

Information seeking behavior of low income African Americans and the implications for collection development and information referral

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Abstract

In this paper I will examine the information search behavior of low income African Americans, using ISB models developed by Taylor, Belkin, Dervin and Bates, as well as the use of gratification theory on ISB as presented by Chatman and information channel research performed by Spink and Cole. Demographically, African Americans are disproportionately low income and urban based, with notable educational disadvantages. The target population is shown to rely on informal channels of information for health information and news, with a reliance on more formal channels for employment information. Implications for collection development include the need for community needs assessments as well as strategic partnerships with existing information channels already operating within the communities.

Socioeconomic and demographic profile

Demographic data from the U.S. census of 2000 show that there are 36.4 million African American people in the US, representing 12.9% of the total population. The African American population increased faster than the total population from 1990 to 2000, and, while the majority live in the South (54%), the population is highly concentrated in specific areas. The places with the largest African American populations were New York and Chicago (together accounting for 9% of the total African American population), followed by Detroit, Philadelphia and Houston, thus indicating that a large percentage (53%) of the population still resides in urban areas. This is down from 1970, when the African American population base in central cities was 60 percent. In 2000, 35

percent of African Americans lived in the suburbs (outside central city in metropolitan areas), compared to only 19 percent in 1970. “This shift in the Black population from central cities to suburbs is due to the corresponding shift of the manufacturing industry and job base from older urban centers.” (Jones, N.A., Jackson, J.S. 2005).

In 1999, African-American median household income was \$27,900, the highest ever recorded, but still far less than the median for non-Hispanic white households (\$44,400), and below all other race groups as well. Poverty is still a pressing problem in the African-American community. Even in 1999, when the poverty rate for African Americans was the lowest ever, at 24 percent, this was still about three times greater than the poverty rate for non-Hispanic whites (8 percent).

The median age (30 years) of the African-American population in 2000 was five years younger than the U.S. population as a whole which is a smaller gap than the previous census data demonstrated, indicating that African Americans are living longer than before, but still only 8 percent of the African-American population is over the age of 65, compared to 14 percent of non-Hispanic whites.

Educationally, African American high school graduation rates have increased, with census figures showing a graduation rate of 80%, but college graduation rates of 17% trail the non-Hispanic white population graduation rate of 28%.

The socioeconomic demographic profile still presents evidence that African Americans represent a disadvantaged population, economically and educationally, with disproportionate representation in low income, urban environments.

ISB theories and research

Much of information seeking behavior (ISB) research has focused on the needs and behaviors of students, since this is a population that is readily available and easy to study. There is little research on the ISB of low income, urban African Americans. One of the reasons for this may be that this group exhibits a low level of ISB outside the confines of its social realm. Therefore, the most relevant research has been in studies that examine particular populations within this group. I will explore first some seminal research in this field and then focus on the research done by two authors, Spink and Chatman, in an attempt to characterize the ISB of this population.

Seminal ISB research

Information seeking is a “problem-solving activity that depends on communication acts” (Marchionini, G. (1995). The research on information search behavior (ISB) is rich and varied. Some early models of ISB include those of Taylor, Belkin, Dervin and Bates.

Taylor, in the 1960s, theorized that there were four levels of information need: visceral, conscious, formal and compromised. An information need begins with the visceral perception where a lack of information is perceived, and the necessity to find the missing information becomes a dominant motivator. Then the information need is expressed, but in an abstract form. Next, the formal expression of the need becomes concrete and finally the compromised need is the action of formulating the need so that the resources at hand can satisfy it.

Belkin favored a cognitive approach in which every individual is in a “definable state regarding knowledge and that the existing state can be altered by some action by information specialists or system designers” (Budd, 2001). The definable state of the

seeker can then be matched with information retrieved using a set of terms or descriptors that can form a query. This approach seems to imply that the information need is a discreet entity that has a precise solution, which can be found if the correct term is used to find it. Research models the search process as progressing through successive levels. The beginning is a state of unease- a state indicating a perceived lack of information, often just a vague feeling. Belkin has called this state an “anomalous state of knowledge” (ASK). Although the information seeker realizes that he is missing something, he does not know what that is, and the task is to define the exact nature of the information need in cognitive terms that can be formulated into a query. The exact nature of the ASK is dependent upon many situational variables, including the contextual knowledge of the searcher as well as the specific motivations for the information seeking behavior. Belkin also has done much research in the area of specified searching. In an article entitled “Helping People Find What They Don’t Know”, Belkin poses a model of information seeking based on a particular type of search behavior, which he calls “specified searching”.

When people engage in information seeking behavior, it’s usually because they are hoping to resolve some problem, or achieve some goal, for which their current state of knowledge is inadequate. This suggests they don’t really know what might be useful for them, and therefore may not be able to specify the salient characteristics of potentially useful information objects. (Belkin, 2000, p.58)

Information seekers must confront three unknowns: what they don’t know (the information need), the nature of the database that they are querying and the vocabulary of the database (i.e. how to talk to the database). In essence, the state of an information seeker is akin to that of a foreigner in a foreign land, with no common language and unsure of the questions to ask to get where they think they want to go.

Belkin notes that typical information systems require a user to specify what he wants the system to retrieve. This requires that the user knows not only what he's looking for, but also the exact terminology that the system uses to classify that information. This is commonly known as "keyword representation" or "conceptual representation", as in the controlled vocabulary utilized by the database. This attempt at communication results in a multistage, interactive and iterative process whereby the system and the user exchange information that eventually establishes their common ground. The common technique for achieving this rapprochement is known as "relevance feedback", and the model can be visualized metaphorically as panning for gold: retrieving a sieve full of results, screening out the less appropriate and re-sifting the remaining results until the best examples are all that's left in the pan.

Along these same lines of establishing context for search behavior, some researchers are making a link between information seeking and communication research, arguing for more context sensitive analysis. Dervin has said that an objectivist approach is based on two assumptions: "One is that information can be treated like a brick; the other is that people can be treated like empty baskets into which bricks can be thrown." (Budd, 2001). She favors an approach that treats information as a subjective user "construct", an approach that seeks to understand how users construe information needs as well as how those same cognitive constructions affect the absorption of the search results. "The person's information need shapes what that person sees in the environment and what information that person will construct from the environment." (Spink & Cole, 2001).

Bates has encouraged broadening the focus of research in information seeking to include biological and anthropological factors as well as social and cultural factors. She argues that much information acquisition occurs through proximity in social interaction rather than through overt information seeking attempts. People operate in one of two modes- sampling and selecting or passive absorption. She proposes a model to describe the modes of information seeking along two grids: directed and undirected/ active and passive. Her conclusion is that “an enormous part of all we know and learn surely comes to us through passive undirected behavior, or simply “being aware”.

She suggests that actively searching for information is a relatively rare act in most lives- that most people get their information from their surroundings rather than seeking external sources.

It may be hard to realize today, but it was a surprise to early researchers to learn what a large percentage of the information people used--whether the general public or researchers--came from other people. When interest in this area first developed, researchers had to do what you always have to do at the beginning of work in an area--discover the basics. Not unreasonably, they had previously thought of information use in terms of the formal information system of paper, and only after some research realized how important other people were as information sources. (Bates, 2002).

Specific ISB research

Research on the uses of information channels derived from communication theories and research on the applicability of gratification theory shed some light on the specific ISB of this population.

Applying communication theory to information seeking, some research into the issue of information poverty has focused on information channels. (Spink & Cole, 2001). “The channel focus option stems from information science’s traditional interest in evaluating the delivery of user services in libraries and other information centers.”(Spink

& Cole, 2001). Channels can be formal (such as OPACS, indexes and librarians) or informal (such as conversations with friends, family or colleagues). One's use of a particular channel is dependent on the culture or microculture of the person. (Spink & Cole, 2001).

Chatman analyzed the ISB of poor African Americans in terms of gratification theory, which is the idea that certain populations place emphasis on the gratification of immediate needs rather than planning for the future. This theory involves six theoretical concepts about the characteristics of poor people: 1. low interest in information outside of their narrow, local social world, 2. low expectations for success resulting in not attempting new opportunities, 3. news is received largely through people like themselves, 4. a time horizon which is limited to the immediate present and the very recent past, 5. a view of their social world as local, unpredictable and often hostile, and 6. mass media as primarily an escape. (Chatman, 1991, p.438). This theory "attempts to address a central issue in studies of information use among poor people: even though their constrained environment is fraught with information problems, they do not appear to be active seekers of information that might address these problems." (Chatman, 1991, p.442).

ISB research findings

The ISB profile for low income, urban African Americans indicates a preference for informal over formal information channels, a suspicion of outside information sources, a need for information to solve problems relating to everyday existence, and a perception that most mainstream information sources were irrelevant to their information needs.

In a study of 300 households in an urban revitalization project in Dallas, Texas, Spink and Cole examined the channel preferences for information seeking of the group and found that their choice of information channels varied according to the type of information that was being sought.

The population was quite isolated from both its immediate community and the larger community of Dallas, with close to 85% reporting that they did not vote in local elections, 90% reporting that their children did not participate in school or community activities and 82% reporting that they did not use banks. Few residents reported being aware of the community services available to them through the Residents Association, and had no knowledge of who the Association members were.

The information environment for these residents “was largely focused on the need to know about what directly affected them- real life connections or the real life channel. Arranging the channels and the information needs in a circular model, it is seen that the formalness of the channel increases as the scope of the information changes from inner (news) to outer (employment).

Health information was accessed through the family physician: 53.9% of the participants reported this as their primary source of health information, followed by 30.9% who reported “family” as their primary source. Spink & Cole speculate that although the results show that the participants do not use formal channels for health information, this may be because they do not have this option, citing lack of access to computers and the Internet, as well as the limitations on the individual processing of such information caused by educational deficiencies.

Information sources for news events were, in order of importance: family, school, television and newspaper. “The importance placed on family and school reflects a focus on real life concerns with news as a real life interaction channel.” (Spink & Cole, 2001, p.7 of 21) Researchers have speculated that the low usage of newspapers as an information channel for poor people is due to several factors, including the negative images of poor people in newspapers, the presentation of events that are not amenable to the way poor people process information and the choice by poor people of more informal sources, such as family or friends) as a more reliable and relevant source of information on news events.

Information related to security issues was most commonly conveyed through neighbors (37.7% of respondents) with local security services next (34.5%) followed by housing management (29.8%), with family, friends and the Dallas police making up the rest of the channels. “People just beyond the household were important for assessing the security risks.”(Spink & Cole, 2001, p.8 of 21).

Residents indicated that they most often used newspapers as the source for information on employment (53.6%) followed by friends and family (31.4 and 22.5% respectively). At least one third had used the public library in the past year, while two thirds did not use libraries, computers or the Internet although they rated the importance of a computer lab and a literacy program highly.

In discussing the implications for developing the information resources for this population, the authors suggest that “...health information as well as employment information is...a best bet candidate for introducing Wynnewood residents to the use of online technology.” In discussing the delivery of news information, the authors stress the

importance of leveraging technology to make the news medium more relevant to the way that poor people process information, through the uses of interactive feedback loops that can present the information in a meaningful way. “It is the hypothesis that the Wynnewood resident was raised in an environment where information was processed in a group; thus the Wynnewood resident prefers to receive news information from family members. If this type of processing holds true for other types of information, like health and employment information,...then these other types of information may not be processed to a satisfactory extent.”(Spink & Cole, 2001, p.17 of 21).

In her study of janitorial workers at a southern university, Chatman found that they were living in an information impoverished world, and perceived that opportunities to improve on their present condition were minimal primarily because of “their perception that they don’t have any way to tap sources of information that might increase their advantage.” (p.443) The study examined data collected over a two year period from 1984-1986, using participant observation and an interview guide of some 28 questions. The participants were largely African American women, with an average age of 38, average educational level of tenth grade, head of household with three children and employed for seven years at minimal wage. The study took place at a major university in southeast United States.

The study showed that employment information came primarily through friends and family (42%) followed by newspapers (25%), with a majority responding that, although they were not happy with their salary level, they were not seeking another job (64%).

Chatman notes in her discussion of the research, that researchers have noted that the “casual, interpersonal exchange between family and friends” is a primary source of information among the poor. In her study she found that newspapers and television were the two primary sources for everyday information. While the use of mass media is not unique to the poor, what is different is that poor people are more motivated to change their behavior based on dangers that are reported in the mass media than are their middle class counterparts. “Both media provided information that reinforced beliefs about the insecurity of their social worlds (accidents, bank robberies, frequent contacts with the police)” (p.444)

Information acceptance relies upon two perceptions: one that the information is plausible, i.e. that it fits in with what is already known, and as such is information stemming from first hand experience and second that the source is credible. When asked what their most believable source of information, 36.5% said themselves, followed by 26.9% who said the Bible; mass media was also cited, with 13.4% listing television news and 9.6% newspaper news.

Chatman theorizes that the fatalism that is inherent in gratification theory, the influence of luck or chance on problem resolution, may explain why the poor do not more actively seek information that will resolve their problems. They have a passive approach to their environment. Television will be used over printed matter, mostly because of the difficulties in accessing printed records versus the ease of using a television. “For some member of the lower working class, their reality is so time-bound, so situational, that the library is not able to respond easily to needs other than those expressed by middle class life. Perhaps what this study illustrates most is our need, as members of an information

profession, to increase our knowledge of information steeped in everyday reality, its perception by specialized populations, and what we will need to accomplish in order to provide that information in its most accessible and useable form.” (p.448)

Needs assessment and collection development strategies

Libraries currently use needs assessment and community analysis to determine the information needs of their constituents. In the case of urban, low income African Americans, formal studies have been few, but those that have been conducted demonstrate a need for credible and relevant information that is provided to people where they are.

In an article examining the use of the Internet for health information by the elderly and African Americans, Detlefsen notes that both groups seem to prefer information from their health care providers but that both groups are “increasingly using the Internet for information searches” (Detlefsen, 2004). Although the author notes that there is little available empirical research on the topic of Internet health information among those of racial/ethnic populations” (p.5 of 9), she concludes that usage of this channel is increasing among African Americans, citing statistics that show increasing computer access and expressed intention to go online in the future as evidence of this trend.

Studies cited by Detlefsen include a University of Pittsburg study of 45 African American women, age 65 and older, in which data revealed that physicians were viewed as the most important source of health information followed by print and non-print media, family members and close friends. Health information was deemed to be important. Other studies cited by Detlefsen support this finding.

In this article, Detlefsen also reports on cultural competency concepts that are important for working with African American communities on health care information. These concepts include mistrust of majority providers, reliance on religion, spirituality and prayer, importance of humor, importance of respectful behavior, the use of gatekeepers and the importance of community opinion leaders and an interest in folk remedies and self-help. To meet these needs, web pages that are designed for this audience should be presented in a way that is compatible with community beliefs and that is tailored to the needs of these users who have lower literacy levels, as well as less computer experience. Access points should use the colloquial terminology of these users, “such as “sugar” for diabetes, “pressure” for hypertension and “the blues” for depression” (Detlefsen, p.5 of 9).

Press and Diggs-Hobson report on a partnership between the Mars Hill Graduate School and a community organization known as the African American Reach and Teach Health (AARTH) to provide health information services to low income, African American faith communities in the Puget Sound area. The information deemed to be of importance was collected through a community assessment that included questionnaires, interviews and direct questions to members of the population. The AARTH pastors and their congregations were concerned about the health disparities of African Americans. In this partnership, the library provided outreach services to the community, working with the churches to provide healthcare information in churches on Sunday mornings, at church faith meetings, church fairs and classes and providing information in short print formats to fit on the pages of weekly church bulletins. The authors note that it is crucial for institutions to go where the people are to reach them, and not wait for the people to

come to them. “Do we attempt to change the information-seeking traditions of every community member or do we offer learning opportunities to the current providers of health information? The chances for effectiveness are infinitely greater when we help a few people do better what they already want to do well rather than attempt to change everyone.” (p.3 of 7). To do this it is necessary to find out where people are currently seeking health information, encourage those patterns and improve them. “Librarians may be the best people at discerning information need and finding appropriate information to fill that need, but others may be better at interfacing with the individual or the community. The method by which librarians can help communities is through partnerships, where a community sees the librarian as a help in fulfilling community needs and the librarian sees the community’s organizations and individuals as a means of carrying out the library’s goals.” (p.4 of 7). The author notes that learning is best accomplished when the teacher is similar to the learner and can present information using models that are mutually familiar to both. Another critical role for libraries is to make the information more accessible and serve as community advocate in securing and deploying appropriate resources, such as funding for computer equipment.

Hoffman and Novak note that African Americans and whites differ significantly in access to computers and Internet usage. In their analysis of 1997 data collected by the CommerceNet/Nielsen Internet Demographic Study, they show that whites are more likely to have used the Internet (26% vs. 22%) and are more likely to have a home computer in their household (44.2% vs. 29%). Income, more than race, explains home computer ownership with increasing levels of income corresponding to increasing likelihood of computer ownership, regardless of race. Data shows that African

Americans are more likely than whites to have computer access at work. In a separate analysis of students, results show that 73% of current white students own a home computer while only 32.9% of African American students own one. In analyzing web access among students lacking a home computer, whites are more likely to access the Internet using alternative means of access: "It is strikingly apparent that white students are much more likely than African American students to have used the Web at locations other than home, school or work, regardless of whether there is a computer at home. It is likely that white, but not African American students, are able to take advantage of non-traditional locations including homes of friends and relatives with home computers, and libraries and community centers with Internet access. Our results suggest strongly that, in terms of students' use of the Web, particularly when students do not have a home computer, race matters." (Hoffman & Novak, (1998, p. 7).

The authors cite the importance of creating access points for African Americans in libraries and community centers and encouraging their use in these locations to bridge this digital divide.

They show that computer accessibility from home is the single largest determinant for Internet usage: "Ensure access and use will follow. Access to a personal computer, whether at home, work, school or somewhere else, is important because it is currently the dominant mechanism by which individuals gain access to the Internet...the adoption of inexpensive devices that enable Internet access over the television should be aggressively pursued, especially for African Americans." (Hoffman & Novak, 1998)

Conclusion

The information needs of the urban, low income African American population center around the immediate needs of surviving daily life, with health, news and employment information being the most often identified needs. This community will benefit from improved access to online Internet resources, but those resources must be presented in culturally relevant and accessible modes to be useful or accepted. The challenge facing librarians is to identify the sources that are currently in use within these communities, and then to improve the information available to those sources in order to provide the best possible information to satisfy the community's needs.

In a quote from an online publication called *The Black Collegian*, Jones and Jackson create a vision for future directions in the evolution of equality of opportunity for African Americans:

We must develop policies and strategies that benefit the challenging and complex relationships between African Americans and all members of American society. In effect, we must develop a truly cooperative approach. Imagine a society in which all racial minority groups come together with a unified voice to further the common good of all in social, economic, and political arenas. Such a reality would provide new means for embracing our diverse ethnicities as *social categories*, instead of distinct boundaries for which we should fight to gain separate power and resources. But how exactly will we achieve this dream? Recent research calls for a "multiracial civil society" in which pluralistic coexistence is the hallmark. Embracing and cherishing racial and ethnic difference will enable us to work together to further society's common good. The most important ideal of this future of racial harmony depends on the extent to which all races and ethnicities are included in this society. Essentially, the equality of opportunity will truly be realized when we see a corresponding equality in outcomes. (Jones & Jackson, 2005).

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