

This is to certify that the

dissertation entitled

Hip Hop Headz and Digital Equity: A Descriptive Study of Internet Usage by African American Male College Students

presented by

Allison Clark

has been accepted towards fulfillment of the requirements for

____degree in _____Mass Media Ph.D.

Deneva Amithenne Major professor

many 2 5, 2002 Date

MSU is an Affirmative Action/Equal Opportunity Institution

0-12771

THESIS 3 2007



PLACE IN RETURN BOX to remove this checkout from your record. TO AVOID FINES return on or before date due. MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE

6/01 c:/CIRC/DateDue.p65-p.15

7HIP HOP HEADZ AND DIGITAL EQUITY: A DESCRIPTIVE STUDY OF INTERNET USAGE BY AFRICAN AMERICAN MALE COLLEGE STUDENTS

By

Allison Clark

A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Mass Media Ph.D. Program College of Communications Arts and Sciences

ABSTRACT

HIP HOP HEADZ AND DIGITAL EQUITY: A DESCRIPTIVE STUDY OF INTERNET USAGE BY AFRICAN AMERICAN MALE COLLEGE STUDENTS

By

Allison Clark

The purpose of this study is to begin to build a body of knowledge to address an important research issue: how to assess the relevance of culturally specific information technology for the African American male. Hip Hop Culture and the Internet are two of the most influential phenomena of the past 25 years. Does Hip Hop Culture influence the Internet usage of African American male college students? This study examined the Internet usage of African American male college undergraduates who participate in Hip Hop Culture. Specifically, this study investigated how African American male college students interact with the Internet to obtain Hip Hop Culture to gratify their desire for culturally related content.

The uses and gratifications approach was coupled with Ludenic (play) theory to create a theoretical framework for the study. This framework allowed the researcher to differentiate the roles of interactivity and play in both Hip Hop Culture and the use of the Internet. This framework facilitated this researcher's empirical assessment of the expectations, needs, and uses and gratifications of the African American male college students in this study.

The methodology involved the use of focus groups of African American male undergraduate college students. Some were selected from participants from various Historically Black Colleges and Universities (HBCUs) in the Committee on Institutional Cooperation (CIC) Summer Research Opportunity Program (SROP). Other subjects were selected from a predominately white midwestern institution (PWI).

The data from the focus group sessions were examined with the assistance of the statistical program CatPac (Category Package). This program employs cluster analysis and multidimensional scaling (MDS). CatPac statistical software was used to analyze the subjects' perceptions of the influence of Hip Hop Culture on their Internet usage as well as the uses and gratifications of their Internet usage. The focus group summary method was applied to the focus groups' conversational transcripts to complement the quantitative analysis of CatPac.

This study pioneers a culturally specific approach as an intervention strategy to narrow the *digital divide*. The results of the study indicate that Hip Hop Culture does influence the subjects' use of the Internet. Results also indicate that content can be the driver, even when connectivity is an issue. If African American males are to fully participate in the global economy, as well as our national political and social structures, then their levels of Internet use and access must be increased.

Copyright by ALLISON CLARK 2002 Dedicated to

My godsons,

William Perry and Charlie Perry II

In Loving Memory of Their Mother,

Queen Candace

ACKNOWLEDGMENTS

I would like to thank those who supported me throughout the writing process. I would like to thank my Committee Chairperson, Dr. Thomas Muth. Thank you for encouraging me with words of support and wisdom. Thank you to my Dissertation Director, Dr. Geneva Smitherman, and a bad sista—I hope I can be half the scholar that you are. To my remaining committee members, Dr. Bonnie Reece and Dr. Larry Redd, thank you for your guidance and constructive comments, but mostly for believing in me.

I would like to acknowledge the financial support received from the National Science Foundation under award number 0089592. Thank you.

Thanks also to Nancy Ashley, for helping me keep all of the MSU deadlines and procedures. Thanks to Marilyn Britt for sanity checks and encouragement. Much thanks to my NCSA family, especially Stephanie Drake, Steve Kleinvehn, Cristina Beldica, Tim Wentling, Shirley Shore, George Estes, Jeff Carpenter, Jackie Kern, Alex Farthing, Scott Lathrop, and Tom Prudhomme.

Thanks to my friends that kept me fed—Cheryl Melchi, Sharon Tettegah, and Chris Brown. Additional thanks to Chris Brown who not only cooked but also read drafts and commented on the document. Thanks to Jeri Kyle—more pray, more power.

To Bryant York, computer scientist, mentor, and friend—you believed and you made this happen.

Special thanks to my on-again, off-again midwife and birth coach, Derrick Weathersby.

Thanks to my family, especially to Aunt Ethel, who believed and encouraged me all along. To my mom, whose scholarly advice to me as I was growing up was, "They got theirs, you tryin' to get yours." Well Mom, I finally got mine!

To Jesus the Christ, You are my first love.

TABLE OF CONTENTS

1
2
5
0
1
2
6
8
7
4
6
1
1
7
7
9
0
1
2
2
3
5
6
8
0
1
5
9
0
7
5

CHAPTER 5—DISCUSSION AND SUMMARY	
Overview of Study	
Play and Interactivity of Hip Hop and the Internet	
Discussion of Findings	
Issues of Access	100
Unintended Gratifications: Impact of Culturally Specific Approach on	
Nonusers of the Internet	104
Conclusion and Future Implications	107
APPENDIX A—GLOSSARY OF HIP HOP TERMS	112
APPENDIX B—FOCUS GROUP QUESTION GUIDE	115
APPENDIX C—CONSENT FORM	116
REFERENCES	118

,

LIST OF TABLES

Table 1. PWI Focus Groups' Word Frequency Table	52
Table 2. HBCU Focus Groups' Word Frequency Table	57
Table 3. PWI Focus Group Subcluster 1b—Use Web for Hip Hop 7	70
Table 4. HBCU Subcluster 1b—Use Web for Hip Hop 7	16
Table 5. PWI Subcluster 2b—Use Internet When Want Music	78
Table 6. PWI Subcluster 2C—Use Internet for School 8	30
Table 7. HBCU Subcluster 1a—Use of Internet for Mail and Class 8	33
Table 8. HBCU Subcluster 2b—Like to Have the Internet for School Use 8	34
Table 9. PWI Focus Groups Subcluster 1a—Views on Internet's Impact on African American Male Nonusers 10)6

LIST OF FIGURES

Figure 1. Hip Hop and the Internet Uses and Gratifications Conceptual Model	46
Figure 2. PWI Focus Groups' Dendogram of Influences of Hip Hop Culture on Internet Usage	65
Figure 3. HBCU Focus Groups' Dendogram of Influences of Hip Hop Culture on Internet Usage	69

•

CHAPTER 1—INTRODUCTION

"The Internet represents the most important technological development of our generation (emphasis added); its effects may surpass those of television and could, over the decades, equal the influence of the printing press" (UCLA Center for Communication Policy, 2000, p. 1). The rapid growth of information technology has impacted the world and has changed the way society functions. Prior to the creation of the Internet, computers were used to work with self-contained files and information. Computers are now used as an interactive communication tool.

To date, Moore's 1960s law predicting that computer chip capability would double every 18 months has held fast. Although Moore's Law was not created to address the social implications of technology, it does demonstrate how the creation of a simple computer chip has impacted society. Computers will continue to rapidly become more powerful, pervasive, and ubiquitous. The astonishingly accelerated growth rate of information technology has fueled debates on social justice issues—such as digital equity. *Continued* rapid growth could prove to be a detriment to the African American male if creative measures are not taken. The concern of digital equity for all U.S. citizens has led to numerous commissioned studies, symposia, and workshops by government and the private sector (see National Telecommunication and Information Administration [NTIA], 1995, 1998, 1999, 2000; Pew Internet & American Life Project, 2001; Web-Based Education Commission [WBEC],

2000; Booz Allen & Hamilton, The Gallup Organization, & EVAXX Inc., 2000; Myers, 2000). It was the Department of Commerce's NTIA surveys, "Falling Through the Net 1–3" and "Falling Through the Net: Toward Digital Inclusion," that investigated the phenomenon of digital inequity. It was the 1998 report, "Falling Through the Net II: New Data on the Digital Divide" that officially used the term *Digital Divide* for the first time. Digital Divide refers to the gap between those Americans who have access to and effectively use information technologies and those who do not have access (NTIA, 2000). Although the Department of Commerce's commissioned studies on the Digital Divide indicated that African Americans have increased their access to the Internet, they still lag behind in Internet access as compared to white Americans (NTIA, 2000). The aforementioned studies clearly demonstrate that the Internet can provide a vast opportunity or a threat.

Problem Statement

Information Technology will be one of the key factors driving progress in the 21st century...It will provide a vehicle for economic growth. (President's Information Technology Advisory Committee, 1999, p. 1)

The Internet is rapidly changing the way the world conducts business—the most menial job will soon require the use of technology. Because America is shifting from an industrial economy to an information economy, computer literacy will be necessary for survival. Although the Internet has improved our quality of life by impacting the way we work, learn, and play, it also threatens to further exacerbate the problems of African Americans by moving them toward a permanently disadvantaged caste status (NTIA, 1999). "Since emancipation, blacks have operated at the margins of the industrial economy... As wealth in this country shifts toward an information economy, the question is whether blacks will be once more relegated to a fringe position" (Slater, 1994, p. 96). PBS's website, *Life on the Internet*, demonstrates the impact of the Internet on every citizen of the world. The Internet is fast becoming a way of life. It has changed the way we communicate, learn, and conduct business:

And even as the Internet offers a singe Global Village, it threatens to create a 2nd class citizenship among those without access. As a new generation grows up as accustomed to communicating through a keyboard as in person, life on the Internet will become an increasingly important part of life on Earth (PBS, 2000).

Blacks could become part of this second-class citizenship if action is not taken to bring them from the historical fringe of technology.

Results of the 2001 Pew Research Center's report, African-

Americans and the Internet, indicate a severe shortage of African

American males online. Women of all races—including African American

women-are predominant among new Internet users. However, it must be

noted that according to the United States 2000 Census Report, the female

population outnumbers the male population, with 100 females for every

96.3 males. For African Americans, there are 90.5 African American

males for every 100 African American females.

Of the 7.5 million African Americans online, 4 million are women. Just as women of all races are predominant among new Internet users, so too are African American women.

In just the past six months, about 1.2 million African-American women accessed the Internet for the first time, compared to approximately 750,000 African-American men. That has opened up a notable gender gap in the black online population and this represents a different situation from the one that has taken place in the online white population. Among white Internet users there is an even split between the sexes (Pew Internet & American Life Project, 2001, p. 6).

Research on what will motivate African American males to "log on" is imperative. If this trend does not change, it could prove to have a detrimental impact on the African American community. The Internet has crossed international borders. If African American males are to fully participate in the global economy, as well as in our national political and social structure, then their levels of Internet use and access must be increased.

Early research on African Americans and the Internet dealt with issues of access to physical infrastructure. Recent research examines what African Americans do once they are online. Research on what actually motivates, or would motivate, African Americans to go online is scarce, particularly with regard to African American males. Evidence is emerging that mere access is not enough. In the groundbreaking book, *Technicolor: Race, Technology, and Everyday Life*, the editors move beyond the dominant paradigm of race, economics, and technology. They point out that although African Americans have been labeled as victims of technology, this label should not be used to justify how technology and information are distributed. "...historically people of color have been casualties of technologically enabled systems of oppression, from colonial expansion, to the racial sciences of craniology and phrenology, to surveillance and information gathering" (Nelson, Tu, & Hines, 2001, p. 3). The Internet could break the negative impact that technology has had on the African American community. The technology of the Internet has the potential to act as a powerful economic empowerment tool for the African American community. Perhaps African American culture is the incentive needed to connect African Americans to technology. Specifically, Hip Hop Culture may be a culturally specific approach that is needed to attract more young African American males to the Internet. Chapter 2 discusses the relevant technology as well as the literature of Hip Hop Culture.

Significance and Purpose of the Study

Although there is an abundance of literature on Hip Hop Culture and on the Internet, there is a dearth of literature on Hip Hop Culture *and* the Internet. The data from this study lay a foundation to generate hypotheses in this untapped area of research (Morgan, 1988, 1993).

The purpose of this study is to begin to build a body of knowledge to address an important research issue: how to create and assess a

culturally specific information technology base for the African American male. This study examined the Internet usage of African American male college undergraduates who participate in Hip Hop Culture. Specifically, this study investigated how African American male college students interact with the Internet to obtain Hip Hop Culture to gratify their desire for culturally related content. There are researchers who believe that computer technology is a way to reach the disenfranchised African American male youth (Bialo & Sivin, 1989a; Carver, 1999; Casey, 1992). In Carver's study of young African American males' use of computers, he found that the students reported positive feelings about the social interactions that occurred during their computer usage. He identified the need for a "degree of social interaction, or cooperative learning" (1999, p. 26) as being one of the primary components that have an effect on the African American males' learning while using computers.

In Who Am 1? The Development of the African American Male Identity, Corbin and Pruitt (1999) explore factors that contribute to an African American male's perception of his identity. Several of these identity factors are relevant to this study—the importance of peers, "coolness," and masculinity. These dynamics help to compensate for feelings of insecurity in a Eurocentric world. The "cool pose" describes the style, language, clothing, and overall attitude and demeanor of African American males. A foundation is laid to have a sense of personal achievement and self-worth. The cool pose further separates them from

the Eurocentric world. The cool pose is an essential component of Hip Hop Culture.

Corbin and Pruitt go on to acknowledge the influence and impact of Hip Hop Culture on African American males. "It is the connection between the young African American male and rap artist that contributes to the development of the young African American male identity. Some adults have identified this connection and have worked to establish programs that promote positive identity development" (Corbin & Pruitt, 1999, p. 75).

Hip Hop Culture and the Internet are two of the most influential phenomena of the past 25 years. Both were relatively unknown to the general public at their inception but have had significant international impact within the last 10 years (D & Jah, 1997; Hardy, 1993; Leiner et al., 2000; PBS, 2000). If the Internet is the great societal equalizer (NTIA, 2000) and if Hip Hop music is the soundtrack of generation X (Rebensdorf, 1997), can the cool pose of Hip Hop Culture influence Internet usage of African American male college students? This study attempts to answer this question by examining the Internet usage of African American male college undergraduates who are participants in Hip Hop Culture. It utilizes a combination of a theoretical framework of uses and gratifications as well as play or Ludenic theory. This study describes the subjects' views on how Hip Hop Culture has influenced their

use of the Internet. This study also examines the Internet uses and gratifications of the participants.

It is this researcher's contention that computer technology must be made relevant to young African American males, beyond the few educational models that currently exist. Hip Hop Culture is a way of life for the majority of African American males youth. Hip Hop possesses the assets of coolness (Corbin & Pruitt, 1999) and the social interaction (Carver, 1999) that researchers have deemed important to the young African American male computer user. Coolness is a critical attribute of maleness for black males, especially youth. The cool pose and social interaction are traits of Hip Hop Culture. The combination of social interaction and coolness have the potential to make computer technology relevant to African American males. Hip Hop Culture has the power to make computing cool. Therefore, it is feasible to conjecture that computer technology can be combined with Hip Hop Culture to make it appealing to this population. Hip Hop Culture appears to have the potential to entice these youth into becoming technological creators and innovators through a process known as participatory development. The philosophy of participatory development is that social capital is built by the contributions of all citizens. Decisions are made by all participants and not by those who are in power. Perhaps young African American males can "flip the script" (modern slang for semantic inversion, which is the manipulation or rhetorical maneuvering of the semantic structure of

European American language [EAL] [Smitherman, 1997]) on the Internet by displaying the same ingenuity they used on language and music technology to make it their own.

As mentioned, the purpose of this study is to begin to build a body of knowledge that is intended to address an important research issue: how to create and assess culturally specific information technology for the African American male. Towards this end, this study examined whether culturally specific content, Hip Hop Culture, attracts African American male college students to use the Internet. The methodology involved the use of focus groups of African American male college students who were selected from participants in the Committee on Institutional Cooperation (CIC) Summer Research Opportunity Program (SROP), who are from various Historically Black Colleges and Universities (HBCUs) and from a predominately white midwestern institution (PWI).

The data from four separate focus group sessions were examined with the assistance of the statistical program CatPac (Category Package). This program employs cluster analysis and the multidimensional scaling (MDS) method. CatPac statistical software was used to analyze the African American male undergraduates' perceptions of the influence of Hip Hop Culture on their Internet usage and the uses and gratifications of their Internet usage. The focus group summary method was applied to the transcripts of the focus group sessions to complement the quantitative analysis of CatPac.

This study pioneers a culturally specific approach to information technology. The results generated from this study could allow researchers to construct more research questions, hypotheses, and data in the specific area of Hip Hop Culture's influence on Internet usage by African American male college students.

Organization of the Study

Chapter Two is a discussion of the relevant literature. Included is research focusing on the Digital Divide. The history of the Internet is then reviewed. Hip Hop Culture and the technological innovations created by this culture are discussed. The application of participatory development in flippin' the technological script in the lives of African American males is examined. The chapter ends with a review of the role of play on the Internet and in Hip Hop Culture.

Chapter Three presents the conceptual framework, theory, and research questions of the study. It describes the research methodology, data collection, and analysis.

Chapter Four presents the results of the study.

Chapter Five presents a discussion, summary, and implications of the results as well as directions for future research.

CHAPTER 2—REVIEW OF LITERATURE

General academic research on the social, economic, and political impact of cyberspace is just emerging. Therefore it is no surprise that there have been few investigations regarding race. As noted in chapter 1, existing research that addresses African Americans and the Internet is primarily limited to issues of access to infrastructure. The critical study of race in cyberspace is an emerging field of study for academics.

There is an abundance of literature regarding the social malaise of the young African American male and the need for programs and policies to rectify the situation (Blake & Darling, 1994; Corbin & Pruitt, 1999; Gibbs, 1984; Oliver, 1989). According to these researchers, African American males have poor educational backgrounds, low SAT scores, and low earning potentials. The African American male has been labeled "at risk," an "endangered species," and even a "menace to society." There are researchers who believe that computer technology is a way to reach these youth (Bialo & Sivin, 1989a; Carver, 1999; Casey, 1992). However, current technological innovations threaten to further exacerbate the problems of young African American males by moving them toward a permanently disadvantaged caste status (NTIA, 1999). As emphasized in chapter 1, the Internet has changed the way society functions. It has improved our quality of life by impacting the way we work and play. It is crucial, therefore, that digital equity is ensured for all citizens. "Schools use the Internet as a vast electronic library, with untold possibilities.

Doctors use the Internet to consult with colleagues half a world away" (PBS, 2000).

Digital Divide

The term *digital divide* refers to the gap between those Americans who have access to and effectively use information technologies and those who have not (NTIA, 2000). Two Department of Commerce surveys, *Falling Through the Net 1-3* and *Falling Through the Net: Toward Digital Inclusion*, investigated this phenomenon. Although the Department of Commerce-commissioned studies on the digital divide (NTIA, 1995, 1998, 1999, 2000) indicated that African Americans have increased their access to the Internet, they still lag behind in Internet access as compared to white Americans (NTIA, 2000). From December 1998 to August 2000, the numbers have increased for white non-Hispanic Americans from 29.8% to 46.1%, an expansion rate of 58.5% (NTIA, 2000). Asian Americans and Pacific Islanders lead in access with a gain from 36.0% to 56.8%. During this same time period, African American access rose from 11.2% to 23.5%, an expansion rate of 109.8%.

The results of the 2001 Pew Research Center's report, African-Americans and the Internet, contains the most recent data specific to African American's access and use of the Internet. During the year 2001, 48% of the 7.5 million African American computer users logged on to the Web for the first time. The majority of online users of this community are African American women at 56% of the total number of Black users. In the African American online community, 61% of first-time users were Black women.

The Pew Report was the first report to survey what African Americans were actually doing online once they gained access to the Internet. More than their white online counterparts, online Blacks download music and audio and video clips, seek spiritual or religious information, and become educated on health care and hobbies. Although Blacks use email to sustain relationships with family and friends, they are less likely to use email than whites to sustain friendships.

The rapid gains in Internet access and use by African Americans are encouraging. However, the report notes, "Despite this substantial growth, African Americans still lag behind their white counterparts in Internet access and computer use" (Pew Internet & American Life Project, 2001, p. 6). White users of computers are at 63%, while a little over 50% of African Americans use computers. Internet access for rural African Americans stands at 22%, compared to 41% of suburban and 35% of urban African Americans who have online access.

The have-nots of the digital divide need more than access to the Internet. Darien Dash, pioneer and activist in the Internet community and founder of Digital Mafia Entertainment, has demonstrated in his work that it takes more than access to the Internet to draw African Americans to it. African Americans, like other ethnic groups, desire culturally relevant content on the Internet. As a panelist at the National Telecommunications

and Information Administration's Digital Divide Summit, Darien Dash stated, "There is a void in content, information, and services that would attach greater value to the interactive experience of minorities" (Department of Commerce, 1999, website).

The limited literature suggests that all college students are more likely to have Internet access than noncollege attendees (Rebensdorf, 1997; Teslik, 1998). Therefore one can surmise that more African American male college undergraduates have Internet access than African American males not attending college. This study begins to build an African American male Internet user paradigm by examining members of this population who have access to the Internet. Future studies can build on the results of this study by investigating the use of Hip Hop to attract African American male nonusers to the Internet.

The Internet has evolved into a mass communication medium similar to print and traditional broadcast (Morris & Ogan, 1996). As with print and electronic media, societal inequities have been magnified by the Internet. It could be stated that the digital divide has an affinity with the knowledge gap media theory. McQuail observes in "Sociology of Mass Communication" (1985), that *knowledge gap* refers to the correspondences between media use and information levels obtained by the information rich—the haves—and the information poor—the have-nots. In other words, those who already know how to glean information from media, the educated information rich, continue to gain more information from the

media—thus widening the gap between themselves and those who don't have information or know how to seek it. This knowledge gap may close or widen over time (McQuail, 1985). According to the 1999 Department of Commerce NTIA report, during the period from 1997 to 1998 the level of access to the Internet, between those with the highest and lowest levels of education, widened by 25%.

The social, economic, and political implications of a continuing gap between those with access and those without access to the Internet are staggering, given current demographic projections. The October 2000 NTIA supplemental report indicates that white American individuals lead in Internet use (emphasis added) with 50.3%. Asian Americans and Pacific Islanders follow with 49.4%, then African American non-Hispanics with 29.3%, and Hispanics with 23.7%. The only populations with use rates higher than their household online connections were African Americans and whites at 23.5% and 46.1%, respectively (NTIA, 2000). The more recent findings of the 2001 Pew Research Center report on African Americans' use of the Internet indicate that more African Americans (a little over 50%) have logged on since the NITA October 2000 report, but they still lag behind the 63% of whites who have logged on. Creative programs and policies are needed to narrow the digital divide by creating digital equity. This is a complex issue requiring expertise in a number of disciplines. This study begins to identify the motivation of African

American male college students to engage in the use of the Internet and possible ways to increase and expand that usage.

History of the Internet

In 1969 the Advanced Research Projects Agency (ARPA) of the U.S. government conceived a Cold War project that would later become the Internet. The original purpose of the Internet, then known as the Advanced Research Projects Agency Network or ARPAnet, was to create a command structure that was centralized and controlled for the United States Armed Forces (Hardy, 1993). The ARPAnet's original design enabled decentralization from the mainframe computer concept to a peerto-peer structure. This new network allowed research computers at one university to communicate with research computers at other universities (Leiner et al., 2000; Zakon, 2000). In 1972 Vinton Cerf was elected the first chairman of the InterNetworking Working Group (INWG). This organization was charged with setting the standards that would govern the growing network. Cerf later became known as the "Father of the Internet" (PBS, 2000). The ARPAnet project did not anticipate the popularity of electronic mail, which became the most widely used application on the Internet (Leiner et al., 2000). This is significant, as the founders of the Internet did not foresee the potential impact of the Internet beyond its original purpose. This indicates that there are many unexplored applications of the Internet that can unexpected impacts various communities.

The next Internet historical milestone occurred in 1976 with the creation of UNIX-to-UNIX-copy protocol (UUCP) by Mike Lesk of AT&T Bell Labs. UUCP was later improved to enable users to log on remotely, transfer files, and send and receive electronic mail (Hardy, 1993; PBS, 2000).

Between 1982 and 1987 Vint Cerf and Bob Kahn were key members of the team that created Transmission Control Protocol/Internet Protocol (TCP/IP), which is the common language of all Internet computers. TCP/IP enables computers to communicate with each other, thereby forming a network. This particular capability created the Internet as we know it today (PBS, 2000).

The innovation and further refinement of the Internet continued through government-funded programs. The Defense Advanced Research Projects Agency (DARPA), the National Science Foundation (NSF), and various university computer scientists created the Computer Science Research Network (CSNET) so that major universities could connect to ARPAnet sites. These connections gave those universities advantages in recruiting students and conducting research (Hardy, 1993; PBS, 2000). NSF then issued a request for proposals inviting universities to participate in CSNET.

As access to the Net increased, so did innovation. UNIX User Network (Usenet) implemented the UUCP Protocol to provide news and items of interest to participants. The Because It's Time network

(BITNET) was started by City University of New York (CUNY). BITNET used email to distribute information to its participants; the mechanism used to distribute BITNET email is known as listserv (Hardy, 1993). In 1977–1978 Ward Christianson created the first computer bulletin board system (BBS), which became another popular forum on the Internet (Hardy, 1993).

The most popular portion of the Internet is the World Wide Web (Leiner et al., 2000; PBS, 2000). Tim Berners-Lee saw the value in combining the concept of the Internet with hypertext to present information in a nonsequential manner (Leiner et al., 2000). Marc Andreesen was a member of the team at the National Center for Supercomputing Applications.(NCSA) that built on hypertext technology to create NCSA Mosaic, the first graphical browser for the World Wide Web (PBS, 2000). Mosaic enabled users to access millions of pages of information. Thirty years after its earliest incarnation, the Internet is a public communications network available to hundreds of millions of people worldwide.

Hip Hop Culture

Hip Hop was incubated in the milieu of racial tensions, urban decay, and economic and political strife during the mid-1970s in the South Bronx. Hip Hop was a form of expression and self-identification for the disenfranchised African American, Afro-Caribbean, and Puerto Rican youth who had been involved in involuntary massive relocations to the South Bronx in the name of urban renewal (Rose, 1994). Hip Hop headz (or experts) agree that Hip Hop Culture consists of four categories of expression that are rooted in African American popular culture: (a) graffiti, an urban form of art where words and pictures are drawn with spray paint on walls, trains, and other urban "bulletin boards"; (b) break dancing, a specific style of dance that is often very athletic and almost always done to music created by Hip Hop DJs or MCs; dancers snap their joints into angular positions by "popping" and "locking" them; (c) MCing, the art of writing and performing rhymes, usually over rhythm-heavy music; and (d) DJing, the use of turntables to manipulate records and to create new music.

In *Black Noise* (1994). Rose expands on the cultural and oral paradigm of Hip Hop by claiming that the four pillars of Hip Hop expression are only some facets of Hip Hop Culture. She states, "... Hip Hop style *is* black urban renewal" (p. 61). Rose emphasizes that it is important not to oversimplify the creation of Hip Hop Culture by simply relegating it to the African American Oral Tradition. Instead, Rose builds upon previous analyses of Hip Hop that label it (a) as a cultural expression that extends the African American Oral Tradition, (b) brands it as counter-capitalistic, or (c) as commercialism. Rose does this to "show how both postmodern and premodern interpretive frames fail to do justice to its complexities, and how Hip Hop's primary properties of flow, layering, and rupture simultaneously reflect and contest the social roles

open to urban inner-city youths at the end of the twentieth century" (p. 22). Flow, layering, and rupture are Rose's attempt to describe stylistic continuities among the four pillars (or elements) of Hip Hop breakdancing, graffiti-writing, DJing, and MCing.

Indeed, there were many other factors that contributed to the creation of Hip Hop Culture—the New York urban terrain in the 1970s and Afro-Diasporic traditions created as a result of Africans being enslaved in America. The African American oral traditions evolved out of the enslavement of Africans. It was from these conditions that enslaved Africans recreated and reshaped the language and music of European Americans. Smitherman acknowledges the complexities of Hip Hop's evolution. Smitherman identifies Hip Hop Culture as more than a form of cultural expression; it is also a type of resistance discourse. She states, "The rap music of the Hip Hop Nation simultaneously reflects the cultural evolution of the Black Oral Tradition and the construction of a contemporary resistance rhetoric" (Smitherman, 1997, p. 21). The African American Oral Tradition of storytelling stems from an African orally oriented background. The crucial difference in American culture lies in the contrasting mode between African Americans' oral orientation and European Americans' print-oriented culture (Smitherman, 1986).

African American language and style are the building blocks of the oral music tradition. The joy and pain of the blues, the freestyle and improvisation of jazz, the call and response of the Black Church, the

toasting and jive talk of radio disc jockeys are the foundations of Hip Hop. Smitherman (1997) states that because all Black music is central to the African American community, it has played a major role in shaping African American Language—therefore the influence of Hip Hop is nothing new. It is clear that Hip Hop stretches back farther than even most Hip Hop headz realize. It is therefore important to examine the validity and origins of the language and style of Black music—African American Language (AAL).

It was in the environment of the New World that African American Language (AAL) was created.

Africans in enslavement were forced to use English—their version of English, that is—as a common language because the slaver's practice was to mix Africans from different ethnic-linguistic groups in order to foil communication and rebellion. However, enslaved Africans stepped up to the challenge and made English work for them by creating a new language using the English language vocabulary. This counter-language was formed by assigning alternate, and sometimes oppositional, meanings to English words. It was a coded language that allowed them to talk about Black business publicly and even to talk about ole massa himself right in front of his face (Smitherman, 2000, p. 26).

It has been long recognized by anthropologists, linguists, and psychologists that language is an extension of one's culture (Ervin-Tripp & Mitchell-Kernan, 1977; Labov, 1970, 1972). In traditional African society the word is imperative; it is fundamental and the fashioning instrument of society (Smitherman, 1977). For most African Americans, their language structure has components of what is known as Black English Vernacular (BEV) or AAL. It is estimated that over 80% of African Americans speak AAL to some extent (Simpkins & Simpkins, 1981).

African American speech has two dimensions: language and style. For purposes of analysis, linguists separate the two, but they often overlap. This fact is frequently overlooked in discussions of African American Language (AAL) (Smitherman, 1986). *Language* refers to sounds and grammatical structure, while *style* refers to the way speakers put sounds and grammatical structure together to communicate meaning. "Language is the words, style is what you do with the words" (Smitherman, 1986, p. 16).

AAL evolved as part of the culturalization process of African Americans and has been demonstrated by linguists to have structured syntax and grammar (Dillard, 1980; Labov, 1970; Smitherman, 1986, 1997; Cook & Levy, 1973; Labov, 1970). Enslaved Africans attempted to fit words and sounds of a new language into a basic idiomatic mold and structure of their native tongue.

The history, development, and evolution of AAL is an interesting one. In *Perspectives on Black English* (1980), J. L. Dillard traces the historical development of AAL linguistically, from the time of the slave trade to the post-Emancipation era. Similar to Smitherman (1986), Dillard hypothesized that AAL resulted from a process of pidginizationcreolization. This process occurred because AAL was a language used to trade between groups of people with different language backgrounds. It is

a mixture of the grammars and lexicons of two languages (Dillard, 1980). A pidgin language has rules and regular sentence constructions, like any other language. Historically, not many languages have been pidginized, although theoretically any language can be pidginized.

Pidgin languages arose during the slave trade. Portuguese Trade Pidgin (Dillard, 1980) was developed to participate in world trade; its development was driven by economics—not by a commitment to language structure. Portuguese, French, and English slave traders had to communicate with Africans who came from 80 different tribes along the West Coast of Africa (Dillard, 1980). The enslaved Africans were forced to adopt many of the Portuguese, French, and English words but maintained their own grammatical systems. Dillard theorizes that due to the conditions of the West African slave trade, "it seems reasonable to believe that Pidgin English was in use in the slave trade by the beginning of the seventeenth century, if not slightly earlier" (p. 22).

Later, house servants acquired the most standard English given the proximity to their masters, while Plantation Creole became the dominant language of field hands (Dillard, 1980). After Emancipation field slaves simply became agricultural workers and sharecroppers. Under this system the use of Plantation Creole did not change much.

Today Hip Hop and rap have evolved into a means of political selfexpression for many young African Americans (Cook, 1996; Costello &

Wallace, 1990; George, 1992; Hager, 1984; Smitherman, 1997, 2000; Spencer, 1991).

In African American Culture, creativity is called into existence by speaking—all dance, religion, and music is produced by oral expression. One fact is clear—rap music uses language creatively. A classic Hip Hop song is considered to have "an original use of slang, unusual and unexpected rhymes, and strong visual imagery" (Hager, 1984, p. 57). These lyrics were rapped or spoken over preexisting music by artists such as James Brown, George Clinton, Parliament P-Funk, and The Last Poets, a trio of formerly incarcerated African Americans, who released "Hustler's Convention" (Toop, 2000). "Hustler's Convention" is considered a foundational song of Hip Hop Culture.

Prior to the explosion of rap music the term *rap* had a different meaning in the African American community. Rap originally referred to a man's creative conversation to a woman for the purposes of seducing her; it evolved to refer to someone who could speak cleverly and forcefully on any subject (Smitherman, 2000). Rap music encompasses all these meanings and more. (The Hip Hop terms *rap* and *DJing* are rooted in Black radio.)

In the African American community, disc jockeys, or DJs, were looked upon as cultural heroes (Smitherman, 2000; Williams, 1998). The status of hero can be attributed to their ability to rap—to speak cleverly and forcefully. "Rhyming and signifying" were ways the DJs entertained

their audience (Barlow, 1999). Barlow goes on to give an account of how Black DJs were hired "because of their mastery of the latest street slang, or 'jive talk', and because of their ability to speak in rhymes" (p. 104). Signifying can be traced back to West Africa via slavery (Smitherman, 1986). Signifying is best described as humorous verbal warfare that utilizes barbs and ridicule with the ultimate goal of humiliating one's opponent. "The dozens" or "yo' momma" jokes are the best known examples of signifying (see Smitherman, "If I'm Lyin, I'm Flyin: An Introduction to the Art of the Snap," (1995)).

In Williams' Legendary Pioneers of Black Radio (1998), Black disc jockeys are dubbed masters of improvisational culture. According to Williams, improvisational culture is the African American communication style that is rooted in Central and West African cultures. Black disc jockeys are likened to the storytelling groits, or tribal oral historians, of Africa. Radio disc jockeys employ the same technique as the African groit by "rapping" in narrative form. "The most important aspect of the groits' performance is audience participation and reaction. Therefore, the groit's goal is to both entertain and instruct the audience. Audiences react to oral performance by establishing a relationship with the groit" (Williams, 1998, p. 3).

African American radio disc jockeys also entertained and amused their audiences with prison-style raps. In *The Life: The Lore and Folk Poetry of the Black Hustler*, the authors document "the Toasts," a form of

poetic storytelling prevalent in prisons throughout the 1950s and 1960s. "They are like jokes: no one knows who created them, and everyone has his own version...good tellers may be highly valued and in much demand" (Wepman, Newman, & Binderman, 1976, p. 44-45).

The DJs and MCs of Hip Hop Culture continue to be the groits of the African American community. Rap music reflects the pleasure and pain of Black life in America; yet Hip Hop Culture has grown into an international phenomenon. The audience for this form of cultural expression has grown significantly from the first commercially successful rap song—"Rappers Delight," released in October 1979 (George, 1992; Rose, 1994; Toop, 2000). MCing, or rapping, has had the greatest commercial success of the four basic elements of Hip Hop. According to the Record Industry Association of America (RIAA) consumer profile report, the total Hip Hop market for the year 2000 was \$14.3 billion. The RIAA is "a trade association whose members create, manufacture and/or distribute approximately 90% of all legitimated sound recordings produced and sold in the United States" (RIAA, 2001). The number one slot for market share went to Rock with 25% of the market. Rap/Hip Hop Music buyers replaced Country music consumers as the second largest segment (12.9%) in domestic sales of sound recordings. Country music had dominated this position for the previous decade.

As the centuries passed, AAL continued to evolve dynamically. The language and style of Hip Hop Culture is a continuation of African

American oral culture. AAL is the backbone of Hip Hop. Hip Hoppers contribute to the continued development of African American oral culture through a technique known as *semantic inversion*, or, in modern slang, "flippin' the script." Smitherman states that the term semantic inversion was coined by the late linguist Grace Holt to describe the manipulation or rhetorical maneuvering of the semantic structure of European American language (EAL) (Smitherman, 1997). Smitherman cites an example of flippin' the script, or semantic inversion, using the word "fat," spelled "phat" in Hip Hop. According to Smitherman, "phat" refers to "a person or thing that is excellent and desirable, reflecting the traditional African value that human body weight is a good thing, and implicitly rejecting the Euro-American mainstream, where skinny, not fat, is valued, and everybody is always on a diet" (Smitherman, 1997, p. 31). Semantic inversion, or flippin' the script, is an act of empowerment for the AAL speaker.

Flippin' the Script on Technology Through Participatory Development

Two conflicting camps have emerged regarding the impact of the Internet on marginal groups in society. There are those who believe that the Internet will only heighten the current problems of society. Then there are those who argue that the Internet has the power to create a perfect cyberworld—a world where race, gender, and class don't matter. In *Internet or Outernet?* Ebo (1998) labels the predicted outcome of these

opposing views as a *cybertopia* or a *cyberghetto*. A *cyberghetto* would foster the current socioeconomic structure by retaining the present hierarchy. A *cybertopia* has the potential to create a new social structure. Yet Internet researchers are discovering that technology and the Internet are not the utopia it was originally professed to be, particularly in regard to race. Race does matter online. "Neither the invisibility nor the mutability of online identity make it possible for you to escape your 'real world' identity completely...we can't help but bring our own knowledge, experiences, and values with us when we log on" (Kolko, Nakamura, & Rodman, 2000, p. 4).

There are some who argue that technology has not been a friend but a foe to the Black man. "Technology Versus African-Americans" presents an historical overview of the negative impact technology has traditionally had on African Americans from their arrival in the New World (Walton, 1999). It was technological innovation that brought African Americans to the shores of America. The invention of the caravel, a ship with three masts and large sails, solved the sailing problems of the Portuguese and allowed them easy travel to West Africa and India. This travel resulted in the enslavement of Africans—making them the technology of the day. They were traded as human chattel for other forms of Western technology, textiles, metals, and firearms. Later, the invention of the cotton gin became a double-edged sword. It reduced the amount of labor and number of laborers needed to harvest cotton, thus making the process faster and

more cost efficient. However, this forced the northward migration of Blacks to work in factories that later closed, leaving cities in urban blight.

Walton wonders if Blacks will be left behind in the Information Age, particularly African American youth who believe that a Michael Jordan is a lot cooler than a Bill Gates. "...Blacks have participated as equals in the technological world only as consumers, otherwise existing on the margins of the ethos that defines the nation, underrepresented as designers, innovators, and implementers of our systems and machines. As a group, they have suffered from something that can loosely be called technological illiteracy" (Walton, 1999, p. 16). Walton acknowledges that this technological illiteracy is the result, but not the intent, of technology. He challenges African Americans to find ways to encourage young people to move beyond consumerism to become full participants in technology.

In order to succeed one must have the ability to exploit technology—to make the technology culturally relevant. African Americans demonstrated this ability during the development of FM radio. Although frequency modulation (FM) radio was invented by Edwin Armstrong in the 1930s, powerful owners—such as NBC—blocked the development of FM radio. It wasn't until the 1960s, with the combination of Edwin Armstrong's perseverance and the economic, social, and technical climate of the country that FM radio became more attractive.

An FM station could be purchased for a lot less money than an AM station. This made FM appealing to the two most controversial movements of the day-the Antiwar Movement and the Black Power Movement (Barlow, 1999). The stations that identified with these movements "did so by experimenting with 'underground radio' formats, [as they were] initially called by their listeners" (Barlow, 1999, p. 227). These so-called counterculture radio outlets were located in cities with large college student populations, such as Boston, New York, Los Angeles, and Washington DC. These stations were later dubbed "progressive FM." They were different from AM stations because they played 33 1/3 rpm LPs rather than 45 rpm discs. Further, the DJs had control over the play lists, and the stations supported the local counterculture audiences (Barlow, 1999). African American DJs enjoyed the new freedom that FM radio gave them by expressing their political views during shows that they created. The most successful FM station with this type of format was WBLS in New York. "Its rise to prominence in the country's largest radio market during the early 1970s received national attention and set the trend for black FM radio over the next decade" (Barlow, 1999, p. 233). It was this so-called counterculture activity that stimulated the African American community to become early adopters of FM radio.

Nelson, Tu, and Hines (2001) confirm the historical capability of African Americans who have traditionally overcome the obstacle of denied access to technology by "making do with what they have" (Nelson,

Tu, & Hines, 2001, p. 8). The pioneers of Hip Hop Culture "made do" with what they had by applying a concept similar to semantic inversion to music technology. Instead of listening to an album that had only a few seconds of good beats, DJs took two copies of the same disc, placed them on two separate turntables and "worked" the sound by orchestrating back and forth between the turntables. Baker has referred to these practitioners as rap "technologists" and the medium as "raptechnology" (Baker, 1991). They adapted the music technology of the 1970s and created a technology unique to Hip Hop.

Several researchers and scholars have recounted the technological innovation of early Hip Hop DJs (Baker, 1993; George, 1992; Rose, 1994). DJ Kool Herc was the originator of turntablism. Herc would set up his massive stereo system in the park and purchase electricity from a nearby neighbor. Known as Herculords, his stereo system consisted of two turntables, a beat box with heavy amplification, and headphones. This technology, combined with the fast handwork of Herc, would entertain the crowd for hours. Herc is credited with two innovations that separate rap music from other popular music: "flippin' the technological script" by creating his own sound system (with its own semantically inverted name the Herculords) and creating the "break-beat" or "b-beat" (Baker, 1993; George, 1992; Rose, 1994). The b-beat was the "practice of extending obscure instrumental breaks that created an endless collage of peak dance beats or break-beats" (Rose, 1994, p. 51).

Grandmaster Flash is credited with creating and perfecting the technique of "scratching." Trained to repair electronics at a vocational high school, Flash reappropriated the technology of the turntable by using one turntable to move the record back and forth to play with or against the rhythm of the record playing on the second turntable, creating a deconstructed sound (Baker, 1993; Rose, 1994).

Just as African Americans were capable of flippin' the script to change and adapt both language and music technology to make it their own, their innovation and creativity can also be applied to the Internet, given the right circumstances. Historical evidence of the right circumstances is illustrated with the development of FM Radio.

If diverse communities define and embrace the information technology that affects them, it is inevitable that these technologies will reflect the individuality and distinguishing characteristics—the culture—of these communities. Only relatively recently has the computing community begun to recognize and openly discuss that cultural assumptions are built into computer artifacts and interfaces. For example, the ubiquitous 'desktop' metaphor is a form familiar to pre-digital white-collar office workers but not so familiar to many others. (Institute for African American E-Culture [iAAEC] website, 2001)

Computing has typically had a "build it and they will come" mentality. As stated in chapter 1, the philosophy of *participatory development* is that social capital is built by the contributions of all citizens. Participatory development is understood to mean a process of inquiry and dialogue through which concerned persons (stakeholders) share ideas in ways that help them have multidimensional perceptions of their own needs. Stakeholders analyze the causes and effects of these needs so that decisions for effective future common action can be made (ELDIS, 1998). Participatory Development has been traditionally used in the so-called Third World countries in the areas of farming, food co-ops, community gardens, advocacy groups, and other grassroots social and political change organizations (ELDIS, 1998; The Foundation for Development Cooperation, 2001; The Participatory Development Forum, 2001).

Creativity and creation have occurred over time among African Americans, but many African Americans were not allowed to retain ownership or to receive recognition for their creations. The Internet has the potential to change this by shifting control of advertising, publication, and marketing into the hands of the inventors. The mission of the Participatory Development Forum best describes the power of grass roots ownership: "We are a network dedicated to promoting a philosophy of participation that advocates for people's capacity and right to define and control their own development in order to achieve social justice and equality" (The Participatory Development Forum, 2001).

In The History of the Net, Hardy quotes Bruce Sterling's view on how the Internet was flipped from a postapocalypse communication tool to a political, social, and economic revolutionary tool: "No one really planned it this way. Its users made the Internet that way, because they had the courage to use the network to support their own values, to bend the

technology to their own purposes. To serve their own liberty. Their own convenience, their own amusement, even their own idle pleasure" (Hardy, 1993, website).

Just as its users changed the original purpose of the Internet from a postapocalypse communication tool of war, young male African American users can further evolve it. Bolter states, "electronic text is, like an oral text, dynamic" (1991, p. 59). Hip Hop pioneers demonstrate the innovative nature of young African American males. This energy can also be applied to the Internet. Today's African American males can invent new uses for the Internet by making it fit their priorities and needs—just as the forefathers of Hip Hop Culture invented new uses for FM radio.

Historically Black Colleges and Universities and Predominately White Institutions

Because the subjects for this study were recruited from students who attend Historically Black Colleges and Universities (HBCUs) and a Predominately White Institution (PWI), it is important to briefly examine the literature about Black males in these institutions. The total number of African American students enrolled in college increased by 3% from 1996 to 1997 (Carlson, 1999). The U.S. Department of Education reports that from 1977 to 1997 the number of degrees conferred on African American male college students rose from 5.2% to 6.7% (National Center for Education Statistics [NCES], 2000). HBCUs award approximately onethird of all bachelor's degrees earned by African Americans (ERIC Clearinghouse on Urban Education [ERIC], 2001, website). HBCUs were founded with the mission of educating African Americans. There are now approximately 120 HBCUs, and "in comparison with other colleges, HBCUs are often under funded" (ERIC, 2001, website).

The digital divide has impacted these African American institutions as well as individual African Americans. Unfortunately, according to HBCU technology assessment studies commissioned by the National Association for Equal Opportunity in Higher Education (Meyers, 2000) and the Thurgood Marshall Scholarship Fund (Booz Allen & Hamilton, The Gallup Organization, & EVAXX Inc., 2000), the majority of HBCUs lag behind in Internet access, computer equipment, and technical training and support. This has a negative impact on the students attending these schools. Faculty and staff believe that the more technologically equipped their campuses are, the better the education and opportunities available to their students (Booz Allen & Hamilton, The Gallup Organization, & EVAXX Inc., 2000; Meyers, 2000).

Comparison studies have been conducted on African American males who attend PWIs versus those who attend HBCUs. The research demonstrates that students at HBCUs are better nurtured due to relationships with faculty, peer-support networks, and greater psychological adjustments than their peers at PWIs (Allen, 1985, 1992; Allen & Haniff, 1991; Gibbs, 1973; Jackson & Swan, 1991). "For males in Black schools, more emphasis should be placed on the academic-support

system, while for males in white schools, more emphasis should be placed on the social-support component" (Jackson & Swan, 1991, pp. 140-141). The Internet may impact these attributes of students at both PWIs and HBCUs. Many of these studies were conducted prior to the current technological explosion. What role can technology play in leveling the playing field? This study, which includes the *digital haves* at PWIs and the *digital have-nots* at HBCUs, is perhaps the first step in answering this question.

The Role of Play on the Internet and in Hip Hop Culture

Play is a vital component of the Internet as well as Hip Hop Culture. There are several schools of thought regarding play theory. Play has been described as a spontaneous and creative process of metaphor construction that communicates identity (Schwartzman, 1982). The classic theorists of play, Huizinga and Caillois from the late 1950s and early 1960s, saw it as activity set apart in time and space from ordinary life. Prior to Huizinga's work, scholars considered play to be meaningless. According to Stephenson (1988), Huizinga considered "playing as a source of culture, giving rise to useful conventions that permit culture to evolve and stabilize—it teaches loyalty, competitiveness, and patience" (p. 46). The act of play is the pursuit of fun—it is an experienced activity (Combs, 2000).

William Stephenson in *The Play Theory of Mass Communication* (1988) first explored the application of play theory to mass media. In this

work, Stephenson focuses on the pleasurable rather than informational aspects of communications. The core postulate of Stephenson's theory is that play is fun, or what he deems *communication-pleasure*. Simply put, self-enhancement is the goal of the audience member. The opposite of communication-pleasure is *communication-pain*, or work to achieve a specific purpose. Stephenson notes that it is important that a clear distinction be made between the two principles of *social control* and *convergent selectivity*. "I propose that neither social control nor convergent selectivity can be understood without attending to the play they enjoin" (Stephenson, 1988, p. 3).

Social control "is made manifest in our inner beliefs and values....the principle of convergent selectivity is very different. It concerns new or non-customary modes of behavior, our fads and fancies, which allow us opportunities to exist for ourselves, to please ourselves, free to a degree from social control" (Stephenson, 1988, p. 2). Stephenson feels that mass media play an important role in convergent selectivity. The Internet facilitates play as creativity, thus engaging the audience in communication-pleasure and convergent selectivity.

The play theory of mass communication was used in conjunction with the uses and gratifications theory in a study of Taiwanese college students' Internet addiction (Chou & Hsiao, 2000). Although the play theory of mass communication may be appropriate for more traditional media, it proves to be problematic in Internet research. Stephenson has

characterized communication-pleasure (play) and communication-pain (work) as oppositional. Yet these two phenomena can sometimes be juxtaposed during the Internet surfing experience. "Even when ostensibly at work, individuals seated at their computers can be engrossed in deep play" (Danet, Ruedenberg, & Rosenbaum-Tamari, 1998, p. 43). An example of this type of experience as it relates to Hip Hop Culture is known as *play-labor*.

In Yo' Mama's Disfunktional!: Fighting the Culture Wars in Urban America, Robin Kelley postulates that the role of play in the lives of urban African American youth is not simply limited to creativity. In this population, play is sometimes linked with labor. Kelley labels this *playlabor*; he acknowledges that play-labor is not unique to the African American community.

What I am suggesting, however, is that the pursuit of leisure, pleasure, and creative expression is *labor*, and that some African American urban youth have tried to turn that labor into cold hard cash. Thus, play has increasingly become, for some, more than an expression of stylistic innovation, gender identities, and/or racial and class anger—increasingly it is viewed as a way to survive economic crisis or a means to upward mobility. (Kelley, 1997, p. 45)

Kelley states that because of permanent unemployment and the decrease in public space available for play, these youth have taken play (e.g., sports, Hip Hop) beyond its pleasure aspects and made a commodity of it (Kelley, 1997). It is apparent that the creativity of Hip Hop involves play. It also involves labor for some African American males who choose to turn their Hip Hop skills into a commodity. Perhaps play or Ludenic theory is a more appropriate theory to couple with the uses and gratifications paradigm when researching the use of the Internet by African American male Hip Hop headz. Two key ingredients of play are *activity* and *creativity*. Play or Ludenic theory acknowledges these components of play as crucial. Ludenic theory is based on the Luddite labor revolt in England during the Nineteenth Century (Combs, 2000). The people of the Luddite region rebelled against a system that threatened to take away the recreational aspect of their lives.

Internet theorists have investigated the Internet from the Ludenic perspective because they regard the Internet as a medium of play—play rooted in creativity and interactivity. Combs, author of *Play World: The Emergence of the New Ludenic Age*, states that "the way to create, or recreate, meaning is to revert to play (2000, p. 112). "The Internet, then, is the latest medium that is the site of play...television play involved passive watching and learning...Net play involves actively navigating in search of likeable information or the discarnate company of the like-minded" (Combs, 2000, pp. 115–116). Combs believes that the embryonic period of new technology is the best time to study its playfulness before it becomes familiar, predictable, and routine. For now, the Internet is far from predictable—offering mediated creative play. Internet researchers Danet, Ruedenberg, and Rosenbaum-Tamari (1998), Rafaeli (1986, 1988), and Rafaeli and Sudweeks (1998) claim that interactivity is one of the primary

features of computer-mediated communication (CMC) that fosters playfulness. This playfulness is inherent to the medium of computers causing play to sometimes occur only between the machine and the user (Danet, Ruedenberg, & Rosenbaum-Tamari, 1998). Dante et al. have compared digital play with real life play, noting the similarities they share. "It too is voluntary, intensely absorbing, done of its own sake, and as we shall see, more or less rule-governed....Cyberspace provides perfect insulation to maintain a play frame" (p. 43). The nonlinearity of this medium allows users to play while they order chaos, create, and assemble knowledge—it is the newest medium of play.

Chapter 3 presents the theoretical framework used for this study. Sheizaf Rafaeli (1986) was the first to study the Internet from the theoretical perspective of the uses and gratifications approach coupled with Ludenic Theory in "The Electronic Bulletin Board: A Computer-Driven Mass Medium." In his work, Rafaeli extended the uses and gratifications approach to Ludenic theory.

CHAPTER 3—THEORY, RESEARCH, DESIGN, AND METHODOLOGY

Theoretical Framework—Uses and Gratifications Theory/Approach and Play/Ludenic Theory

The theoretical framework for the present study is derived from Rafaeli's groundbreaking study mentioned in chapter 2. Specifically, Rafaeli's coupling of the uses and gratifications approach with Ludenic (play) theory was replicated as a theoretical framework for this study. This framework allowed the researcher to differentiate the roles of interactivity and play in both Hip Hop Culture and the use of the Internet. This framework also allowed the researcher to empirically assess the audience's expectations, needs, uses, and gratifications in relation to Hip Hop and the Internet.

It is from the uses and gratification perspective that the focus of mass communication research shifted from media effects to the social and psychological functions of the audience. Katz, Blumler, and Gurevitch developed the classic outline of the uses and gratifications paradigm that is accepted by most media researchers:

(1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones. (1974, p. 20) The uses and gratifications theory has been criticized by some (Swanson, 1979a) and defended by others (Katz, 1979) for its theoretical basis in functionalism. Functional analysis is derived from the sociological tradition (Katz, Blumler, & Gurevitch, 1974).

Unlike previous theories that emphasized the power of the media, uses and gratifications research has sought to recognize the important role of the audience member. Most theorists accept the *active audience* postulate of uses and gratifications (Blumler, 1979; Katz, 1979; Katz, Blumler, & Gurevitch, 1974; Swanson, 1979a, 1979b). Three attributes of early uses and gratifications research continue to make it a robust theoretical approach: 1) the persons have their own reasons or motives to voluntarily attend to media; 2) perceived gratifications or met needs constitute the conceptual basis for a person to attend to media content; and 3) self-assessment of the subject would generate useful information about their motives for media use (Swanson, 1992). These foci provide a foundation for conducting research on the various ways audiences respond to mass media.

Internet researchers have referenced uses and gratifications as a suitable theory for conducting new media research (Morris & Ogan, 1996; Newhagen & Rafaeli, 1996). "The single most important characteristic of interactive media is the *active* role afforded to members of its audience" (Rafaeli, 1986, p. 127). As an active audience theory, uses and gratifications focuses on what a person does with the media, as opposed to

theories that examine media effects on the person. The basic premise of active audience theory is that media effects are mediated by the intent or motivation of the user. It is the interactivity of the Internet that has prompted researchers to revive this theory/approach (Chou & Hsiao, 2000; Ebersole, 1999; Ferguson & Perse, 2000; Ha & James, 1998; Hany, 1996; Papacharissi & Rubin, 2000; Perse & Dunn, 1998).

Interactivity has been labeled the feedback loop in communication theories and models (Ebersole, 1999) and is fostered by synchronous (in real time) and asynchronous (not in real time) communication on the Internet. "The degree to which participants in a communication process have control over, and can exchange roles in, their mutual discourse is called interactivity" (Williams, Rice, & Rogers, 1988, p. 10). It is one of the "defining qualities of communication on the Net" (Newhagen & Rafaeli, 1996, p. 4). Some Internet researchers consider interactivity to be one of the crucial aspects of Net-based communication (Danet, Ruedenberg, & Rosenbaum-Tamari, 1998; Newhagen & Rafaeli, 1996; Rafaeli, 1988). In fact, Rafaeli (1998) labels feedback as crucial Internet research.

As stated in chapter 2, interactivity is one of the primary features of computer-mediated communication (CMC) that fosters playfulness (Danet, Ruedenberg, & Rosenbaum-Tamari, 1998). It is this element combination of interactivity and play that prompted Rafaeli to argue that play or Ludenic theory is an extension of the uses and gratifications approach

(1986). Rafaeli claimed that research should go beyond previous assumptions about the positive or negative effects of electronic bulletin boards on the audiences that use them. Instead, Rafaeli argued that the participative and interactive nature of the medium required an investigation of actual use and motivation for use, with special attention given to play motivation. It is within these parameters that Rafaeli attempted to strengthen the theoretical foundation of uses and gratifications by coupling the interactivity component of the uses and gratifications approach with Ludenic theory. "In addition to the obvious questions about the identity and nature of users and uses, there should be a special interest in the role of fun and play in describing and explaining such systems' use" (Rafaeli, 1986, p. 127).

The authors of *Research Methods and the New Media* acknowledge that new media require the testing of existing theories and models, but researchers should also consider alternative models and new theoretical approaches. "One of the unique characteristics of many new media is their greater interactivity compared to the conventional mass media. This greater interactivity in mediated human communication provides an appropriate setting for developing and testing theories of involvement" (Williams, Rice, & Rogers, 1988, p. 169). The authors define involvement as the active participation of an audience in an information-exchange process.

A theoretical framework that extends the uses and gratifications approach to Ludenic theory is appropriate for the present study because of the roles of interactivity and play in both Hip Hop Culture and the Internet. This framework facilitated this researcher's empirical assessment of the expectations, needs, and uses and gratifications of the African American male college students in this study. As illustrated by the conceptual model (see Figure 1), a) Hip Hop Culture influences both the Internet and the user—and vice versa; b) Hip Hop Culture can influence users to interact with the Internet in an effort to gratify their needs for content related to Hip Hop; during this interaction with the Internet, play is also occurring; c) The dotted arrow depicts the potential of the interactivity and play of Hip Hop Culture to fuel the interactivity and play of the Internet.

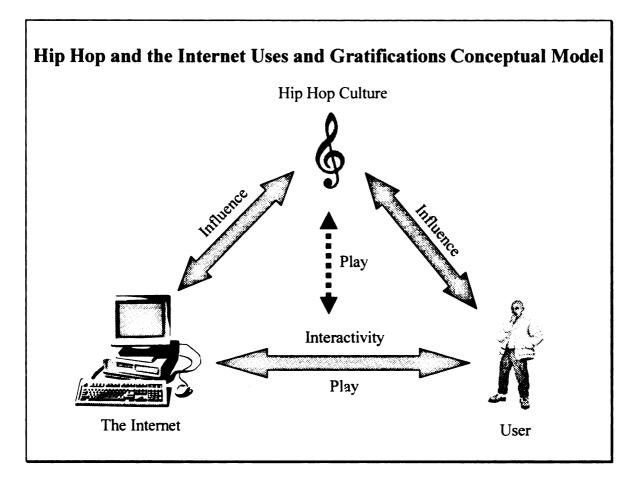


Figure 1. Hip Hop and the Internet Uses and Gratifications Conceptual Model

A priori knowledge indicated that the subject population interacts with Hip Hop Culture because of the pleasure and play it delivers to them. Further, African American males value social interaction in regard to computer use (Carver, 1999). As previously noted, the uses and gratifications paradigm of Katz, Blumler, and Gurevitch identifies several key factors that impact media use. The aspects relevant to this study are: the *social* (emphasis added) and psychological origins of *needs* (emphasis added) as well as consequences of Internet use, "perhaps mostly *unintended* ones" (Katz, Blumler, & Gurevitch, 1974, p. 20). This framework allowed the researcher to investigate how the participants attended to a medium (Internet) when they believed that content (Hip Hop) would be useful in fulfilling their needs or desired gratifications as well as unsought needs and gratifications (Swanson, 1992). Research has confirmed that seeking gratifications is "one of the influences that shape people's exposure to mass media" (Swanson, 1992, p. 311). Influence can be viewed as "the fundamental intervening variable for the analysis of decision-making" (March, 1955, p. 432). In the context of this study, influence was viewed as the student's decision-making process of using the Internet to seek content related to Hip Hop Culture. In sum, a framework coupling the uses and gratifications approach with Ludenic theory provided the theoretical rationale for this investigation of the influence of Hip Hop Culture on Internet use by African American male college undergraduates.

Research and Analysis Design

Focus Groups

The essence of Hip Hop music is the combination of language and posturing with the dynamic interaction of the group (Hager, 1984). The focus group method was well suited for this study (Stewart, 1990), as it is a socially oriented research procedure that enables participants to interact with each other while the investigator captures this interaction (Morgan, 1988). The synergy and interactivity of the focus group method allowed

the researcher to uncover relationships between Hip Hop Culture and the Internet that would not have been revealed in the survey or interview method. The focus group method is also cost effective and can produce useful data without the interference of the researcher (Morgan, 1988; Stewart, 1990). This method allowed the participants to freely discuss issues related to Hip Hop Culture and the Internet. The free exchange of information allowed the participants to self-report their usage and gratifications behavior in regard to the Internet. Unlike the survey or interview method, focus groups can provide rich data in a stimulating atmosphere (Garrison, Pierce, Monroe, & Sasseretal, 1999; Morgan, 1997). As noted earlier, the ability of an audience member to report on their media experience is an important aspect of the uses and gratifications approach. Swanson states that "...the belief in the ability of audience members to provide information about why they attend to mass media has endured as a methodological principle of uses and gratifications research" (Swanson, 1992, p. 307).

Limitations of the focus group method include less control over the data generated and the issue of whether group interactions actually reflect an individual's feelings on issues being discussed. The researcher controlled these limitations by defining the discussion topics (Morgan, 1988). The researcher was also cautious in attempting to generalize focus group findings to larger populations (Stewart, 1990). Focus Groups: A Practical Guide for Applied Research was used as the primary step-by-

step guide to conduct the focus group research for this study (Krueger & Casey, 2000).

Multidimensional Scaling and Cluster Analysis

This study utilized the multidimensional scaling (MDS) method and cluster analysis to analyze data generated from the focus groups. MDS has been used primarily in psychology and marketing research (Borg & Groenen, 1997; Punj & Stewart, 1989). MDS analyzes similarities or dissimilarities in data by systematizing it to reveal patterns in the data as points presented in a spatial map (Borg & Groenen, 1997; Coombs, 1958; Schiffman, Reynolds, & Young, 1981). Researchers use multidimensional scaling "to help uncover patterns or structures in a matrix of behavioral data" (Williams, 1973, p. 499).

C. H. Coombs laid the foundation for MDS analysis of similarities in An Application of a Nonmetric Model for Multidimensional Analysis of Similarities. He states "whether one defines similarity in terms of one of these response measures or whether one wishes to study the functional relation of one of these measures to similarity otherwise defined, the typical procedure is to construct a transformation, called a *distance* function, which converts the observations into measures of distance" (Coombs, 1958, p. 515). The geometrical relations among the data points reveal the salient features of the phenomenon (Schiffman, Reynolds, & Young, 1981; Williams, 1973; Young & Hamer, 1987).

Cluster analysis, an empirical method for classification, has also been used in marketing research (Green, Carmone, & Smith, 1989; Punj & Stewart, 1989). Some theorists (Punj & Stewart, 1989) have criticized cluster analysis as being ad hoc, that is, it is not rigorous enough to stand alone as a unit of analysis. However, when combined with MDS, cluster analysis permits homogeneous clusters to become a unit of analysis (Punj & Stewart, 1989).

Statistical Package and Focus Group Summary

African American Language (AAL) is the dynamic core of Hip Hop Culture. The focus group method allowed this researcher to capture participants' perceptions of Hip Hop Culture and the Internet in their own language, which sometimes included AAL. These perceptions were analyzed with the use of CatPac, neural network software that is modeled on the structure of biological nervous systems (Woelfel, Stoyanoff, & Danielsen, 1993). CatPac software "makes it possible for computers to read and understand any text in any language that can be represented in ASCII characters" (Woelfel, 1998, website). This feature made this statistical package an appropriate method to analyze text that contains AAL.

Because CatPac uses MDS and cluster analysis methods, it generated a perceptual data map comprised of the Language of Wider Communication (LWC) and AAL that was used during the focus group session. These perceptual maps aided the researcher in identifying

underlying concepts in the spoken discourse generated during the sessions (Woelfel & Stoyanoff, 1994).

Although CatPac is a robust statistical package, it lacks the capacity to capture semantic nuances. To overcome this limitation, qualitative analysis of the focus group discourse supplemented the quantitative analysis. According to Morgan (1988) there are two methods of analysis researchers utilize on focus group data—content analysis and focus group summary that is similar to ethnographic summary. Content analysis generates a statistical summary of the focus group data (as will CatPac), while focus group summary relies on quotes from the group discussions. Morgan believes that "there is generally an additional strength that comes from combining the two...a basically quantitative summary of the data is improved immensely by including quotes that demonstrate the points being made" (p. 64). Focus group summary was employed to enhance the quantitative analysis of the study.

Research Questions

This study explored Hip Hop Culture's influence on Internet usage by African American male college students at a predominately white university (PWI) and at selected Historically Black Colleges and Universities (HBCUs). It investigated the following research questions:

- 1. Has Hip Hop Culture influenced African American male college students' usage of the Internet?
- 2. What are the Internet uses and gratifications of the subjects?

3. How do the uses and gratifications of students at the PWI compare with those of students attending the selected HBCUs?

Method

Pretest and Instrumentation Development

Prior to the collection of data, a pretest focus group was conducted to assist the researcher in developing and refining the focus group guide (see Appendix B). An informal screening questionnaire was used to determine the qualifications of the students participating in the focus groups. To qualify, the subject had to be an African American male undergraduate between the ages of 18 and 24 who listens to Hip Hop and uses the Internet.

The pretest focus group had four participants with a mean age of 20. The subjects ate pizza, drank soda, and chatted while they completed the consent form (see Appendix C). The subjects were allowed to ask questions about the focus group session. The session lasted approximately one hour. The pretest allowed the moderator/researcher to become familiar with the focus group, gauge when and how to be flexible—in other words to make adjustments and be ready for the unexpected as recommended by Krueger and Casey (2000). An unexpected incident did occur during the focus group pretest session. The subjects began discussing what their lives were like prior to their exposure to the Internet. The researcher realized that changes to the focus group guide

that addressed this important issue were appropriate. The findings from the pretest focus group revealed that Hip Hop Culture did influence their use of the Internet and that some of their uses and gratifications of the Internet were comprised of school activities, listening to and downloading music.

Subjects

The subjects recruited from the PWI and HBCUs had to meet the same criteria as the pretest focus group. Due to the limited number of African American male college students, random sampling was not feasible. Instead, a purposive sample of students was chosen from the PWI and selected HBCUs. For the PWI focus groups, volunteers were selected from a major midwestern university to participate in this study. Students were recruited from various university classes, the local chapter of the National Society of Black Engineers (NSBE), and the University's Black Chorus. In an effort to solicit volunteers, the researcher obtained the permission of professors in charge of these various classes and organizations to make an announcement about her research project. Once permission was granted, the researcher attended gatherings of the classes, NSBE, and the Black Chorus. She explained that her research was about African American males, Hip Hop Culture, and the Internet. The students were informed of the requirements for participation in the study. The volunteers were advised that in exchange for a maximum of 2 hours of their time they would be given free pizza and sodas. The volunteers were

provided an informational flyer about the focus groups. The students were asked to provide the researcher with their names and contact information. They were also asked to provide names and contact information for friends who might be interested in participating in the study—this did generate additional subjects for the study. Placement of the subjects from the PWI in the PWI focus group sessions was based on the participants' availability. Two separate focus group sessions were conducted. The mean age of the PWI focus group was 20.6. The total number of participants was 12.

For the HBCU subjects, a convenience sample was recruited from HBCUs who are participants in the Committee on Institutional Cooperation (CIC) Summer Research Opportunity Program (SROP). The CIC is the academic consortium of the Big Ten Universities and the University of Chicago. The SROP is designed to expose undergraduate minority students to intensive research with a faculty mentor at a CIC institution (Committee on Institutional Cooperation [CIC], 2001, website).

To seek volunteers for the study, the researcher contacted the head of the university's SROP to obtain permission to recruit subjects. Once permission was granted, the researcher was provided a contact sheet from the SROP Director to solicit the students. Although there were African American males in the SROP program, the number from HBCUs was limited. The total number of African American males in the SROP who attended an HBCU was eight. It was crucial for the researcher to have

100% participation from the SROP HBCU students. Originally, the SROP students failed to respond to initial email and telephone messages left by the researcher. It was apparent that personal contact had to be made. The researcher attended a mandatory meeting for all SROP students. At this meeting she made the same announcement she had made at the PWI functions—that she was looking for volunteers who were African American male undergraduates between the ages of 18 and 24 who listen to Hip Hop and use the Internet. She emphasized that this study was for the African American males who attended HBCUs only—not PWIs. Because the researcher had a list of the HBCU students, she made an effort to target them specifically. Some of the students were not at the mandatory meeting, therefore the researcher attended a SROP social function to recruit all of the subjects. These subjects were also promised free pizza and soda in exchange for their time. The researcher was successful in recruiting all eight of the SROP HBCU students for this study. Two separate HBCU focus groups were conducted. The placement of the subjects in these focus groups was based on the participants' availability. The data from both groups were combined for analysis purposes. The total number of HBCU focus group participants was 8, with a mean age of 21.4.

Procedure

The PWI focus groups and HBCU focus groups were conducted in the same manner. The subjects arrived at the selected location and were

allowed to eat their pizza and drink their sodas. This was purposeful in order to provide a relaxed atmosphere while the researcher explained to the subjects the purpose of the study. During this time the subjects chatted with each other, read over the consent form, signed it, and were allowed to ask questions. The session began with an icebreaker question to begin to steer the conversations towards the research topic. All focus groups were conducted with the same focus group guide (see Appendix B). The same location was used to conduct the PWI and HBCU focus groups. Each group met on separate days in an open forum that facilitated a free exchange of information and opinions on Hip Hop Culture and the Internet. Each session ran approximately 1 to 2 hours. The participants were led by a mediator (the researcher) and were asked to candidly express their personal views about the research topic. The focus groups were audio- and videotaped in order to insure accurate transcription of the data.

Location

The PWI and HBCU focus groups were conducted at a premier institute for advanced science and technology, located on the selected midwestern university campus. This institute is a multi- and interdisciplinary research facility. Research is conducted in the physical sciences, engineering, life, and behavioral sciences. It is rare to see an African American male in the building. Many, if not most, of the subjects who volunteered for this study had never been in the building—even those

who were science and technical majors attending school at the major midwestern university where this research center is located. The impact of this location on the subjects is discussed in chapter 5.

The conference room where the focus groups were conducted is set up as an Access Grid node. The Access Grid node is an integrated audio and visual environment that supports distributed meetings (these are meetings of persons in various geographical locations who need to meet without leaving their home locations), remote visualization and collaboration, and distance education. Equipment needed to run an Access Grid node includes top-of-the-line personal computers (PCs) to generate audio and visual display, video capture, audio, and general control of the setup, three projectors with video capture devices and cameras, and a wide range of audio devices. Basically, the Access Grid node provides a videoconference-like environment-but room-to-room instead of personto-person, and Access Grid node communication is transmitted via the Internet. During the session, the researcher ran an IBM 570 ThinkPad laptop with wireless connection to the Internet in case the focus group members wanted to connect to a site they were discussing.

At the conclusion of each focus group, the researcher explained to the participants the purpose of the Access Grid node and described the program that developed the Access Grid node. The subjects were informed that the Access Grid node is part of a partnership that is funded by the National Science Foundation (NSF). The purpose of this partnership is to

prototype an advanced computational infrastructure for the Twenty-First Century. There are approximately 69 campuses with one or more Access Grid nodes onsite (Argonne National Labs, 2001). The impact and significance of conducting these focus groups in this location is discussed in chapter 5.

Data Analysis

The data gathered from the PWI and HBCU focus groups provided the information needed to address the research questions. A professional transcriber transcribed the audiotapes. The researcher edited the transcripts for inaudible data or data not understood by the transcriber (e.g., names of underground rap artists and groups). She then combined the transcripts from the two PWI sessions for purposes of analysis. The same was done with the transcripts from the two HBCU sessions. Multidimensional scaling and cluster analysis were conducted using CatPac software to analyze the transcripts generated from the focus groups. The researcher also used focus group summary analysis.

As stated previously, the CatPac statistical package is designed to identify patterns of frequently used words in subject-generated discourse. The unique words produced from this analysis produced primary clustering solutions. The primary clustering solutions yielded categories of words or thematic units. These thematic units consisted of recurring beliefs or explanations (Stewart, 1990) of the subjects' use of the Internet. The researcher used the thematic units generated by CatPac as

structure for the focus group summary analysis of the transcripts. For the focus group summary analysis, the researcher coupled the "cut-and-paste" or "scissor-and-sort" technique (Stewart, 1990) with the thematic units generated by CatPac. The researcher initially conducted the cut-and-paste method by conducting a search of the transcripts using the Find function of Microsoft Word software to locate words contained in the thematic units. This text was color coded as it related to the various thematic units. The researcher also manually reviewed the transcripts to identify and code those sections relevant to the research questions. The color-coded material was then moved to its relevant topic category. Transcript sections were incorporated into the quantitative analysis of the focus groups to support the descriptive analysis of the data.

CHAPTER 4—RESULTS

As stated, this study examined the Internet usage of African American male undergraduates at selected PWI and HBCUs. This chapter is a report of the findings from the study. The data were collected and analyzed by the focus group method. Multidimensional scaling and cluster analysis, utilizing CatPac software, were used to analyze the discussions generated by the focus groups.

The CatPac statistical package identified patterns of frequently used words by the participants of the focus groups. While excluding conjunctions and other nondescriptive words, CatPac has an automatic setting to detect the top 25 most frequently used, or *unique* words (Woelfel, Stoyanoff, and Danielsen, 1993). CatPac uses the Wards Clustering Method, based on the total sum of squares, to analyze the highfrequency words identified. CatPac was used to provide a quantitative analysis of the data, while focus group summary was used for a qualitative analysis of the data. This chapter describes the CatPac method of statistical analysis and presents the thematic units generated by CatPac. The chapter then expounds on the thematic units by providing focus group quotes that support and substantiate the thematic units. The researcher used the focus group summary method described in chapter 3 to select the focus group quotes.

Presentation of PWI Focus Groups' CatPac Data

Two separate PWI focus group sessions were conducted. Placement of subjects in the PWI focus group sessions was based on availability. There were 12 participants in the PWI focus group, with a mean age of 20.6. The participants were majors in architecture, speech communications, journalism, history, electrical engineering, computer engineering, math with computer science minors, economics, and aerospace engineering. NT-TYPE

The Wards Clustering Method, based on the total sum of squares, was used to analyze the 2,752 words generated by the two focus groups. Table 1 shows the frequency distribution of the verbal responses, indicating which perceptions occurred most often. The first group of statistics includes the words factored by Catpac for analysis or *total* words in text by the focus groups (2,752), the *total unique words* used in the analysis (25), the *total episodes* or number of windows used in the analysis (2,243), and the *total number of lines* analyzed in the focus group text (908). Catpac uses the *clamping* technique to ensure that a node remains turned on, or doesn't forget the words being scanned.

The second group of statistics reports each unique word by frequency in the left column. The right column lists these same data in alphabetical order. For example, the word *know* was the most frequently occurring word, occurring 237 times, 8.6% of all occurrences. Therefore, *know* appeared in 973 or 43.4% of the scanned windows.

Table 1. PWI Focus Groups' Word Frequency Table

Frequency of African American Male Undergraduates' Perceptions of Hip Hop Culture's Influence on Their Internet Usage

TOTAL WORDS	2,752	THRESHOLD	0.000
TOTAL UNIQUE WORDS	25	RESTORING FORCE	0.100
TOTAL EPISODES	2,243	CYCLES	1
TOTAL LINES	908	FUNCTION Si	igmoid (-1 - +1)
CLAMPING	Yes		

Descending	g Freque	ency l	List		Alphabetic				
Word	Freq	%	Freq	%	Word	Freq	%	Freq	%
Know	237	8.6	973	43.4	Can	112	4.1	452	20.2
Have	193	7.0	858	38.3	Computer	139	5.1	584	26.0
Internet	191	6.9	811	36.2	Don't	157	5.7	654	29.2
People	179	6.5	788	35.1	Go	107	3.9	517	23.0
Don't	157	5.7	654	29.2	Good	59	2.1	317	14.1
Think	147	5.3	684	30.5	Have	193	7.0	858	38.3
Computer	139	5.1	584	26.0	Нір Нор	119	4.3	505	22.5
Нір Нор	119	4.3	505	22.5	How	74	2.7	387	17.3
Can	112	4.1	452	20.2	I'm	102	3.7	431	19.2
We	112	4.1	493	.22.0	Internet	191	6.9	811	36.2
Му	111	4.0	454	20.2	Know	237	8.6	973	43.4
Go	107	3.9	517	23.0	Listen	62	2.3	210	9.4
I'm	102	3.7	431	19.2	Me	59	2.1	326	14.5
Would	93	3.4	370	16.5	Music	89	3.2	386	17.2
Music	89	3.2	386	17.2	My	111	4.0	454	20.2
Web	79	2.9	355	15. 8	People	179	6.5	788	35.1
Want	75	2.7	394	17.6	School	57	2.1	246	11.0
How	74	2.7	387	17.3	Site	74	2.7	335	14.9
Site	74	2.7	335	14.9	Think	147	5.3	684	30.5
Use	67	2.4	307	13.7	Time	58	2.1	284	12.7
Listen	62	2.3	210	9.4	Use	67	2.4	307	13.7
Good	59	2.1	317	14.1	Want	75	2.7	394	17.6
Me	59	2.1	326	14.5	We	112	4.1	493	22.0
Time	58	2.1	284	12.7	Web	79	2.9	355	15.8
School	57	2.1	246	11.0	Would	93	3.4	370	16.5

Although the frequency statistics of unique words is interesting, the list does not lend itself to examination that can detect meaningful perceptions. CatPac lets us present the frequency statistics in a hierarchical cluster analysis, or dendogram, to illustrate and identify the unique words used in the data file from the focus group sessions.

Figure 2 presents the dendogram of two primary clustering solutions yielded by CatPac's analysis of the unique words generated from the two combined PWI focus group transcripts. The dendogram results from the PWI focus groups looks much like a city skyline seen from a distance. The dendogram creates the skyline formed below the keywords of the text that read vertically across the top of the page. The dendogram identifies clusters of concepts by shading in the area directly below those words that cluster together. More specifically, constructing each of the clusters to represent a *concept*, in this instance *influence*, which is then indicated by the sets of words across the top of what appears to be the images of buildings. Each of the clusters grows taller, from the top to the bottom of the dendogram as it includes more words, making it easy to visually recognize subclusters (Woelfel, Stoyanoff, and Danielsen, 1993).

The dendogram in Figure 2 reveals patterns of association with the influence of Hip Hop Culture and Internet usage. The dendogram in Figure 2 is an interesting one. Cluster 1 is comprised of two subclusters. Subcluster 1a builds under the words *can*, *computer*, *know*, *don't*, *have*, *people*, *think*, *Internet*, *my*, *I'm*, and *go*. Subcluster 1b is made up of the words *we*, *would*, *hip hop*, *web*, and *me*. Subcluster 1b suggests that the participants would use the web when they want to find sites related to Hip Hop. Subcluster 1a suggests that the participants think that Hip Hop can

impact Internet usage, particularly for people who don't know about computers. The focus group summary data substantiate the thematic units produced by the subclusters.

The second cluster helps to interpret the pattern of the first cluster. The second cluster consists of the words good, listen, site, use, want, music, school, time, and how. This cluster is made up of three subclusters: 2a) good, listen, and site; subcluster 2b) use, want, and music; and 2c) school, time, and how. Cluster 2 suggests "how" the participants use the web—for school and when they want to listen to sites that have good music, particularly Hip Hop music.

<u>c c</u>	К	D	H	P	T	I	M	I	G	W	W	Н	W	M	G	L	S	U	W	М	S	Т	H
<u>A O</u>	N	0	Α	E	H	N	Y	!	0	Ε	0	I	E	E	0	I	<u> </u>	S	A	U	С	I	0
<u>N_M</u>	0	N	V	0	I	T	•	M	•	•	U	Ρ	В	•	0	S	Т	Ε	N	S	H	M	W
<u>. P</u>	W		Ε	Ρ	N	Ε	•	•	•	•	L	H	•	•	D	<u> </u>	E	_•	T	I	0	E	<u> </u>
<u>. U</u>	•	T	•	L	K	R	•	•	•	•	D	0	•	•	•	Ε	•	•	•	С	0	•	<u> </u>
<u>. T</u>	•	•	•	E	•	N	•	•		•	•	P	•		•	N	•	•	•	•	L	•	•
<u>. E</u>	•	•	•	•	•	E	•			•	•	•			•	•	•	•	•	•	•		• _
<u>. R</u>		•	•			T	•	•	<u> </u>	•			•	•	•	•	•	•	•	•	•	•	<u> </u>
<u></u>	•			•	•	•		•	•	•			•	<u> </u>	•		•	•	•	•	•	•	•
<u></u>		•	•	•		•	•	•	•	•		•	•	•	•			•	•	•	•		•
•	<u> </u>		•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	<u> </u>
•	× × /		•	_•	<u> </u>	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•		<u> </u>
•	<u> </u>			•	•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	<u>.</u>
•	~ ~ ~			_	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
•	<u> </u>			~ ~ /		•	•	•	_•		•	•		•	•	•	•	•	. <u>.</u>	•	•		•
•	~~~					•	•	•	•	•			•	•	•	•			•	<u> </u>			
•	<u> </u>		~ ~ /		~ ~ /				•	•	•	•	•	•	•	•			•	_•			<u> </u>
•	~ ~ .	<u> </u>	<u> </u>				<u> </u>	•	•		•			•	~ /			•	•		•		<u> </u>
							~ ~ /			•	•	•			~ /			•		•	•		•
	~ ~ /					~ ~ /			~ ~	•		•			~ ~ ~		•	<u>.</u>	•	•	•		•
•	~ ~ /							~ ~ .		•	•	•	•	•			•	•	•	•	~ /		<u> </u>
~ ~ ~ ~		~ ~ /		~ ~ /	~ ^ /	~ ~ /		· · ·			•	•					•		•	•	~ /		•
~ ~ ~ ~		~ ~ /			~ ~ /				~ ~	.		•	•	•			•	•	•		~ /		_
~ ~ ~ ~	~ ~ .	~ ~ /		~ ~ .		~ ~ /	~ ~ /	~ ~ .	~ ~		~ ~	•		•	~ /			•	•	•	~ /		
~ ~ ~ ~	~ ~ .	~ ~ /	~ ~ /	<u> </u>	~ ~ /	~ ~ /		~ ~ .	~ ~ /			•	•				_	•	•	•	~ /		
	~ ~ .								~ ~ /		~ ~ .		•					•	•	•	~ /		•
~~~	~ ~ .	~ ~ ~	~ ~ /		~ ~ /	~ ~ /	~ ~ /		~ ~ .	~ ~ .	~ ~ .	~ ~	•		~ /		~	~ /		•	~ /		-
~~~	~ ~ .	~ ~ /	~ ~ /	~ ~ /	~ ~ /	~ ~ /	~ ~ /	~ ~ .	~ ~ .	~ ~ .	~ ~ .	~ ~ .	~ ~	•	~ /			~ /			~ /		<u> </u>
~~~	~ ~ .	~ ~ /	~ ~ ~	~ ~ /	~ ~ /	~ ~ /	~ ~ /	~ ~ .		~ ~ .	~ ~ .	~ ~ .	~ ~	•	~ /			~~			~ /		<u> </u>
~ ~ ~ ~	~ ~ /	~ ~ /	~ ~ /		~ ~ /	~ ~ /	~ ~ /			~ ~ .				A Å	~ /	~ ~ /				•	~ /		<u> </u>
~~~	~ ~ /	~ ~ /	~ ~ /	~ ~ ~	~ ~ /		~ ~ /		~ ~ ^	~ ~ /	~ ~ .	~ ~ .	~ ~ /	~ ~	~ /	~ ~ /	~ ~ /			× ×	~/		•
~~~	~ ~ .	~ ~ /	~ ~ ~		~ ~ /		~ ~ /	• • •					• • •	~ ~									<u> </u>
~ ~ ~ ~	~ ~ .	~ ~ ~	~ ~ /	• • •	~ ~ /	~ ~ /	~ ~ 7				• • •	~ ~ .	~ ~ .	~ ~	~ /					~ ~ /	~ ~ ~		~~
~ ~ ~ ~	~ ~ .	~ ~ /	~ ~ /	~ ^ ^	~ ~ /	~ ~ /	~ ~ /	~ ~ .	~ ~ ·	~ ^ /	~ ~ .	~ ^ .	~ ~ ~	~ ^ /	~ ~ /	~~/	~ ~ /		~ ~ /	~~/	~ ~ /		~~

Figure 2. PWI Focus Groups' Dendogram of Influences of Hip Hop Culture on Internet Usage

# Presentation of HBCU Focus Groups' CatPac Data

As with the PWI focus groups, two separate HBCU focus group sessions were conducted with placement based on availability. The total number of HBCU focus group participants was 8, with a mean age of 21.4. The HBCU participants were majors in sociology, biology, architectural engineering, mass communications, and English.

As with the PWI focus groups, the Wards Clustering Method was used to analyze the 1,425 words of conversational text generated by the HBCU focus groups (see Table 2). Once again the cluster represents the concept of influence on Internet usage, indicated by the set of words across the top of the "buildings." Table 2 lists the 25 total unique words used in this analysis. The total episodes or number of windows used in the analysis was 892, while the total number of lines analyzed in the HBCU focus group text was 407.

## Table 2. HBCU Focus Groups' Word Frequency Table

Frequency of African American Male Undergraduates' Perceptions of Hip Hop Culture's Influence on Their Internet Usage

TOTAL WORDS	1,425	THRESHOLD	0.000
TOTAL UNIQUE WORDS	25	<b>RESTORING FORCE</b>	0.100
TOTAL EPISODES	892	CYCLES	1
TOTAL LINES	470	FUNCTION Sign	noid (-1 - +1)
CLAMPING	Yes		

Descending	Frequency	v List	Alphabetically Sorted List							
Word	Freq	%	Freq	%	Ŵord	Freq	%	Freq	%	
Like	110	7.7	401	45.0	About	47	3.3	200	22.4	
Internet	105	7.4	335	37.6	Access	38	2.7	130	14.6	
Have	86	6.0	322	36.1	At	68	4.8	224	25.1	
What	81	5.7	286	32.1	Be	31	2.2	154	17.3	
School	78	5.5	271	30.4	Class	33	2.3	102	11.4	
In	76	5.3	235	26.3	Get	54	3.8	246	27.6	
Use	72	5.1	266	29.8	Go	40	2.8	156	17.5	
At	68	4.8	224	25.1	Have	86	6.0	322	36.1	
Нір Нор	66	4.6	172	19.3	High	29	2.0	111	12.4	
Just	66	4.6	225	25.2	Нір Нор	66	4.6	172	19.3	
On	65	4.6	231	25.9	In	76	5.3	235	26.3	
When	60	4.2	200	22.4	Internet	105	7.4	335	37.6	
Get	54	3.8	246	27.6	Just	66	4.6	225	25.2	
About	47	3.3	200	22.4	Know	44	3.1	153	17.2	
Know	44	3.1	153	17.2	Like	110	7.7	401	45.0	
Go	40	2.8	156	17.5	Mail	29	2.0	105	11.8	
Му	39	2.7	140	15.7	Me	37	2.6	121	13.6	
There	39	2.7	165	18.5	Му	39	2.7	140	15.7	
Access	38	2.7	130	14.6	On	65	4.6	231	25.9	
Me	37	2.6	121	13.6	School	78	5.5	271	30.4	
Class	33	2.3	102	11.4	There	39	2.7	165	18.5	
Think	32	2.2	147	16.5	Think	32	2.2	147	16.5	
Be	31	2.2	154	17.3	Use	72	5.1	266	29.8	
High	29	2.0	111	12.4	What	81	5.7	286	32.1	
Mail	29	2.0	105	11.8	When	60	4.2	200	22.4	

The unique words produced from the analysis of the HBCU focus groups yielded two primary clustering solutions. Figure 3 shows the dendogram produced from the HBCU focus groups. This dendogram

reveals patterns of association with Hip Hop Culture's influence on use of the Internet. Cluster 1 is comprised of two subclusters. Subcluster 1a consists of the words *about*, *class*, *mail*, and *there*. Subcluster 1b consists of the words *access*, *high*, *hip hop*, *be*, *think*, *go*, and *know*. Cluster 1 indicates that the HBCU focus groups access the Internet for Hip Hop, to read their mail, and to obtain class assignments.

The second cluster is made up of two subclusters. Subcluster 2a builds under the words *at*, *get*, *on*, and *when*. Subcluster 2b includes the words *have*, *in*, *like*, *school*, *what*, *Internet*, *me*, *my*, *use*, and *just*. Cluster 2 suggests that the subjects like the Internet—as exemplified by the personal pronouns, *me* and *my*. This cluster suggests that the subjects get on the Internet at school when they can. They also use the Internet for school purposes. The focus group summary of this subcluster's thematic unit supports this claim.

А	С	М	т	А	н	н	в	Т	G	к	А	G	0	W	Н	I	L	S	W	I	М	М	U	J
B	L	Α	Η	С	Ι	I	Е	Н	0	N	Т	Ε	N	Η	Α	N	I	С	Η	N	E	Y	S	U
0	Α	I	E	С	G	Ρ	•	I	•	0	•	Т	•	Ε	V	•	K	Н	Α	Т		•	Ε	S
U	S	L	R	E	Н	Н		N		W			•	Ν	Е	•	Е	0	Т	Е	•			T
T	S	•	Ε	S		0		K		•			•	•	•		•	0	•	R	•	•	•	•
	•	•		S		Ρ												L		N				
- <u></u> -										•	•								•	E			•	
•																				T				
																								<u> </u>
											•					•								-
	_ <u></u>				<u>`</u> _	<u>`</u>								•				•						<u> </u>
<u> </u>						<u>·</u> _		<u> </u>								~ /		(Å					<u>_</u>	
<u> </u>		<u>-</u>														~ /						<u> </u>	<u> </u>	<u>`</u>
<u> </u>					<u>.</u>	<b>.</b>									• •	~ /	~ ~ /	~ ~ /		~ ~				<u> </u>
<u> </u>	- <b>-</b> -	· ·	_ <b>-</b> -	•	•	_ <b>_</b>	<b>-</b>	•	_ <b>_</b>		•	-				~ ~	~ ~ /			~ ~ ~	~ ~			<u>_</u>
-	•	•	- <b>-</b> -	<b>·</b> _	<b>•</b>	<b>-</b> -	•	•	<b>.</b>	<b>•</b>		•	•	•	· ·	~ /	~ ~ /	~ ~ /	~ ~ /	~ ~ ~	~ ~ /	~ ~	_ <b>-</b> -	÷
<u> </u>	•		_•_	<b>•</b>	<b>.</b> _	•	•	<u> </u>	_•_	•	<b>•</b>	<b>·</b> _	<b>.</b>			~ ~ /	~~		~ ~ /				<b>•</b>	<u> </u>
<u> </u>	- <b>-</b> -	•	•	•	_ <b>•</b> _	•	_ <b>•</b> _	•	•	•	•	•		•	~ ~	~ ~ ~	~~/	~~		~ ~ ~	~ ~ >	~ ~ 7	**	<u> </u>
•	•	•	.•	•	•	•	•	•	•	•	•	÷.	**	•	~	~ ~ /		× 7		~ ~ ~		~ ~ /	~ ~	<u> </u>
<u> </u>		•	•	•	•	•	•	•	-•	•	*	~ ~ .	~ ~	•		~ ~ ~				~ ~ ~		~ ~ /	~ ~	<u> </u>
<u> </u>	*		•	•	•	-•	•	•		•			~ ~	_ <b>.</b> _	~ ~	~ ~ ~				~ ~ ~			~ ~	<u> </u>
•	~ /		•	÷.	**	•	•	•	•	•		~ ~ .	~ ~	•	~ ~	~ ~ /							~ ~	<u> </u>
<u>•</u>			•	~	~ ~	•	-	**		•		<u> </u>	~ ~	•	~ ~ ~					~ ~ ~	~ ~ /	~ ~ ~	~ ~	<u> </u>
<u> </u>			•		~ ~	•		~ ~	•	•	<u> </u>		~ ~ ~	**	~					~ ~ ~	~ ~ /		~ ~	<u> </u>
•			•		~ ~	•		~ ~		≂÷		~ ~ ~		~ ~	~ ~ ~	~ ~ /	~~~			~ ~ ~	~ ~ ~		~ ~	<u> </u>
<u> </u>			•			· ·		~ ~	•	~~		~ ~ .		~ ~	~									<u> </u>
<u>.</u>			•		~ ~ .			~ ~		~ ~													~ ~	<u> </u>
<u>.</u>			•		~ ~ .			~ ~		~ ~	-													<u> </u>
<u> </u>							~ ~ .																~ ~	<u> </u>
<u> </u>			•									<u>~ ~ </u>												<del></del>
•		<u> </u>		<u> </u>						^ ^	<u> </u>	<u> </u>	<u> </u>											$\frac{1}{1}$
•									<u> </u>		<u> </u>	<u> </u>	$\frac{2}{2}$											$\frac{1}{1}$
		<u> </u>	_	•				<u> </u>			<u> </u>	• • •	• • •									• • •	<u> </u>	<u>^</u>
~ /					~ ~ .					^ ^	<u> </u>	<u> </u>						~ ~ /				<u> </u>		
~~				~ ~ .	~ ~ .	<u> </u>	~ <u>~</u>			~ ^ ·	~ ^ ·	• • ·	~ ^ ·	<u> </u>	~ ~ ~	~ ^ /	~ ~ /	~ ~ 7	~ ~ ~	<u> </u>	~ ~ .	~ ~ .	~ ~ ·	

Figure 3. HBCU Focus Groups' Dendogram of Influences of Hip Hop Culture on Internet Usage

# **Research Questions**

This section presents the results of the study in relation to the research questions that guided it.

Has Hip Hop Culture influenced African American male college students' usage of the Internet?

### PWI

The data generated by the PWI focus groups indicate that they are influenced by Hip Hop Culture to use the Internet. The thematic units of Subclusters 1b in Table 3.

Word	Frequency	Percent	Windows Scanned	% Windows Scanned
Hip hop	119	4.3	505	22.5
We	112	4.1	493	22.0
Would	93	3.4	370	16.5
Web	79	2.9	355	15.8
Me	59	2.1	326	14.5

Table 3. PWI Focus Group Subcluster 1b—Use Web for Hip Hop

In each focus group session, participants were specifically asked about their use of the Internet for Hip Hop Culture. The participants were unanimous in their affirmative response to the influence of Hip Hop Culture on their use of the Internet. The thematic unit "Use Web for Hip Hop" of Table 3 illustrates this point. The 119 frequent references to *hip hop* and *we* at 112 times, or 4.1% of all occurrences, illustrates the PWI focus groups' discussion of how they use the Internet to seek out content related to Hip Hop Culture. Traditional mainstream media, such as television and radio, were viewed as not being a true representation of Hip Hop.

But what the bad thing is, most people just have a television or a radio and that's their only access to Hip Hop, and that doesn't represent everything on Hip Hop.

Not even close.

Hip Hop no longer has to be represented by the select few people that MTV decides that we should listen to, so it broadens the scope.

The focus groups continued to express their feelings about the

Internet and the impact it has had on Hip Hop Culture. The PWI focus

groups presented convincing testimony that the Internet is their major

media source for Hip Hop Culture:

I have to agree with that. I think that the Internet does play a great role in basically just expanding the Hip Hop culture, because, I don't know, I think before we had the presence of the Internet, I think the culture was more condensed, but now you have more people.

The impact of the Internet on Hip Hop Culture evolved into a

discussion of how the Internet is the perfect medium for Hip Hop Culture

and the music industry in general.

I see the Internet as breaking a lot of barriers that were there in the music industry before. I mean, I would say to me it's kind of a power shift as far as music goes and producers and access and everything that goes into it. You know, these record companies now have less power than they used to, and so what that does is it just opens up so many doors and possibilities for people to get access to music, for people who are artists who want to be heard, for them to get their stuff out. The freedom that goes along with the Internet is just mind-blowing, and so I feel like it's so good, such a good thing for the Hip Hop Culture and for just music in general.

Deregulates the industry, basically.

The discussions about the Internet as the perfect medium for music

in general, and Hip Hop specifically, escalated into the topic of the

Internet's impact on underground Hip Hop acts. There was a vibrant and

boisterous discussion on how the Internet has given underground Hip Hop

acts more exposure than traditional media.

TV and radio, it's too mainstream to even have underground artists really be presented. I like the Internet because it has so many different uses, I think. Underground artists get a lot more exposure.

In both PWI sessions, the discussion about the use of the Internet to

expose underground artists was spontaneous, lively, and animated. The

following are some typical reactions to the Internet's impact on

underground Hip Hop acts:

Also, I think it's a great way for like so-called underground artists, artists that aren't signed to labels to be able to get exposure to—It's like a real good way, since a lot of these artists don't get to shine, like on radio or whatever.

As far as the Internet is concerned, I think it's probably the number one way for an unsigned artist/underground artist to get any type of recognition because the truth is that you're not going to get any if you go to MTV or BET or any mainstream radio in that town.

I'd say...it's good to me because just imagine an underground act without the Internet, so they're just—With the Internet it allows them to tackle many more obstacles that they couldn't just because of physicality. You can't be everywhere at one point in time. You can only do so many local shows, so many picnics, talent shows, rap at so many schools, prisons, churches, whatever you do. So with the Internet, you can be accessed almost anywhere.

I probably think that the Internet would be maybe one of the best ways because on TV I haven't seen them really promote underground artists, and with the Internet you can listen for underground, it's like any time of day, really. Like any time you want, and not just like wait for some TV show or wait for a certain radio broadcast that you want to hear. It's like just right there.

I mean, a record store is kind of limited as well, just like MTV only displays certain artists like Jay-Z or Ja Rule or something like that, whereas on the Internet, it's all artists out there.

So the Internet is nothing but a plus when it comes to getting exposure for underground acts.

I heard an album by the name of Quasimoto. I never heard of them before, and if it weren't for the Internet I would never hear of them. So it gets the word out to underground people. Like everybody said, it broadens the scope of Hip Hop. I like it.

So it makes it a lot more accessible.

Although the PWI focus groups were enthusiastic about the

Internet's impact on underground Hip Hop, some lamented the difficulty

in locating these acts if one didn't know the right places to look.

...the Internet site—you have to be specifically looking for it in order to find an underground artist, and I find that a lot of the underground artists, I like them better than some of the mainstream. So, but I think that the Internet requires some searching. You've got to actually get on there and look and know the correct key words to type in order to find them... The PWI focus group members discussed how they realize that the Internet is only a tool that they use to "supplement" their interest in Hip Hop. In fact, the underground Hip Hop artists had more "cool points" than mainstream Hip Hop artists, who were sometimes viewed as "sellouts." The Internet is regarded as a way to find these obscure groups that would not ordinarily have exposure. The PWI focus groups acknowledged that the computer is not a replacement for the social dynamics that Hip Hop offers.

The PWI focus groups were explicit about their versatile use of the Internet in relation to Hip Hop activities. One member of the focus group was a computer engineering major and a Hip Hop artist. He had extensive knowledge of Hip Hop Culture and technology. This participant described how he turns his computer into a studio by adding software known as Cakewalk, along with mikes and speakers, to create Hip Hop music. This participant then described how he uses the Internet to distribute his music:

Hip Hop no longer has to be represented by the select few people that MTV decides that we should listen to, so it broadens the scope. It also—It not only expands the Hip Hop community, but I think it creates a community on the Internet because I know around the time that I first started rapping and recording, I was getting on a couple of websites, and I found forums where people just, you know, they post rhymes. And you can post them, and you can respond to other people's rhymes. You can email people and do collaborations and stuff like that, and there's lots of websites just like that. And so there's lots of little Hip Hop communities that have been created by the Internet, and I actually—a guy that I met on one of these forums, I actually went to Atlanta and recorded with him. I mean that it opens the door to stuff like that. So it can not only expand the community, it also creates other communities.

The PWI focus group participants described how they were subscribers to a local Hip Hop email listserver. The purpose of the Hip Hop listserver is to keep subscribers abreast of the local Hip Hop activities, post rhymes, and announce upcoming events such as poetry readings and local concerts.

The PWI focus group members' use of the Internet for Hip Hop was extensive and varied. It ranged from downloading and listening to music, global collaborations with other Hip Hop artists, locating underground Hip Hop artists, and getting the word out about local Hip Hop activities via the Hip Hop listserver.

#### HBCU

The HBCU focus groups yielded a positive response to the first research question—Hip Hop Culture did influence their use of the Internet. The thematic unit generated by Subcluster 1b, "Use Web for Hip Hop," supports this finding. (See Table 4.)

Word	Frequency	Percent	Windows Scanned	% Windows Scanned
Hip hop	66	4.6	172	19.3
Know	44	3.1	153	17.2
Go	40	2.8	156	17.5
Access	38	2.7	130	14.6
Think	32	2.2	147	16.5
Be	31	2.2	154	17.3
High	29	2.0	111	12.4

Table 4. HBCU Subcluster 1b—Use Web for Hip Hop

The HBCU focus groups were not as verbal as the PWI focus groups. This is demonstrated by the total words used in text by the PWI focus groups (2,752), compared to the total words used by the HBCU focus groups (1,425). However, their responses to Research Question 1 were affirmative. In each focus group session, participants were specifically asked about their use of the Internet for Hip Hop Culture. All HBCU participants were unanimous in their response to the question of using the Internet for Hip Hop Culture. The words used in Table 4's Subcluster 1b demonstrate the participants' use of the Internet for Hip Hop. The words *know* with a frequency of 44, *go* with a frequency of 40, and *hip hop* with a frequency of 66 all demonstrate that the participants know they can access Hip Hop by going online.

Yes, I do. All the time, especially if I want to see when a specific album's going to come out. Sometimes I go to source.com to get some of things on a particular artist, so I know if I want to purchase a CD or if I want to get some outside opinions on how a CD might be, I go to the website. I may go to Hiphop[.com] or BET.com.

The HBCU focus groups also discussed ways these commercial sites

could improve—such as having Hip Hop artists chat about their albums

and/or existing and upcoming projects.

Other uses related to online Hip Hop involved listening to and

downloading music.

I think, at one time this last year, I had over 600 songs downloaded. I have a lot of files.

#### Summary

Both the PWI and HBCU focus group members were positive in their responses regarding the influence of Hip Hop Culture on their use of the Internet. Thus the answer to the Research Question 1 is a definite "yes."

#### **Research Question 2**

What are the Internet uses and gratifications of the subjects?

## PWI

The members of the PWI focus groups had numerous uses of and gratifications from the Internet. As discussed in relation to research question 1, these subjects have a multitude of uses of the Internet for Hip Hop Culture—to download and listen to music, locate underground Hip Hop acts, collaborate, utilize the local listserver, and explore Hip Hop related sites such as DavyD.com, hiphopsite.com, source.com, and undergroundhiphop.com. Other uses of the Internet by these subjects included communicating with friends via email and instant messaging, chat rooms, shopping, passing the time, school research, school assignments, online classes, and obtaining general information.

Music

The thematic units generated in Table 5 illustrates one of the primary uses of the Internet for the PWI focus groups.

Word	Frequency	Percent	Windows Scanned	% Windows Scanned
Music	89	3.2	386	17.2
Want	75	2.7	394	17.6
Use	67	2.4	307	13.7

Table 5. PWI Subcluster 2b—Use Internet When Want Music

The importance of using the Internet to satisfy their needs for accessing music from the web by these subjects was illustrated by their discussion of using Napster. Napster was a site where, prior to legal action by the music industry, any music genre could be obtained at no charge. Many universities had problems with their systems being overloaded by students' avid use of the site. Although the dormitories located on the PWI campus are equipped with the high-speed connectivity needed to download music, university officials blocked access to the Napster site. Like most universities across the country, this midwestern PWI had problems with their systems being slowed or shut down by students attempting to download extremely large music files from Napster. The PWI participants, who lived in university housing, discussed how they subverted the university's block on Napster to download music from the web. Due to the university's block on the popular Napster website, they resorted to logging online via AOL, instead of their university account, and then accessing Napster. The group also discussed audiogalaxy.com (a free music site) as another way to get around the university's block.

The group lamented the fact that, although the Internet is an asset in obtaining music, it does not replace the social experience that surrounds music—from the transaction experience to the listening experience. While there was general agreement in the focus groups about downloading free music from the Internet, some group members did indicate that they missed the experience of purchasing a CD—taking off the wrapper, reading the CD cover. One member likened downloading music from the Internet to eating Rice Krispies out of a blank cereal box.

I know it's Rice Krispies in there, but it just feels better to look at the Rice Krispies, look at the box.

#### School

Another primary use of the Internet by the PWI focus groups is for school. The statistics of Subcluster 2c that generated Table 6 support this finding.

Word	Frequency	Percent	Windows Scanned	% Windows Scanned
How	74	2.7	387	17.3
Time	58	2.1	284	12.7
School	57	2.1	246	11.0

Table 6. PWI Subcluster 2C—Use Internet for School

The participants with majors in business and technical areas were required to use the Internet for school assignments more so than the liberal arts majors.

Like my major's economics, and what a lot of us wonder why in the world we're in this computer lab. It's you learn how to use Access, Excel, and Excel visual basic, and basically it just shows us how to do a lot of programming, but with almost like a business aspect, too. So I find it to be real beneficial. When I first had to register for it, I didn't know why I had to take it really. You know, it really helped. The way I see it, a lot of other fields that aren't computer related—they're going that way. So having that type of knowledge would really be helpful.

In addition to online assignments, the technical majors were

required to take web-based courses.

I use the Internet for—this is not by choice, but most of my classes, I have to do my homework on the Internet. I've got

my math homework. A lot of my classes, my professors like to send us the assignments on email, so being forced the way I communicate is through the Internet.

Because the Internet plays an intrinsic role in the coursework of the

PWI university, many of the students' attitudes about conducting research

have changed.

I mean, it's like nowadays, instead of my first thought about finding information on something—my first thought is not to go to the library. It's to go online and see what I can find. That's what the Internet has done to me. It's made me dependent on it a little bit, but that's because it's so efficient, I believe.

Although the liberal arts majors were not required to take computer

literacy classes or do online assignments, they did assert that the use of

the Internet was vital to their studies.

I'm a history major, so I do a lot of reading and writing....You know, I've written maybe 90 papers since I've been here...for me to knock out a five-page paper....But without a website, I'm scratching my head like, OK, what do I do, what do I do....

The PWI focus group members also stated that they used the

Internet to pass the time. There was a student who had a unique

interaction with the Internet. He uses the Internet as a medium of

work/play.

Sometimes I just browse around to see sites out there. I just listen because it's my job. I design sites on the Internet. So it keeps me, you know, keeps money in my pocket. Yeah, I like to browse around and see what types of things are out there. You never know what you might come across just typing in a word on a search engine.

#### HBCU

The members of the HBCU focus group sessions discussed the various uses and gratifications they had in regard to the Internet. As indicated earlier, one of those uses was for Hip Hop. Specifically, this group used the Internet to listen to and download music, make CDs, and view Hip Hop-related websites such as source.com, BET.com, Vibe, 360, and Hiphop.com. Other uses included participation in chat rooms, instant messaging, email, shopping, obtaining general information, passing the time, and school research and school assignments.

I want to find out about something, I look it up. Whatever I need to know, I'll look it up. Most of the time it's entertainment related...I'll check emails...I might go get maps—I like Travelocity...and oftentimes it's still entertainment.

When I'm not in class, I'm pretty much at my desk on my computer doing something. I don't just waste time, you know, I do random searches.

School

Another primary use of the Internet for the HBCU focus groups was for school. The 33 references to *class* in the thematic unit of Table 7 illustrates this point.

Word	Frequency	Percent	Windows Scanned	% Windows Scanned
About	47	3.3	200	22.4
There	39	2.7	165	18.5
Class	33	2.3	102	11.4
Mail	29	2.0	105	11.8

Table 7. HBCU Subcluster 1a-Use of Internet for Mail and Class

Students also discussed how, although not required, some of them had the option to email their assignments to their professors.

I don't have any classes [online] but assignments that they [want us to] do over the Internet.

The thematic unit of Table 8 demonstrates that the students like

having access to the Internet for school use.

Word	Frequency	Percent	Windows Scanned	% Windows Scanned
Like	110	7.7	401	45.0
Internet	105	7.4	335	37.6
Have	86	6.0	322	36.1
What	81	5.7	286	32.1
School	78	5.5	271	30.4
In	76	5.3	235	26.3
Use	72	5.1	266	29.8
Just	66	4.6	225	25.2
Му	39	2.7	140	15.7
Me	37	2.6	121	13.6

Table 8. HBCU Subcluster 2b—Like to Have the Internet for School Use

The discussion of how the subject like to have access to the Internet for school was centered on adequate access to the Internet at their various campuses. There was considerable variability in the type of Internet connectivity available to the HBCU participants. Some schools were in the process of upgrading from dial-up access to faster connections.

In contrast to the unanimous response that the Internet was used for school, there was great variability in *how* the participants use the Internet for school. I limit, but the only thing is like when I'm doing papers or whatever, or the drawing—I use AutoCAD a lot.

Like the PWI participants, the use of the Internet for coursework at the HBCU participants' institutions was varied. Some of the architectural students used computer programs, such as AutoCAD, for their courses. Two technical majors in the HBCU focus groups participants had online courses. Some students took computer literacy classes that were required for their major. However, one HBCU required all incoming freshman to take a computer literacy class.

We have one, but it's not specifically geared toward the Internet. It's called, the class is called "Instruction for Computer Usage," and it's basically a workshop that uses the Internet, and everything else is just basic...Word and Excel.

#### Summary

The Internet uses and gratifications of PWI and HBCU focus group members were for email, school, chat rooms, to pass the time, instant messaging, to download and listen to music, and Hip Hop Culture.

### **Research** Question 3

How do the uses and gratifications of students at the PWI compare with those of students attending the selected HBCUs?

As stated earlier, the uses and gratifications for subjects attending the PWI were for numerous aspects of Hip Hop Culture. Their experiences range from exploring websites such as DavyD.com, hiphopsite.com, source.com; downloading and listening to music; participating in global collaborations with other Hip Hop artists; using the campus's Hip Hop listserver; and locating underground Hip Hop artists on websites such as undergroundhiphop.com. They also use the Internet for email, instant messaging, chat rooms, shopping, passing the time, school research, school assignments, online coursework, and general information.

The uses and gratifications of the subjects attending the HBCUs were for Hip Hop Culture that focused on downloading and listening to music, making CDs, and exploring more mainstream or commercial Hip Hop-related websites such as source.com, BET.com, Vibe, 360, and hiphop.com. Other uses of the Internet by the HBCU focus groups were chat rooms, instant messaging, email, shopping, obtaining general information, passing the time, doing school research and courses.

On the surface it appears that the uses and gratifications of the PWI focus group subjects and the HBCU focus group subjects were basically the same. In fact, uses of the Internet by the PWI focus group members and the HBCU focus group members had extensive overlap. All of the members of the PWI and HBCU focus groups stated they were influenced by Hip Hop Culture to use the Internet. However, the *type* of Internet Hip Hop content used (to gratify needs) by the PWI and HBCU students varied between these two groups.

For example, PWI focus group participants initiated the discussion on how they used the Internet to collaborate with other Hip Hop artists and sought out underground Hip Hop sites. As stated in relation to the

first research question, the PWI participants felt that underground Hip Hop artists were "cooler" than mainstream Hip Hop artists.

Unlike the PWI focus groups, who sought out underground acts on the Internet, the HBCU focus groups used the Internet mainly to access mainstream Hip Hop artists. Because of the enthusiastic unsolicited discussion of underground Hip Hop acts by members of the PWI focus groups, the moderator specifically asked the HBCU focus groups about underground acts.

I don't think the Internet really promotes—Well, I'm not going to say it promotes, but you're not going to have a lot of sites out there, major, I guess, sites, that actually promote Hip Hop artists. Most of your underground artists, most of your major Internet labels, Internet sites, are for the mainstream artists, so it's not really—I wouldn't say there's not many websites out there, but you just don't see them to know. We don't know who they are. There's no way you can get, be able to listen to their songs, find out more about it. Most of the time, they're not even promoted.

Members of the PWI focus groups specifically criticized some of the commercial sites, such as BET.com, whereas the students attending the HBCUs cited it as one of the websites they used most often for Hip Hop. The PWI responses outlined earlier in relation to the first research question demonstrate how strongly they feel about the value of the Internet in relation to underground Hip Hop. The PWI focus group participants were emphatic about the impact the Internet has had on underground Hip Hop acts. The group expressed their beliefs that the Internet is the best thing that has happened to underground Hip Hop. Like I said, the pro is that worldwide exposure. It's like a worldwide demo tape. You can put your song out there and whoever's interested can get the song.

There was a contrast in the use of chat rooms by the HBCU and PWI participants. Members in both the PWI and HBCU focus group sessions stated they used chat rooms. However, the PWI focus group participants were quick to point out their negative feelings about chat rooms, whereas the HBCU focus group members had no negative commentary regarding chat rooms. The PWI focus group members discussed how their uses of chat rooms have changed over time since their first online experiences.

I look at chat rooms are something that I've kind of grown out of. I mean, when everybody—when I first got AOL X number of years ago, I—Let's chat room for this, let's see who's in there, you understand, but it gets really old, talking to like ten million people you don't know, you'll never know—I mean, it's just not that much fun talking to chat rooms.

All members of the PWI group agreed that their use of Internet chat

rooms was still evolving.

One thing that I do sometimes, or that I used to do like six months to a year ago, would be—the closest thing I get to a chat room would be if-from that forum that I mentioned before like the Davey D's. A bunch of us would go into a chat room and we'd all freestyle, energizing. So I would semi kind of know them from the Internet, and it's funny, because it is a community. You know, I knew these guys for like a year over the Internet, so I know about them, but I didn't know them personally. So that would be the closest to a chat room.

On the other hand, this group did indicate that chat rooms were a

useful way to set up meetings or to have conversations with friends.

I basically use them instead of talking on the phone, because the phone bill gets kind of expensive. These are people that I—It was—basically, I knew the person's name, and we agreed to meet at a certain time. So it like a scheduled like conference meeting, and we basically talked over using the chat room. The main reason for me doing it was basically to save money instead of talking long distance on the phone, just taking advantage of the resources I had at hand.

There was variability within and between the PWI and HBCU focus groups regarding required use of the web for school. All members of both the PWI and HBCU focus groups expressed how they use the Internet to conduct research related to school projects. However, not all participants were required to use the Internet to take online courses. The participants with technical majors in both the PWI and HBCU groups were more likely to have taken an online course at their institution than the liberal arts majors.

Members of both the PWI and HBCU focus groups discussed the positive and negative impacts of the Internet. The following are some of the responses of the HBCU focus groups:

It definitely makes life a lot easier. You're exposed to much more, outside—like television, you're more limited. The Internet is basically you have exposure more information.

Also, I think it's a good tool, but it's very time consuming.

You be on one minute and the next thing you know, it's two hours later.

I try not to get online too often. I think it's too much.

The following are comments and responses from the PWI focus

groups that demonstrate their general discussion on the positive and

negative impact of the Internet.

One respondent stated:

That's one of the biggest arguments out now about the Internet is the isolation factor. Some people are cutting themselves off away from the world and doing everything right now. You can do almost anything online. You can order your groceries, clothes, CDs-anything you want you can order online. And now a lot of people work from home. Computers accomplish a lot. You can go and do things. You can get up at 4:00 in the morning if you have a thought at home and start working. Or if you're going to buy something, or whatever. It isolates people off from the world, and a lot of people are losing that social interaction, which is still deemed as important. But there are people with the will power, the self-discipline to know that they're cutting themselves off from the world and to still do these things with the computer to supplement you. It's not supposed to take the place of everything else.

Another subject said:

I think it's just a tool. You don't use a hammer to clean the table. It's like, use a specific tool for a specific job, and that should be it. As opposed to taking the Internet and turning it into one of those organizers—I'm thinking an analogy, you know one of those Army knives that has the knife, the bottle opener, the fingernail file, and try to pack it all into one big thing that they can use whenever they want. They fail to realize that that's not what the Internet is. It's a specific tool for a specific job, and that's what you use it for. That specific job. You don't use it for anything else. More or less, the job is not going to turn out right. I mean it's a tool just like fire, just like a sword, just like anything, you know—it can be a friend or a foe. You've got to watch out.

#### Summary

In spite of the variance between the PWI and HBCU institutions' access to the Internet, the members of the PWI and HBCU focus groups had the same basic uses of and gratifications from the Internet. Once again, they used it for school, to pass the time, chat rooms, instant messaging, email, music, and Hip Hop Culture. The PWI focus groups appeared to have used the Internet more extensively in these areas than their counterparts who attended the HBCUs.

## CHAPTER 5—DISCUSSION AND SUMMARY

### **Overview of Study**

This study investigated how African American male college students interact with the Internet to obtain Hip Hop Culture to gratify their desire for culturally related or specific content. It was the premise of this study that physical access to the Internet, although necessary, is not sufficient to engage this population in the utilization of the Internet, that content is the driver.

The theoretical framework of this study was the uses and gratifications approach coupled with Ludenic or play theory. This framework allowed the researcher to investigate how the participants attended to a medium (the Internet) when they believed that its content (Hip Hop) would be useful in fulfilling their needs or desired gratifications (Swanson, 1992). In other words, the researcher investigated how culturally specific content can influence users to interact with, to play with, the Internet when they believed that the content sought, in this case Hip Hop, would be useful in fulfilling their needs or desired gratifications.

The data were collected and analyzed by the focus group method. Multidimensional scaling and cluster analysis were conducted using CatPac software to analyze the transcripts generated from the PWI and HBCU focus groups. The CatPac statistical package identified patterns of frequently used words by the participants of the focus groups. CatPac's quantitative and focus group qualitative analysis techniques were combined to analyze the data generated by the focus group sessions. Thus, multidimensional scaling, cluster analysis, and focus group summary were used to analyze the data from the focus groups.

It should be noted that the focus group method has strengths and limitations. On the one hand, this method allowed less control over the data generated. However, a moderator was present to steer the direction of the focus groups' discussions. The sampling method and size of focus groups does not allow for statistical projections (Krueger & Casey, 2000). On the other hand, the focus group method allowed the researcher to investigate a topic that is untapped by capturing the participants' interactions and dialogue on the subject of Hip Hop Culture and the Internet. The focus group method also facilitated the production of data with minimum input from the researcher. The focus group method was ideal for this study as its purpose was to uncover factors that *influence* motivation or behavior (Krueger & Casey, 2000).

This investigation addressed the following research questions:

- 1. Has Hip Hop Culture influenced African American male college students' usage of the Internet?
- 2. What are the Internet uses and gratifications of the subjects?
- 3. How do the uses and gratifications of students at the PWI compare with those of students attending the selected HBCUs?

Both the PWI and HBCU focus group members answered the first research question affirmatively. All participants were positive in their responses to questions regarding the influence of Hip Hop Culture on their use of the Internet. In fact, this positive response was unanimous.

The second research question addressed the uses and gratifications of the members of the focus groups in relation to their use of the Internet. As stated in chapter 4, the Internet uses and gratifications of PWI and HBCU focus group members were for email, school, chat rooms, to pass the time, instant messaging, to download and listen to music, and Hip Hop Culture.

The third research question compared the uses and gratifications of the PWI focus group participants to that of the HBCU focus group participants. As noted earlier, it appears that the uses and gratifications of the PWI focus group subjects and the HBCU focus group subjects were basically the same. PWI and HBCU focus group members used the Internet to download and listen to music, email, instant messaging, chat rooms, shopping, pass the time, school research, school assignments, online coursework, and general information. However, the level and extent of Internet use and play (to gratify needs) expressed by the PWI and HBCU groups varied. Most notable was the sharp contrast between the PWI and HBCU focus groups' levels of Internet use. The PWI focus group members appeared to have a more sophisticated level of use for Hip Hop Culture—specifically global collaborations, production of Hip Hop,

and locating underground artists. The uses and gratifications of the HBCU participants focused on more mainstream or commercially related Hip Hop.

There were also variations within and between the PWI and HBCU focus groups regarding required use of the web for school. All members of both the PWI and HBCU focus groups indicated that they use the Internet to conduct research related to school projects. However, not all participants were required to use the Internet to take online courses. The participants with technical majors in both the PWI and HBCU groups were more likely to have taken an online course at their institution than were the liberal arts majors. In spite of the fact that the level of Internet access at each of the represented institutions varied, the technical disciplines required their students to use the Internet more than did the nontechnical majors at both the HBCUs and the PWI.

The purpose of splitting out the HBCU focus groups from the PWI focus groups in this area was to direct future research. Future research could incorporate institutional environmental differences, such as Internet access, as a variable.

## Play and Interactivity of Hip Hop and the Internet

The interactivity component of the uses and gratifications approach coupled with the Ludenic theory is suited for both African American male Hip Hop and Internet use. Hip Hop Culture and the Internet both involve elements of play, as discussed in chapter 3. As illustrated by the

conceptual model (see Figure 1, chapter 3, p. 46) a) Hip Hop Culture influences both the Internet and the user—and vice versa; b) Hip Hop Culture can influence users to interact with the Internet in an effort to gratify their needs for Hip Hop-related content. During interaction with the Internet, play is also occurring; c) The dotted arrow depicts the potential that the interactivity and play of Hip Hop Culture has to fuel the interactivity and play of the Internet.

The data support the Hip Hop and the Internet Uses and Gratifications Conceptual Map. For example, as discussed in chapter 4, all of the PWI focus group members subscribe to the local Hip Hop listserver to keep abreast of Hip Hop happenings. Hip Hop Culture influences them to interact and play with the Internet. The Internet impacts Hip Hop Culture and the user, in this instance by providing a forum for Hip Hop. The Internet makes the announcement of Hip Hop-related events and activities possible. The impact of Hip Hop Culture, the Internet, and the User is a dynamic and cyclical interaction.

#### **Discussion of Findings**

Several issues arose during the focus group sessions that are worthy of further discussion for two purposes: a) to give insight into the pattern of Internet use by the PWI and HBCU focus group participants and b) to offer directions for future research.

The findings of research question 2 on the uses and gratifications of the focus group members were consistent with the data presented in the

Pew Internet & American Life Project (see chapter 2, pp. 12-13). The use of the Internet for downloading and listening to music, instant messaging, chatting, and conducting school research for both the PWI and HBCU focus groups parallels the findings of the Pew study for African Americans under the age of 30. In fact, the Pew data demonstrate that African Americans under 30, like the members of these focus groups, are more likely to be "drawn to leisure activities on the Internet" as compared to older African Americans. The data also reveal that, compared to whites online, more African Americans use the Internet (54% compared to 32%) to listen to music, and download music (29% compared to 21%). According to this research, online blacks are 20% more likely to conduct school research on the Internet than online whites (Pew Internet & American Life Project, 2001).

Based on the dialogue of the HBCU and PWI focus groups, it appears that the PWI focus group members are more advanced users of the Internet. Several factors might account for this difference. Institutional computer resources may explain the contrasting modes of Internet use by the PWI and HBCU participants. The recent assessment of HBCUs' technical infrastructure (Booz Allen & Hamilton, The Gallup Organization, & EVAXX Inc., 2000; Myers, 2000) discussed in chapter 2, substantiate this claim. These schools are still striving to raise their levels of technological readiness. As stated, most subjects were required to use the Internet to submit assignments and take web-based classes. Only two

of the HBCU participants were actually *required* to use the Internet for school. It appears that the institutional settings have impacted the subjects' overall level of use of the Internet. The PWI participants were more advanced in their uses of the Internet than the HBCU participants.

Another factor is that HBCU students are better nurtured and have made greater psychological adjustments than their peers at PWIs (Allen, 1985, 1992; Allen & Haniff, 1991; Gibbs, 1973; Jackson & Swan, 1991). Perhaps the PWI students are forced to look for more culturally relevant outlets than their peers at HBCUs because the HBCU students are actually *living* the Black Experience. However, the PWI students, a distinct minority in their white institutions are forced to look for more aspects of Black culture. The Internet offers an opportunity to obtain the Black Experience they are seeking. The HBCU students may take for granted, or have become accustomed to, the culturally supportive system that their HBCU institutions offer. Thus, there isn't a need to be as *Black* as their counterparts at the PWI. This could be an explanation for the contrast in the amount of dialogue in the HBCU sessions (1,425) versus the amount of dialogue in the PWI session (2,752).

Perhaps the PWI focus group participants found it necessary to reach out for more of their culture as described by Andrew Ross:

"... that the black performance of uncommercialized and therefore undiluted black music constitutes the only truly genuine form of protest or resistance against the white culture industry and its controlling interests, and that black music which submits to that industry automatically loses its autonomous power (Ross, 1989, p. 69)."

The PWI focus groups' dialogue stressed how underground Hip Hop has stayed true to the original tenants of Hip Hop Culture, that it was undiluted. Once again, they viewed the mainstream Hip Hop artists as "sellouts."

Both groups had participants with technological majors who had technological skills. However, the PWI students had higher demand for online activity than did the technology majors at the HBCUs. Each of the participant's disciplines and institutions determined how the Internet was used for coursework. One could surmise that because the PWI participants were required to spend more time online for school-related activities, this level of interactivity could transfer over into other areas. The PWI participants were web drivers who manipulated the web to gratify their needs, while the HBCU students were web consumers.

The PWI groups were comprised of a large percentage of primarily science, math, engineering, and technology (SMET) majors. There were also a few liberal arts majors. Both types of students had a high confidence level about their knowledge and use of the computer. The following statement by one of these students exemplifies the groups' levels of sophistication in their understanding of the power of the computer:

I think there's going to come a time pretty soon where everybody's going to need to be somewhat of a computer scientist. Just like you might learn Spanish in high school, you're going to need to learn C++, too. I mean, you should at least know, to me, something about one language, you know what I'm saying? Because you should have some idea of how computers work.

#### **Issues of Access**

All (HBCU and PWI) participants owned a computer, although none of their institutions required computer ownership. Participants agreed that they spent a minimum of one hour per day online. Access to sufficient physical infrastructure was not an issue at the PWI campus. The PWI campus has high-speed connectivity and is a member of Internet2. Internet2 (I2) is a partnership of the universities, government agencies, and industry sites that are supported by the nationwide advanced network called Abilene. The goal of this consortium is to hasten the creation of the next-generation Internet by working to "develop and deploy advanced network applications and technologies (UCAID, 2001, website)." Through Internet2 working groups, members of I2 can collaborate on: a) advanced applications, b) middleware, c) new networking capabilities, d) advanced network infrastructure, and e) partnerships and alliances. One of the HBCU participants was from an HBCU that is a new member of Internet2.

As reported in chapter 4, the HBCU focus group Subcluster 2b generated the thematic unit "Like to Have the Internet for School Use" (see Table 8). This subcluster demonstrates the students' discussion of how they like having access to the Internet for school use. This discussion was centered on adequate access to the Internet at their various campuses.

Access to the Internet on the campuses of the HBCU participants varied from dial-up modem to high-speed connectivity. Approximately one-third of the HBCU campuses that the participants attended had dialup modems. These students did not rely on their campuses for connectivity. Those who lived off campus subscribed to a local Internet Service Provider (ISP) or lived in housing that provided connectivity that was better than dial-up. When discussing access to the Internet, the HBCU participants in the focus groups indicated that they maintained at least one or more email accounts in addition to their school-issued email account. Some stated that other accounts were for fun and nonschool activities. There was near consensus on the infrequent use of their school email accounts. One factor that may explain the students' attitude about their school email accounts is access to proper technological infrastructure at the majority of HBCUs. It was noted in chapter 2 that the majority of HBCUs lag behind in Internet access, computer equipment, technical training, and support. This lack of infrastructure has had a negative impact on the students attending these schools. The following comments by the HBCU focus group participants confirm this:

I think we have like four labs, two of them pretty good sized, but you've got 6,000 students, so if you don't get in there at the right time, or—it's just like forget it.

Sometimes it [Internet connection] may not be working right.

Yet, like their counterparts at the PWI who lived in campus housing who worked around their university to access Napster, these students found a way to overcome their institutions' lack of sufficient connectivity. Because of this, all of the HBCU participants had a separate email account in addition to their school account. In reference to his school email account, one participant stated:

I check it, but I don't use it.

The following statement sums up the feelings of the HBCU focus groups:

You're not cool unless you have a hotmail account..."

The demographic makeup of the HBCU focus group sessions also provides insight into the some of the forces behind these students' efforts to overcome the issues of access at their respective institutions. As noted in chapter 3, the HBCU focus group members were participants in the CIC SROP. As a participant of the SROP, a faculty member must recommend students from his or her home institution. These students are taught to conduct research and are encouraged to pursue graduate school. Many consider these students the best and brightest of their institutions. There were comments made in the HBCU focus group session that led the moderator to conclude that participants in the SROP, who desired to attend graduate school, required access to the Internet.

The recruiters at the SROP recruitment fair was directing everybody to their web page...all the booths were the same.

One HBCU student expressed the gratifications the Internet has given him since his introduction to it:

I think it's a lot easier.

I agree with that. It definitely makes life a lot easier. You['re] exposed to much more, outside—like television, you're limited. The Internet is basically you have exposure [to] more information.

The impact of the environment at the data collection site also reveals the attitudes of the PWI and HBCU focus group participants. As reported in chapter 3, all of the PWI and HBCU focus group sessions were conducted in a conference room set up as an Access Grid node. The Access Grid node provides a videoconference-like environment that is room-to-room instead of person-to-person, and it is transmitted via the Internet. The researcher was running an IBM 570 ThinkPad laptop with a wireless connection to the Internet. It was not until the *conclusion* of each focus group that the researcher explained the purpose of the Access Grid node and described the program that developed the Access Grid node. The reactions of the PWI and HBCU focus group members contrasted sharply. The PWI focus group members were excited and wanted to know more. The HBCU focus group members just smiled politely. Could this contrast in reaction be due to the comfort and exposure level to technology on the various campuses represented? As the literature reviewed in chapter 2 demonstrates, the majority of HBCUs lack the expansive state-of-the-art equipment possessed by the majority of the schools that are members of Internet2.

In spite of the differences in Internet access at the PWI and HBCU institutions, the members of the PWI and HBCU focus groups had the same basic uses for and gratifications from the Internet. They used it for

school, to pass the time, chat rooms, instant messaging, email, music, and Hip Hop Culture. Although the PWI focus groups appeared to have used the Internet more extensively in these areas than their counterparts who attended the HBCUs, both groups saw the Internet as a beneficial tool.

# Unintended Gratifications: Impact of Culturally Specific Approach on Nonusers of the Internet

As reported in chapter 4, one of the PWI participants stated that the Internet has changed his attitude about conducting research:

I mean, it's like nowadays, instead of my first thought about finding information on something—my first thought is not to go to the library. It's to go online and see what I can find. That's what the Internet has done to me. It's made me dependent on it a little bit, but that's because it's so efficient, I believe.

The use of the Internet for school-related content appears to have created an unexpected side effect on the participants, as stated in the Katz, Blumler, and Gurevitch definition of the uses and gratifications approach: "...other consequences, perhaps mostly unintended ones" (1974, p. 20). The students were influenced to use the Internet for required schoolwork and discovered that it could be used as a primary resource for school.

Both the PWI and HBCU focus group members felt that Hip Hop could be used to attract African American male nonusers to the Internet. Both groups talked openly about their pre- and post-Internet access days. They all discussed how powerful it is to now have access to the Internet. One student in the PWI focus group likened Internet access to having the ability to read and write in today's society.

The HBCU focus groups' positive response to whether Hip Hop Culture could be used to attract nonusers to the Internet is illustrated in Table 4, "Use Web for Hip Hop." As illustrated by the words that build Subcluster 1b, the group stated that they think access would be high if nonusers knew they could go to the Internet to obtain Hip Hop.

The PWI focus groups expressed strong opinions about using Hip Hop to attract African American male nonusers to the Internet. When asked if they felt that Hip Hop Culture could be used to influence nonusers to log on to the Internet, they all said yes. They discussed how it is important to use the familiar (Hip Hop Culture) as a bridge to the unfamiliar (the Internet).

Also, as far as Hip Hop is concerned, it's also a good tool to get like young kids to get into the Internet. It's a good starting tool since Hip Hop is like one of the number one cultures that a lot of young people are into nowadays, and basically, you can use Hip Hop as a tool to get young people into other things, broaden their scope of interests.

I say yes. It's a good way to introduce them to the Internet and they can go to it, but, you know, like they're curious or whatever—you know, like try [the] Internet out for other things, but introducing them to it with Hip Hop is just like that step forward, so I say it's good.

The thematic unit of Table 9, "Views on Internet's Impact on African American Male Nonusers" created by the PWI focus group subcluster is evidence that these participants think that Hip Hop can impact Internet usage, particularly for people who don't know about computers. The focus groups felt that using a culturally specific approach

(Hip Hop) as a draw to the Internet is a good one.

Word	Frequency	Percent	Windows Scanned	% Windows Scanned
Know	237	8.6	973	43.4
Have	193	7.0	858	38.3
Internet	191	6.9	811	36.2
People	179	6.5	788	35.1
Don't	157	5.7	654	29.2
Think	147	5.3	684	30.5
Computer	139	5.1	584	26.0
Can	112	4.1	452	20.2
Му	111	4.0	454	20.2
Go	107	3.9	517	23.0
I'm	102	3.7	431	19.2

Table 9. PWI Focus Groups Subcluster 1a—Views on Internet's Impact on African American Male Nonusers

Members of the PWI focus group even went so far as to discuss the responsibility rap artists should have in promoting technology and the Internet.

So a lot of artists need to, you know, they make platinum cool, so why don't you make the Internet cool, too. Don't do

it in a cheesy way. Do it in a realistic way. So I just blame them for that.

If you keep talking about things that are on the street, and true Hip Hop is a reflection of what's going on in society, mostly urban society, so with all this influence, you need to start making it known that, ok, you don't get onto the Internet, get into the website, get into the computer. I can only think of one artist who had a creative way of doing that, and that's The Rizzar. He did it through an alter ego called Bobby Digital, and basically he just promoted getting into technology because I'm sure he's a multimillionaire and he's dealing with websites and downloading music and this, that, and the other, so it's cool to talk about guns and chains and women, but, you know, you can influence other things that you're dealing with in real life, if it's so-called real music.

#### **Conclusion and Future Implications**

This study examined the digital haves as a way to begin to look at how to influence the digital have-nots in the use of computer technology. It is hoped that, once a nonuser of the Internet is influenced by culturally specific content to use the Internet, the side effect would be to use the Internet for other purposes. Specifically, the premise is that, under the proper conditions, a nonuser of the Internet who is a Hip Hop head would use the Internet to seek out Hip Hop Culture. Once this new user has interacted and played with the Internet to seek out Hip Hop-related content, then a side effect would be to seek out other content and uses of the Internet. This type of unintended consequence is noted in the uses and gratifications definition developed by Katz, Blumler, and Gurevitch:

(1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) the mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities), resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones. (1974, p. 20)

In other words, Hip Hop is the intended use for a nonuser, but an unintended consequence could be that a new user once influenced to turn to the Internet to find Hip Hop-related content—such as websites, chat rooms, downloadable music—would then use this medium to seek out other content of interest. According to Swanson (1992), the gratificationseeking that motivates the user to attend to specific content of the medium does shape the actual effect of the user's experience. The users have social and/or psychological motives that give them certain expectations of interacting with the Internet to satisfy their needs. Starting from the familiar (Hip Hop) can be the bridge to the unfamiliar.

The gratifications experienced by audiences are not controlled entirely by the features of the message, message genre, or medium. Instead, audiences contribute something to the equation as they creatively use mass media to try to accomplish their own purpose. Media content is at least partly malleable, capable of being interpreted or taken in somewhat different ways by persons who seek different gratifications from it" (Swanson, 1992, p. 312).

As exemplified by the early African American FM radio DJs and the originators of Hip Hop, African Americans have a historical record of flipping the original purpose of technology. This same type of innovation and creativity could be applied to the Internet. The creators of the Internet envisioned it as a postapocalypse communication tool. Yet the use of this technology was reappropriated by its users. The literature presented in chapter 2 demonstrated how African Americans flipped the script on

technology during the evolution of FM radio and during the creation of Hip Hop Culture. Perhaps the play and play-labor of this cultural genre can be coupled with the creativity and interactivity of the Internet to attract more African American male users. As Rose states, "technologies foster a kind of creative expansion that breaks or gets around boundaries" (Rose, 2001, p. 147). To sustain the use of the Internet by African American males, relevant content will be needed. Logan Hill argues that although the specific solutions are not obvious, more sites that contain racial or ethnic content are needed to "give minorities reasons to go online (Hill, 2001, p. 26)." Hill claims that there needs to be something rewarding for the casual online user to become a participant in the information economy, whatever their ethnicity. He also argues that minority computer users don't necessarily want to isolate themselves from the rest of the Internet and points out that the most successful websites have niche markets that allow users to delve deeper into their own interests. "Sustainable, diverse sites geared toward minorities may well determine the future ethnic composition of the Internet, if not the fate of the Internet itself (p. 28)."

Future research can build on the present study to conduct a systematic survey. An instrument could be created based on the feedback generated from the focus group data in this study. This survey could be based on the research model designed by Greenberg (1974) for his study of reasons why London schoolchildren said they liked to watch television.

In this research, Greenberg constructed a questionnaire based on eight distinct motivations for viewing television that he had collected from the schoolchildren in free-response data. The categories identified were: pass the time, diversion, learning about things, learning about myself, arousal, relaxation, companionship, and habit (Greenberg, 1974).

The role of technology in the socialization of African American male college students at HBCUs and PWIs would prove to be an interesting study. In regards to social and academic support, the studies discussed in chapter 2 (on the environmental impact of HBCUs and PWIs on African Americans) were conducted prior to the current technological trends in higher education. Does the Internet make a significant difference? Previous studies indicated that students at HBCUs have a more supportive social structure than students who attend predominately white institutions. Is technology an equalizer for African American students attending PWIs?

This researcher would like to conduct applied research under her HOOD[™] Concept. The Helping Our Own Develop (HOOD) concept combines elements of the Participatory Development Model discussed in chapter 2 and the philosophy of Hip Hop Culture. Many young African Americans use Hip Hop as a process of inquiry and dialogue to share ideas. They feel that Hip Hop is a source of self-identification and pride (Clark, 1990). The HOOD concept will be used to examine:

• Are African Americans revising the Internet to conform to longstanding black cultural priorities?

- Is the Internet a primary tool for alternative cultural expression?
- In what ways does the Internet facilitate ownership and control of Hip Hop culture?
- How has the Internet helped to preserve Hip Hop Culture? How has Hip Hop Culture motivated African American youth to engage in use of the Internet?

Research on the social and cultural impacts of computing is still in the embryonic stage. The literature on computer usage by *any* group of African American males is scarce. The results of this study have demonstrated that content can be the driver, even when connectivity is an issue. As stated in chapter 1, if African American males are to fully participate in the global economy, as well as in our national political and social structure, then there is a prerequisite for increasing levels of Internet access and use. By combining the appeal of Hip Hop Culture with the power of the Internet, it is possible that young African American males can be empowered to "flip the script" on their lives.

## **APPENDIX A—GLOSSARY OF HIP HOP TERMS**

All definitions used were obtained from Fresh Fly Flavor: Words & Phrases of the Hip-Hop Generation (1992) (Brathwaite, 1992).

**B-Boy**—Originally B-Boy was an abbreviation for "break boy"—a totally devoted male fan and participant in Hip Hop music and culture. Originally a B-Boy, like Hip Hop music, was looked down upon, even by those who attended jams-the name given to parties that would spring up in parks, block parties, and community centers where hip hop was spawned. A B-Boy was usually a feisty participant at these early jams. Here's how he got his name. When the DJ played a record with a break beat on it, the break would start, and so would these boys. They would drop to the ground wherever they stood and perform complex foot maneuvers, twists, turns, and flips, and sometimes ended these controlled physical outbursts by spinning on their heads. They called it break dancing, and original B-Boys like Grandmaster Flash, Dynamite, and Phase II pioneered it. However, in those early days, not everyone was enthused by the B-Boy's sudden outbursts at these jams, and often looked at them with disdain, saying "Oh, no, these damn B-Boys are breaking again. Don't they have any finesse?"

Many times the breaking would be competitive and sometimes lead to fighting between rival break dancing groups.

Needless to say, breaking went on to become an integral part of Hip Hop culture. It had its media debut, in the early 1980s via vehicles like the motion picture "Flashdance," "Beat Street," and hip hop's first and best film, "Wild Style."

The term B-Boy also gained popularity because, like the expression hip hop, it was a type of reference point when describing the previous parties' highlights, as in "They started playing that Hip Hop shit and them **B-Boys** started going off."

Break Beat—Song containing an instrumental drum dominated section, ideal for the purpose of making Hip Hop music. In the beginning days of Hip Hop, long before the idea of making records and fortunes was even a dream, the key ingredients for being involved were: some sort of sound system, hopefully, two working turntables, various indispensable records like Chic's "Goodtimes," M.F.S.B.'s "Love is the Message," and Apache's "Bongo Rock"—in pairs of course—a mixer to segue back and forth between the two records, and an MC/rapper to talk up a blue streak on the microphone. Now, with all these ingredients in place and functioning, to go to the highest heights, each area needs to be constantly improved on—equipmentwise, recordwise, and rapperwise.

The break beats are a chief importance to the DJ, so he must hunt relentlessly for new and improved pieces of music to cut up, scratch, and mix for his rapper. The introduction of compilation records (called break beat records) containing all the common break beats used by Hip Hop's pioneering DJs like Kool Herc, made the process easier for all involved in the early 1980s. Herc pioneered the use of the break beat and introduced one of the most popular break beats—Apache's "Bongo Rock."

- **DJ**—Disc jockey, radio, or party. 2. In dance-hall reggae, the rapper is referred to as the "DJ" and the "selector" is the one who plays the recording.
- **Hip Hop**—1. The term originated in the mid-1970s during the beginning states of what is also known as rap. It was first said by DJ Hollywood, who, while playing records, would get on the mike and shout: "To the **hip hop** the hippy hippy hippy hop and you don't stop."

This caught on and other pioneering DJs and MCs in Harlem and the Bronx picked up everyone involved. Fans, when explaining the previous night's party experiences, would use the word Hip hHop to describe and identify what type of party it was. The term is now used to specify the type of rap music that is close and true to the original attitude. 2. Style and state of mind as established by the originators of Hip Hop music and culture.

- MC-1. Master of ceremonies. 2. One who raps Hip Hop music to the funky beat, i.e., KRS-One, Ice Cube, Big Daddy Kane, Kool G. Rap.
- **Rap Music**—Poetry or rhymes set to throbbing, funk rhythm patterns. Rap music is the generic term that describes the most dominant youth music in America since the early days of rock and roll. News, views, and attitudes make up a small part of what rap music is all about. It's really about a voice that, for the most part, shouts as one what's on the mind of America's ultra urban, contemporary, vanguard black youth.

Rap music, to paraphrase Chuck D. is the Cable News Network (CNN) of the ghettoes of America. Millions of words have sailed

along major beats to provide the loudest voice a black man has ever had in this country and it continues to grow.

Sampling—To digitally record a portion of an existing record or sound and later incorporate it into a Hip Hop record. This technological advance allows up to five or more samples of music or any sound to be recorded without any loss in sound quality.

For the Hip Hop producer who had already begun recording funk and soul classics for their rappers to rap over, digital sampling made their work a lot easier and provided new possibilities and ways of making records. Also, most digital sampling drum machines have the capacity of playing a series of samples in a programmed sequence of very complex rhythmic patterns.

Most rap records today incorporate some form of sampling, whether it's the drum sound or an entire section from another record. Among the best examples of sampling in contemporary music today would be any song by Public Enemy, especially "Night of the Living Baseheads," from the album "It Takes a Nation of Millions to Hold Us Back."

Scratch—Manually manipulating records on a turntable to create an abrasive, percussive sound in tune with the beat.

Wheels of Steel—Two turntables in the hands of a Hip Hop DJ.

## **APPENDIX B—FOCUS GROUP QUESTION GUIDE**

#### **Opening Question:**

1. Tell us who you are, your classification and major, and what HH group/artist you are currently listening to.

#### **Introductory Question:**

2. What is the first thing that comes to mind when you hear the phrase "Hip Hop and the Internet"?

#### **Transition Questions:**

- 3. Do you use the Internet for HH? What?
- 4. Do you use the Internet for other activities? What?
- 5. How do you use the Internet for your HH interests? Listening, exchanging, sharing music files? Marketing/creating music? Chat rooms?

#### **Key Questions:**

- 6. How much time do you spend on the Internet? What would get you to use the Internet more often than you do now? Where do you access the Internet? Home? Lab? Work? How much of this time is for HH? NOTE: may need to break this question up some.
- 7. So, how would you change the Internet to make your HH experience a better one? More accessible? More content? Better content? A help desk?
- 8. Tell me about the HH websites you frequent. What do you think about their content?
- 9. If you could design a HH website what would it look like? What would it have that would get people to use it over time and not once in awhile? What services would it have? What would be the focal point of it? (Role play: let's design one)
- 10. Did you have a computer at home? School?
- 11. When did you get access to the Internet? Tell us about your life before the Internet and your life after.
- 12. Does your university require you to take computer related courses?

#### **Ending Questions:**

- 13. Do you think HH is a way to get African American males—those who would not otherwise use the Internet--to use it?
- 14. Here is your chance to freestyle. Is there anything else that you want to say about Hip Hop and the Internet?

## **APPENDIX C—CONSENT FORM**

#### **Purpose and Procedures**

You have been invited to participate in a focus group research study conducted by Allison Clark, a graduate student from Michigan State University. The researcher is trying to learn about what African American male college students feel about how Hip Hop Culture has influenced their Internet usage. Ms. Clark will use the information gathered through this study for her dissertation studies.

The focus group will run for approximately ninety minutes.

The researcher has set up equipment to record video and audio during the focus group, for later review. This means that your speech and appearance will be videotaped during the session. Video recordings will be reviewed later only by the researcher to create a written transcript of the session. The written transcript will be feed into a text analysis system known as CatPac.

#### Freedom to Withdraw

Participation in this study is strictly voluntary. Once you have volunteered, you may withdraw your participation at any time with no personal repercussions or penalty. Additionally, you may request that researchers turn off the video recording equipment at any time.

#### **Risks and Benefits**

I see no risks beyond those associated with normal day-to-day living in this study.

#### **Confidentiality of Data**

The identities of participants are confidential and known only to the researcher conducting the study. You may divulge this information if you wish, but it will not be divulged by the researcher. The data you generate will be combined with the data from other participants. This aggregate information will be used in prototype design and evaluation, and may be used in papers or presentations, but your individual data will never be identified.

I will take the following steps to keep your data confidential: you will be assigned a "participant number"; any information gathered (such as a videotape) will have this number code instead of your name. Only the researcher named above will have access to information linking your name to your participant number. The information linking your name to participant number will be kept in locked files separately from the other data. The consent form, containing your full name, will also be stored in locked files separately from the data. Your privacy will be protected to the maximum extent allowable by law.

#### **Freedom to Ask Questions**

If you have any questions about this study, you should feel free to contact:

Allison Clark Phone: 217-359-4204 Email: aclark@ncsa.uiuc.edu

If you have any questions about being a research subject, you should feel free to contact:

David E. Wright, Chair of Michigan State University Committee on Research Involving Human Subjects (UCRIHS)

Phone: 517-355-2180

Email: urchrihs@msu.edu

-----

#### **Informed Consent:**

In signing this consent form, I give Allison Clark, permission to present this work, both in written and oral form, without further permission from me.

I have read the above information on the purpose of the study, the procedures that will be followed, the use and confidentiality of the data, the risks and benefits, and freedom to withdraw from the study or ask questions, and I agree to participate.

Date:		
-		

### REFERENCES

- Allen, W. R. (1985). Black student, white campus: Structural, interpersonal, and psychological correlates of success. Journal of Negro Education, 54(2), 134-147.
- Allen, W. R. (1992). The color of success: African-American college student outcomes at predominantly white and historically Black public colleges and universities. *Harvard Educational Review*, 62(1), 26-44.
- Allen, W. R., & Haniff, N. Z. (1991). Race, gender, and academic performance in U.S. higher education. In W. R. Allen & E. G. Epps & N. Z. Hanniff (Eds.), College in black and white (pp. 95-109). Albany, NY: State University of New York Press.
- Argonne National Lab. (2001). Access Grid node domestic and international sites, [website]. Argonne National Lab. Available: http://www-fp.mcs.anl.gov/fl/accessgrid/ag-nodes.htm [2001, November 11].
- Baker, H. A. (1991). The rap, race, and pedagogy for the 1990s. In C.
  Penley & A. Ross (Eds.), *Technoculture* (pp. 197-209).
  Minneapolis, MN: University of Minnesota Press.
- Baker, H. A. (1993). Black studies, rap, and the academy. Chicago: University of Chicago Press.
- Barlow, W. (1999). Voice over: The making of Black radio. Philadelphia: Temple University.
- Bialo, E. R., & Sivin, J. P. (1989a). Computers and at-risk youth: A partial solution to a complex problem. Classroom Computer Learning, 9(4), 34-39.
- Blake, W. M., & Darling, C. A. (1994). The dilemmas of the African American male. Journal of Black Studies, 24(4), 402-415.
- Blumler, J. G. (1979). The role of theory in uses and gratifications studies. Communication Research—An International Quarterly, 6(1), 9-36.
- Bolter, J. D. (1991). Writing space: The computer, hypertext, and the history of writing. Hillsdale, NJ: Lawrence Erlbaum.

- Booz Allen & Hamilton, The Gallup Organization, & EVAXX Inc. (2000). Historically Black Public Colleges and Universities: An Assessment of Current Information Technology Usage. New York: Thurgood Marshall Scholarship Fund.
- Borg, I., & Groenen, P. J. F. (1997). Modern multidimensional scaling: Theory and applications. New York: Springer.
- Brathwaite, F., (a.k.a. Fab 5 Freddy). (1992). Fresh fly flavor: Words and phrases of the hip-hop generation. Stamford, CT: Longmeadow Press.
- Carver, B. A. (1999). The information rage: Computers and young African American males. In V. C. Polite & J. E. Davis (Eds.), African American males in school and society: Practices and policies for effective education (pp. 20-33). New York: Teachers College Press.
- Casey, J. A. (1992). Counseling using technology with at-risk youth (EDO-CG-92-14). Ann Arbor, MI: ERIC Clearinghouse on Counseling and Personnel Services.
- Chou, C., & Hsiao, M. C. (2000). Internet addiction, usage, gratification, and pleasure experience: The Taiwan college students' case. *Computers & Education*, 35(1), 65-80.
- Clark, A. (1990). As nasty as they wanna be: Popular music on trial. New York University Law Review, 65, 1481-1531.
- Committee on Institutional Cooperation. (2001, June). The CIC summer research opportunity program (SROP), [website]. The Committee on Institutional Cooperation. Available: http://www.cic.uiuc.edu/third_level/diversity_srop.html [2001, July].
- Coombs, C. H. (1958). An application of a nonmetric model for multidimensional analysis of similarities. *Psychological Reports*, 4, 511-518.
- Combs, J. E. (2000). *Play world: The emergence of the new Ludenic age.* Westport, CT: Praeger Publishers.
- Cook, D. (1996). Is Hip Hop culture Black culture, [website]. Davey D. Available: www.daveyd.com/blckculture.html [2001, November].

- Cook, H., & Levy, B. B. (1973). Dialect proficiency and auditory comprehension in standard and Black nonstandard English. *Journal* of Speech and Hearing Research, 16, 642-649.
- Corbin, S. K., & Pruitt II, R. L. (1999). Who am I? The development of the African American male identity. In V. C. Polite & J. E. Davis (Eds.), African American males in school and society (pp. 20-33). New York: Teachers College Press.
- Costello, M., & Wallace, D. F. (1990). Signifying rappers: Rap and race in the urban present (First ed.). New York: The Ecco Press.
- D, C., & Jah, Y. (1997). Fight the power: Rap. race. and reality. New York: Delacorte Press.
- Danet, B., Ruedenberg, L., & Rosenbaum-Tamari, Y. (1998).
  "Hmmm...where's that smoke coming from?" Writing, play, and performance on Internet relay chat. In F. Sudweeks & M. McLaughlin & S. Rafaeli (Eds.), Network and netplay: Virtual groups on the Internet (pp. 41-76). Menlo Park, CA: MIT Press.
- December, J. (1996). Units of analysis for internet communication. Journal of Communication, 46(1), 14-38.
- Department of Commerce. (1999, December 9). Digital divide summit, [website]. Paper presented at the Digital Divide Summit, Washington DC. Available: http://digitaldivide.gov/summit/ [2001, January 12].
- Dillard, J. L. (1980). Perspectives on Black English. The Hague, NY: Mouton.
- Ebersole, S. E. (1999). Adolescents' use of the World-Wide Web in ten public schools: A uses and gratifications approach. Unpublished Doctoral dissertation, Regent University.
- Ebo, B. (1998). Internet or outernet? In B. Ebo (Ed.), Cyberghetto or cybertopia?: Race, class, and gender on the Internet (pp. 1-12). Westport, CT: Praeger Publishers.
- ELDIS. (1998). Participatory monitoring, evaluation and reporting, [website]. Institute of Development Studies. Available: http://www.eldis.org/ [2001, June 30].

- ERIC Clearinghouse on Urban Education. (2001, April 26). Historically Black Colleges and Universities, [website]. The National Library of Education, Office of Educational Research and Improvement, U.S. Department of Education. Available: http://eric-web.tc.columbia.edu/hbcu/ [2001, July 10].
- Ervin-Tripp, S. M., & Mitchell-Kernan, C. (Eds.). (1977). Child discourse. New York, NY: Academic Press.
- Ferguson, D. A., & Perse, E. M. (2000). The World Wide Web as a functional alternative to television. Journal of Broadcasting & Electronic Media, 44(2), 155-174.
- Garrison, M. E., Pierce, S. H., Monroe, P. A., & Sasseretal, D. D. (1999). Focus group discussions: Three examples from family and consumer science research. Family and Consumer Sciences Research Journal, 428-450.
- George, N. (1992). Buppies, b-boys, baps and bohos: Notes on post-soul Black culture. New York: Harper Collins.
- Gibbs, J. T. (1973). Black students/white university: Different expectations. Personnel and Guidance Journal, 51(7), 463-469.
- Gibbs, J. T. (1984). Black adolescents and youth: An endangered species. American Journal of Orthopsychiatry, 54, 6-20.
- Green, P. E., Carmone, Jr. Frank J., Smith, Scott M. (1989). Multidimensional scaling: Concepts and applications. Needham Heights, MA: Allyn and Bacon.
- Greenberg, B. S. (1974). Gratifications of television viewing and their correlates for British children. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on* gratifications research (Vol. 3, pp. 71-92). Beverly Hills, CA: Sage Publications.
- Ha, L., & James, E. L. (1998). Interactivity reexamined: A baseline analysis of early business web sites. Journal of Broadcasting and Electronic Media, 42(4), 457-474.
- Hager, S. (1984). Hip-Hop: The illustrated history of break dancing, rap music, and graffiti. New York: St. Martin's Press.

- Hany, R. T. (1996). An Internet study of the uses and gratifications of Star Trek. Unpublished Masters thesis, Illinois State University, Normal, IL.
- Hardy, H. E. (1993). *The history of the Net*. Unpublished Master's, Grand Valley State University, Allendale, MI. Available http://www.ocean.ic.net/ftp/doc/nethist.html [2001, January]
- Hill, L. (2001). Beyond access: Race, technology, community. In A. Nelson & T. L. N. Tu & A. H. Hines (Eds.), *Technicolor: race, technology, and everyday life* (pp. 13-33). New York: New York University.
- institute for African American E-Culture. (2001, June). Culture specific approaches, [website]. institute for African American E-Culture. Available: www.iaaec.com [2001, July].
- Jackson, K. W., & Swan, L. A. (1991). Institutional and individual factors affecting Black undergraduate student performance: Campus race and student gender. In W. R. Allen & E. G. Epps & N. Z. Hanniff (Eds.), College in black and white (pp. 127-141). Albany, NY: State University of New York Press.
- Katz, E. (1979). The uses of Becker, Blumler, and Swanson. Communication Research, 6(1), 74-83.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on* gratification research (pp. 19-31). Beverly Hills, CA: Sage Publications.
- Kelley, R. D. G. (1997). Yo' mama's disfunktional!: Fighting the culture wars in urban America. Boston: Beacon Press.
- Kolko, B. E., Nakamura, L., & Rodman, G. B. (Eds.). (2000). Race in cyberspace. New York, NY: Routledge.
- Krueger, R. A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Labov, W. (1970). The study of nonstandard English. Champaign, IL: National Council of Teachers of English (NCTE).

- Labov, W. (1972). Language in the inner city: studies in the Black English vernacular. Philadelphia: University of Pennsylvania Press.
- Leiner, B. M., Cerf, Vinton G., Clark, David D., Kahn, Robert E., Kleinrock, Leonard, Lynch, Daniel C., Postel, Jonl, Roberts, Larry G., Wolff, Stephen. (2000, August 4, 2000). All about the Internet: History of the Internet, [Internet]. Internet Society (ISOC). Available: http://www.isoc.org/internet-history/ [2000, December].
- March, J. G. (1955). An introduction to the theory and measurement of influence. The American Political Science Review, 49(2), 431-451.
- McQuail, D. (1985). Sociology of mass communication. Annual Review of Sociology, 11, 93-111.
- Morgan, D. L. (1988). Focus groups as qualitative research (Vol. 16). Newbury Park, CA: Sage Publications.
- Morgan, D. L. (1993). Successful focus groups: Advancing the state of the art. Newbury Park, CA: Sage Publications.
- Morgan, D. L. (1997). Focus groups as qualitative research (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Morris, M., & Ogan, C. (1996). The Internet as mass medium. Journal of Communication, 46(1), 39-50.
- Myers, S. (2000). Historically Black colleges and universities: An assessment of networking and connectivity. Washington, DC: National Association for Equal Opportunity in Higher Education for U.S. Department of Commerce, National Telecommunications and Information Administration Technologies Opportunities Program.
- National Center for Education Statistics. (2000). Bachelor's degrees conferred by institutions of higher education, by racial/ethnic group and sex of student: 1976-77 to 1996-97. Washington, DC: National Center for Education Statistics.
- National Telecommunication and Information Administration. (1995). Falling through the Net. Full report. Washington, DC: Department of Commerce.
- National Telecommunication and Information Administration. (1998). Falling through the Net II: New data on the digital divide. Full report. Washington, DC: Department of Commerce.

- National Telecommunication and Information Administration. (1999). Falling through the Net III: Defining the digital divide. Full report. Washington, DC: Department of Commerce.
- National Telecommunication and Information Administration. (2000). Falling through the Net: Toward digital inclusion. Washington, DC: Department of Commerce.
- Nelson, A., Tu, T. L. N., & Hines, A. H. (Eds.). (2001). Technicolor: Race, technology, and everyday life. New York: New York University Press.
- Newhagen, J., & Rafaeli, S. (1996). Why communication researchers should study the Internet: A dialogue. Journal of Communication, 46(1), 4-13.
- Oliver, W. (1989). Black males and social problems: Prevention through Afrocentric socialization. Journal of Black Studies, 20(1), 15-39.
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet use. Journal of Broadcasting & Electronic Media, 44(2), 175-196.
- PBS. (2000). Life on the Internet: Net timeline, [website]. PBS Online. Available: http://www.pbs.org/internet/timeline/timeline-txt.html [2001, June 10].
- Perse, E. M., & Dunn, D. G. (1998). The utility of home computers and media use: Implications of multimedia and connectivity. Journal of Broadcasting & Electronic Media, 42(4), 435-456.
- Pew Internet & American Life Project. (2001). African-Americans and the Internet. Washington, D.C.: Pew Research Center.
- President's Information Technology Advisory Committee. (1999). Information technology research: Investing in our future. Washington, DC: National Coordination Office for Computing, Information, and Communications.
- Punj, G., & Stewart, D. W. (1989). Cluster analysis in marketing research: Review and suggestions for application. In P. E. Green, Carmone, Jr. Frank J., Smith, Scott M. (Ed.), *Multidimensional scaling* (pp. 206-246). Needham Heights, MA: Allyn and Bacon.
- Rafaeli, S. (1986). The electronic bulletin board: A computer-driven mass medium. Computers and the Social Sciences, 2(3), 123-136.

- Rafaeli, S. (1988). Interactivity: From new media to communications. In R. P. Hawkins & J. Wiemann & S. Pingree (Eds.), Advancing Communication Science (Vol. 16, pp. 312). Newbury Park, CA: Sage.
- Rafaeli, S., & Sudweeks, F. (1998). Interactivity on the nets. In F. Sudweeks & M. McLaughlin & S. Rafaeli (Eds.), Network & netplay: Virtual groups on the Internet (pp. 173-189). Menlo Park, CA: MIT Press.
- Rebensdorf, A. (1997). Representing the real: Exploring appropriations of Hip-Hop culture in the Internet and Nairobi., Lewis and Clark College, Portland, OR.
- RIAA. (2001, March 13). *RIAA releases 2000 consumer profile*, [website]. Recording Industry Association of America. Available: http://www.riaa.com/News_Story.cfm?id=389 [2001, September].
- Rose, T. (1994). Black noise: Rap music and Black culture in contemporary America. Hanover, NH: Published by University Press of New England <for> Wesleyan University Press.
- Rose, T. (2001). Sound effects: Tricia Rose interviews Beth Coleman. In A. Nelson & T. L. N. Tu & A. H. Hines (Eds.), *Technicolor: Race, technology, and everyday life* (pp. 142–153). New York: New York University Press.
- Ross, A. (1989). No respect: Intellectuals and popular culture. New York: Routledge.
- Schiffman, S. S., Reynolds, M. L., & Young, F. W. (1981). Introduction to multidimensional scaling, theory, methods, and applications. New York: Academic Press.
- Schwartzman, H. B. (1982). Play and metaphor. In J. W. Loy (Ed.), The paradoxes of play (pp. 25-41). West Point, NY: Leisure Press.
- Simpkins, C., & Simpkins, G. A. (Eds.). (1981). Cross cultural approach to curriculum development. Detroit, MI: Center for Black Studies Wayne State University.
- Slater, R. B. (1994). Will Blacks in education be detoured off the information superhighway? Journal of Blacks in Higher Education, 0(3), 96-99.

- Smitherman, G. (1995). If I'm lyin, I'm flyin: An introduction to the art of the snap. In J. Percelay & S. Dweck & M. Ivey (Eds.), *Double* snaps. New York: William Morrow.
- Smitherman, G. (1986). Talkin and testifyin: The language of Black America. Detroit, MI: Wayne State.
- Smitherman, G. (1997). The chain remain the same: Communicative practices in the Hip Hop nation. Journal of Black Studies, 28(1), 3-25.
- Smitherman, G. (2000). Black talk: Words and phrases from the hood to the amen corner (Rev. ed.). Boston: Houghton Mifflin.
- Spencer, J. M. (1991). The emergency of Black and the emergence of rap. Durham, NC: Duke University Press.
- Stephenson, W. (1988). The play theory of mass communication (2nd ed.). New Brunswick, NJ: Transaction, Inc.
- Stewart, D. W. (1990). Focus groups theory and practice. Newbury Park, CA: Sage Publications.
- Swanson, D. L. (1979a). The continuing evolution of the uses and gratifications approach. Communication Research, 6(1), 3-7.
- Swanson, D. L. (1979b). Political communication research and the uses and gratifications model: A critique. Communication Research, 6(1), 37-53.
- Swanson, D. L. (1992). Understanding audiences: Continuing contributions of gratifications research. *Poetics*, 21, 305-328.
- Teslik, D. (1998, October 21). Independent Hip-Hop on the Internet, [Internet]. KWUR Radio. Available: http://kwur.wustl.edu/hiphop/articles/indienet.html [2000, December].
- The Foundation for Development Cooperation. (2001). Participatory development, [website]. The Foundation for Development Cooperation. Available: http://www.fdc.org.au/programs/150_development/ [2001, November 21].

- The Participatory Development Forum. (2001). Participatory development, [website]. The Participatory Development Forum [2001, November 21].
- Toop, D. (2000). Rap attack 3: African rap to global Hip Hop (3rd, revised, expanded and updated ed.). London: Serpent's Tail.
- UCAID. (2001). Internet2, [website]. University Corporation for Advanced Internet Development (UCAID). Available: http://www.internet2.org/ [2001, July 19].
- UCLA Center for Communication Policy. (2000). The UCLA Internet report: Surveying the digital future. Los Angeles: UCLA.
- U.S. Census Bureau. (September 10, 2001). Census 2000—PHC-T-11. Male-Female Ratio by Race Alone or in Combination and Hispanic or Latino Origin for the United States: 2000, [website]. United States Government. Available: http://www.census.gov/population/cen2000/phc-t11/tab01.txt [2002, April 8].
- Walton, A. (1999, January). Technology versus African-Americans. The Atlantic Monthly, 283, 14–18.
- Web-Based Education Commission (WBEC). (2000). The power of the Internet for learning: Moving from promise topPractice, [website]. U.S. Department of Education. Available: http://www.ed.gov/offices/AC/WBEC/FinalReport/ [2001, August 12].
- Wepman, D., Newman, R. B., & Binderman, M. (1976). The life: The lore and folk poetry of the Black hustler. Philadelphia: University of Pennsylvania Press.
- Williams, F., Rice, R. E., & Rogers, E. M. (1988). Research methods and the new media. New York: The Free Press.
- Williams, G. A. (1998). Legendary pioneers of Black radio. Westport, CT: Greenwood Publishing Group, Inc.
- Williams, J. S. (1973). Multidimensional scaling: Theory and applications in the behavioral sciences. *Contemporary Sociology*, 2(5), 498-499.
- Woelfel, J. K. (1998). Research software: CatPac. The Galileo Company. Available: http://www.uwex.edu/ces/flp/fll/galileo/catpac.html [2001, June 5].

- Woelfel, J. K., & Stoyanoff, N. (1994). CatPac: A neural network for qualitative analysis of text. Troy, MI: Terra Research and Computing Company.
- Woelfel, J. K., Stoyanoff, N., & Danielsen, S. (1993). Galileo manual. Troy, MI: Terra Research and Computing.
- Young, F. W., & Hamer, R. M. (1987). Multidimensional scaling-History, theory, and applications. Hillsdale, NJ: L. Erlbaum Associates.
- Zakon, R. H. (2000). *Hobbes' Internet timeline*, [website]. Available: http://info.isoc.org/guest/zakon/Internet/History/HIT.html [2000, December].

