African-Americans and the Digital Divide

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INTRODUCTION

The Internet has become an integral part of America's entertainment, communication, and information culture. Since the mid 1990s, the Internet has become prevalent in middle and upper-class American households. Companies and government agencies are increasingly offering products, services, and information online. Educational institutions are integrating technology into their curriculum and are offering courses from a distance.

However, while some are advantaged by the efficiencies and convenience that result from these innovations, others may unwittingly become further marginalized by these same innovations since Internet access is not spreading to them as quickly. The 'digital divide' is the term used to describe this emerging disparity. Government analysts argue that historically underserved groups such as racial and ethnic minorities, rural and low-income communities, and older Americans are at a distinct disadvantage if this divide is not closed because American economic and social life is increasingly becoming networked through the Internet (National Telecommunications and Information Administration, 1995).

Over the last decade access to the Internet has increased significantly. A 2006 Pew Internet and American Life survey shows that 73% of U.S. adults (about 147 million adults) are Internet users, up from 66% (about 133 million adults) in 2005. And the share of Americans who have broadband connections at home reached 42% (about 84 million), up from 29% (about 59 million) in 2005 (Madden, 2006). African-Americans are increasingly accessing the Internet via home broadband connections, with a 121% adoption rate in 2005 (Horrigan, 2006). But does this mean that the problem of the digital divide has been solved? Is further research in this area warranted or has the digital divide become passé? In this article, we take on these questions by first reviewing major issues and trends in digital divide research. We do so by reviewing the digital divide literature as it relates to one historically underserved group, namely African-Americans. Next, we present a conceptual framework that contrasts 1) social and technological access perspectives, and 2) assetbased/resource and behavioral/use perspectives. The article concludes with our recommendations for future research opportunities for examining digital divide issues.

BACKGROUND

There have been numerous definitions for the digital divide, government and industry reports about the digital divide, and competing interpretations of the statistics contained in these reports. For instance, the digital divide has been defined at the What is Web site as "the fact that the world can be divided into people who do and people who don't have access to—and the capability to use—modern information technology, such as the telephone, television, or the Internet." Others (PRNewswire, 2000) offer another definition: "arguably the single, largest, and segregating force in today's world. If it is not made a national priority, a generation of children and families will mature without these tools that are proving to be the key to the future."

Most of our knowledge about the digital divide in the U.S. is based on survey research on computer and Internet access in the home, at work, and in public places. The most cited statistics are found in the digital divide series produced by the U.S. Department of Commerce (National Telecommunications and Information Association, 1998; 1999; 2000; 2002). Theses studies have found that the divide cuts along the lines of ethnicity and race, geographic location, household composition, age, education, and income level. However, these gaps are rapidly closing. In September 2001, 143 million Americans (54%) were using the Internet, and 174 million Americans (66%) used computers (U.S. Department of Commerce 2002). The gains are largest for low income families (those earning less than \$15,000 per year increased at a 25% percent annual growth rate versus 11% for households earning \$75,000 and above), and under represented ethnic and racial minorities (33% for Blacks, 30% for Hispanics, 20% for Whites and Asian American and Pacific Islanders). American Internet users are also engaged in a wide variety of activities-45% use e-mail, 36% use the Internet to search for products and services, 39% of individuals are making online purchases, and 35% are searching for health information (U.S. Department of Commerce, 2002).

In 2006, 73% of the U.S. adult population and 61% of African-Americans are online. These online African-Americans tend to use the Internet differently than other racial and ethnic groups. Novak, Hoffman and Venkatesh (1997)

fails to eliminate or even reduce broader feelings of cultural isolation among minority groups.

summarize previous research on African-Americans with regard to different media as follows:

African-Americans have the highest participation in radio and TV and the lowest participation in newspapers. In terms of our classification, it means that historically, they have participated in greater measure in entertainment-oriented technologies rather than in information oriented technologies. Previous studies have also shown that African-American ownership of telephones is lower than white ownership, which may be due in part to differences in income.

They go on to theorize that culture helps to explain these results. African-Americans have found their social expression historically through the arts, and have been less successful in gaining entry to other dominant domains such as business, education, technical employment, and professional occupations. Culture may also help to explain Spooner and Rainie's (2000) observation that online African-Americans are 69% more likely than online whites to have listened to music on the Web, and are 65% more likely than online whites to have sought religious information on the Web. Music and spirituality have traditionally been integral components of African-American culture.

Although African-Americans may use the Internet relatively less than other ethnic groups, they have more positive attitudes toward the Internet than do similarly situated whites (Mossberger & Tolbert, 2003). For instance, Kvasny (2006) found that working class African-American women believed that computer skills would prepare them for higher paying jobs, and improve their parenting abilities. In a study of Internet adoption in a community technology project, Youtie et al. (2002) found that African-American women were among the highest adopters of cable TV-based Internet devices.

Although African-Americans harbored favorable attitudes towards the Internet, these same technologies may have little impact on social inclusion. In a more recent study, Sipior, Ward, Volonino and Marzec (2004) examined the digital divide in a public housing community in Delaware County, PA USA. With thirty-one African-American participants with ages ranging from 13-65, these researchers concluded that effective community-based programs could help reduce the divide. While these interventions notably have improved computing skills about under-served groups, a one time shot

CURRENT DEBATES

Given the rapid Internet uptake by African-Americans and other under-represented groups, one of the foremost issues is whether a digital divide still exists. We contend that these debates about the existence of the digital divide result from a rather narrow treatment of a complex social phenomenon. In fact, many of the newer studies in this genre call for a rethinking of the digital divide (Warschauer, 2002; Gurstein, 2003; Hacker and Mason, 2003; Kvasny, 2003; Payton 2003; Payton forthcoming). In what follows, we organize a discussion of the current debates in the digital divide discourse. We do so through a framework (Table 1) that contrasts two perspectives of access (technological and social) and two perspectives of use (asset-based and behavioral). Technological access focuses on the computing artifact, while social access focuses on know-how and competence. Asset-based perspectives view the divide as a deficiency in requisite resources such as income or education that enable Internet use, while behavioral perspectives tend to focus on the effectiveness of Internet use. Although these perspectives are presented as separate categories, authors tend to draw from both categories. For instance, the argument that the digital divide is based upon a lack of access to computing artifacts and computer skills suggests a technological access/assetbased perspective. An argument that the digital divide emerges from a lack of understanding about how to use the Internet to further life chances adopts a social/behavioral perspective.

Technological and Social Perspectives on Access

The technological access view, with its focus on broad statistics on Internet diffusion and use rates, has led some policy analysts to assume that the answer lies in certain characteristics of the technology. Hence, policy solutions tend to employ technological fixes, such as, wiring public schools and libraries, and providing computing resources with Internet access in poorer communities (Norris, 2001). We

Table 1. Competing perceptions for examining the digital divide

Access Factors	Use Factors
Technological	Asset-based
Social	Behavioral

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