major role* - A character who is very important to the image theme or layout, shown in the foreground of the image.

*minor role* - A character who is of average importance to the image theme or layout. Generally, these characters are not spotlighted in the image, but they are not difficult to find in the image while casually looking at it.

*background role* - A character who is difficult to find in an image (i.e., not likely to be noticed by a reader glancing at the image) and is not important to its layout.

*Individual role* - Only person in the image.

*Unrecognizable* – Can make out the figure of a human image, but the details of their physical characteristics are difficult to infer or only their backside is shown.

C. Setting

*Classroom setting* – Includes any auditorium style classrooms, traditional classrooms, or labs where learning takes place.

*Campus setting* – Includes any area of the campus where people can gather, or socialize. For example stadiums, student unions, libraries, campus walkways, and any area that exist within a university campus.

*home, indoor or outdoor* - Recognizable as a residence, room, garage, yard, home or apartment driveway, or parking space.

*outdoors/natural scenery* - Includes forests, rivers, ocean, fields, or sky as well as streets, public roads, sidewalks, or pathways. Does not include outdoor settings at individuals'
homes or outdoor social settings.

*social setting outside home* ~ Includes public places, auditoriums, restaurants, movie theaters, where people meet and congregate for social purposes not located within a university campus.

*other* - Includes artificial settings (stage or specially built props or backgrounds) and any other setting not listed above.

D. Relationship to Others in the image

*social context* - Includes friends or any other people depicted in a social setting, with the exception of family members depicted in a social context.

*extracurricular team context* – Includes any type interactions that is related to some sort of extracurricular activity, like sports, clubs, etc.

*family context* - Includes husband and wife and any relationship between relatives, including children as well as extended family such as aunts/uncles, grandparents, grandchildren, adopted children, foster children.

*impersonal context* - More than one character appears in the ad, but there is no apparent relationship between the characters.

*nobody else in ad* - Choose this option when only one model appears in the image.

*academic team context*: Includes any type of interaction where the common goals is academic. Examples include team projects, student to teacher relationship, or peer to peer relationships where academia is the main goal.

*other relationship* - Any relationship other than those listed above.
Appendix C

_Coding Sheet: One sheet for each model that is to be coded_

Name of University Website:
A. Number of humans on feature story found in homepage image:

B. Ethnicity of Character:
   1. Hispanic
   2. African American
   3. Asian American
   4. Caucasian
   5. Mixed
   6. Other
   7. Unrecognizable

C. Minority character role in image:
   1. Major role
   2. Minor Role
   3. Background Role
   4. Individual

D. Setting of Character in image:
   1. Classroom Setting
   2. Campus Setting
   3. Home, indoor or outdoor
   4. Outdoor/natural scenery
   5. Social setting outside home
   6. Other

E. Relationships of Character to Others in image:
   1. Social Context
   2. Extracurricular Team Context
   3. Family Context
   4. Impersonal Context
   5. Nobody else in image
   6. Academic Team Context
   7. Other relationship

F. Gender of Character:
   1. Male
   2. Female

G. Age of Character:
   1. Child/Teenager
2. Young Adult
3. Adult
4. Mature Adult
The term Hispanic is used to describe people in the United States who are descendents or have migrated from countries where Spanish is spoken (Cafferty & Engstrom, 2000). In the context of which it is used for this thesis, and because the term is rooted in language rather than a race, Hispanic will encompasses different races within a people that have a common linguistic heritage. As a result, Hispanic Americans in the United States are often based on an assumed shared native language.