Media Construction of HIV

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by

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The undersigned, appointed by the dean of the Graduate School, have examined the thesis entitled

MEDIA CONSTRUCTION OF HIV

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and hereby certify that, in their opinion, it is worthy of acceptance.

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DEDICATION

I dedicate this master's Thesis to my family and my community, who have always supported me. A special thank you to my mother, Heather Brown, and her many sacrifices.

I decided to pursue master's degrees in public health and journalism, just as the Covid-19 pandemic was underway. These have been unprecedented times, and I have experienced great losses, which I have not had quite enough time to process.

My nana Carrolyn Elane Smith (1947-2021)

My dear friend Marco Castro-Bojorquez (1968-2021)

My dear friend Tiffany Marrero (1991-2023)

This thesis is an opportunity to reflect on nearly a decade of living with HIV (Human Immunodeficiency Virus). I want to take this opportunity to say everything that I needed to say about the social challenges of living with HIV, and somehow move on. At least for a while. Although HIV is such a small part of my health, managing illness and stress has had an impact on my academic journey. Fortunately, my friends Kia Price, Evonnia Woods PhD, Demario Richardson, and D. Rashaan Gilmore have been no more than a phone call away.

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I dedicate this Thesis to all of you.
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ABSTRACT

Many of the challenges experienced by people living with HIV relate to biases, stigma, and conceptualization of HIV, rather than to the scientific realities of the virus itself or the medical impacts of living with the virus. This study uses the loosely defined theory of Media Construction of Social reality, described by Fengmin Yan as a process involving gatekeeping and framing. The Null Hypothesis is that media sources do not influence dependent variables and do not differ from the those who receive information from friends or family members living with HIV, is not supported. Receiving information from Friends or Family Members living with HIV is negatively correlated with HIV knowledge ($r=−.177$, $p<0.001$) and not significantly correlated with knowledge of HIV ($r=−.089$, $p=0.055$). HIV Knowledge and HIV Stigma appear to be statistically unrelated ($r=0.027$, $p=0.576$).
INTRODUCTION

Media has played an important role in the HIV response since the onset of the epidemic. Communities at risk for HIV leveraged media to express their desperation and humanity in response to a government and American middle class that was largely apathetic toward gay men and people of color. Media primarily serves as an agenda setting method for HIV, with short term goals. One gap in the literature is the long-term effects of HIV in media, and the ways that exposure to various forms of HIV media shape views and behaviors toward and around the HIV virus and people living with HIV (PLHIV).

The first reported cases of the syndrome that would come to be known as AIDS, were made June 5th, 1981, in a Morbidity and Mortality Weekly Report published by the CDC. By August of that year, Film Producer Larry Kramer hosted more than 80 gay men in New York, to raise money in response to the epidemic. At that time, advocate groups primarily comprised of LGBT identified people fought for greater visibility and federal intervention against the epidemic (HIV.gov).

In 1983, a group of 12 white gay men drafted a manifesto titled the “Denver Principles”, at the fifth annual Gay and Lesbian Health Conference in Denver Colorado. The Denver Principles demand that People living with HIV (at the time “AIDS”) be regarded as subject matter experts, and that people living with HIV be protected from discrimination, be entitled to full and satisfying sexual and emotional lives, and that PLHIV organize and form caucuses on behalf of their community. Thus, beginning a movement for the self-determination of PLHIV (The Denver Principles).
HIV has been used in media through the history of the epidemic to mobilize the LGBT community, expedite FDA approval processes, HIV prevention messages have been featured in popular media, and many public figures have come forward as living with HIV over the years. The way that people come to understand HIV is determined by the way that they access HIV information. In this way, the social reality of HIV is media constructed.

HIV is a very real issue impacting millions of people worldwide. There are approximately 1.2 million people (about the population of New Hampshire) living with HIV in the U.S. alone. However, HIV stigma and misconceptions about HIV poses an additional threat to the health and safety of those already living with the virus. It is known, for example, that a strong support system is associated with better health outcomes among PLHIV. HIV stigma is also known to create barriers to engagement in care, and a deterrent to HIV testing. These attitudes and behaviors directly impact health outcomes for PLHIV (HIV.gov).

The purpose of this research is to determine how exposure to various types of media contribute to a false media constructed reality of HIV. Popular media, for example, was once the only way to educate communities about HIV risk and methods of HIV prevention. On the other hand, popular media is intended to entertain, and has no obligation to provide credible health information. Madonna’s 1992 Erotica album is one such example, where perspectives of the day regarding HIV were heavily featured and framed in relation to sex, death, and gay culture. Although the perspectives reflect a specific point in time (1992) Madonna’s contribution to popular culture remains relevant (Storrow, L. 2017).
Of course, public health and medical professionals are among the best sources for credible information about HIV risk and treatment. However, comprehensive sexual health education remains politicized, and many states opt for abstinence-only education. School-based sexual health programs are not always inclusive of sexual and gender diversity, which can impact the relevance of provided education. Public Health and medical professionals are also not immune to propitiating HIV stigma and outdated HIV information if they are not properly trained on the subject.

News Media is another source of HIV information, but the accuracy of information and the presence of HIV stigma is variable depending on the reporter’s familiarity with HIV. Frequently, news stories are published about HIV criminalization, involving PLHIV accused of non-disclosure of their HIV status. These stories are especially stigmatizing, framing consensual sex as punishable by law, due to one having HIV. HIV criminalization also places the responsibility of HIV prevention solely on the person living with HIV.

Other sources of HIV information include social media and pornography, which are both subject to bias. User generated content has a low degree of credibility. Although pornography is a primary source of sexual education for many, pornography has no obligation to provide health information.

The media construction of HIV is especially relevant to the lives of PLHIV, given the media’s influence over behaviors and attitudes regarding the virus.
“Media Construction” refers to the ways that media redefines or alters the understanding of a concept. “Media Construction” as a term, is often used to explain media’s role in upholding interpretations of certain concepts within a system.

There exists no concrete definition for the concept of “Media Construction”. Although there is a general understanding of what is meant by the term, there is quite a bit of variation in interpretation of the term. According to researcher Stephen Pollock, “The media can act as a socializing agent by constructing reality and then disseminating this reality to the mass public. The “social” element comes into play when upon receiving the media’s “reality” message, the vast majority agree upon this reality and accept it. Following this pattern, social construction may be more appropriately referred to as social agreement of reality.”

In the article “MEDIA AND THE SOCIAL CONSTRUCTION OF REALITY: Toward an Integration of Theory and Research”, Adoni and Mane suggest that media construction can be understood as an extension of Media Dependency Theory. First introduced by Schutz, Berger and Lockman in 1967, Media Dependency Theory attempts to explain reciprocal relationships between media, society structures, and audiences.

According to Adoni and Mane’s interpretation of the Media Dependency model, three realities exist simultaneously: Objective Reality, Symbolic Reality, and Subjective Reality. Objective reality, which represents the experienced objective world. For the purposes of this research, Objective Reality refers to the reality of the HIV virus and the experiences of those living with HIV. Symbolic Reality refers to any number of expressions of objective through art, literature, or media. Within this study, Symbolic
Reality represents various media sources referencing HIV in any way. Subjective Reality refers to larger systems and institutions such as “public opinion” or “the social order”.

**LITERATURE REVIEW**

The impact that HIV has had on the U.S. media cannot be understated. Initially, cases were underreported, beginning with a single CDC report in 1981. As advocates fought for greater visibility of the growing epidemic, media coverage of the HIV epidemic peaked in 1987 at over 5000 news stories with the approval of AZT as treatment for HIV. According to a 2004 article published by the Kaiser Family Foundation (KFF), the number of HIV-related news stories began to decline at a fairly linear rate to fewer than 1000 stories in 2002. In that time, HIV cases continued to increase from fewer than 100,000 to nearly 900,000 (Brodie 2004).
Among the reasons for the decline in media coverage is the idea of “Media Fatigue”. Researchers of KFF believe that audiences in the U.S. and journalists were no longer interested in stories about HIV, as the focus of the epidemic turned more global in scope, even though the epidemic continued to progress at the time (Brodie 2004).

In reference to declining trends of news stories related to HIV, it is worth mentioning that many stakeholders in the fight against HIV, and coalitions established in response to HIV were also supporters of marriage equality, which was gaining momentum through the mid 90s to the mid 2010s.
The media plays a critical role in informing the public about HIV, yet a great deal of ignorance about HIV and stigma against people living with HIV persists. According to a 2003 survey by the KFF, “72% of the U.S. public said that most of the information they get about HIV/AIDS comes from the media, including television, newspapers, and radio.” In comparison, GLAAD reports that 56% of non-LGBT respondents to the 2021 “State of HIV Stigma Study”, report seeing stories about HIV in media. A different KFF study conducted in 2009, found that 62% of respondents access HIV information from the media, 13% from doctors or health professionals, 12% from school, 5% from family or friends, and 7% from other sources (Brodie 2004).

The same study by GLAAD found that 48% of respondents feel knowledgeable about HIV in 2021, compared to 51% of respondents in 2020. In addition, 53% of medical professionals, 44% of hair stylists and barbers, and 35% of teachers report discomfort around PLHIV. Regionally 54% of non-LGBT respondents in the South, 54% in the Midwest, 45% in the Northeast, and 45% in the west report discomfort around medical professionals living with HIV.

According to a 2009 survey of the HIV epidemic conducted by KFF, 14% of respondents report they had heard, seen, or read a lot about the problems of “AIDS” in the past year. 31% responded “some”, 42% responded “only a little”, and 12% reported nothing at all. 6% of respondents name HIV as the most urgent health problem facing the nation in 2009, down from 44% in 1995. When asked how concerned they are about their risk of HIV, 13% report “very concerned”, 12% report somewhat concerned, 23% report “not too concerned”, and 50% report “not at all concerned”. It is worth noting that 38% of African American Respondents report “Very concerned to this question”.

The 2009 KFF survey measured some common misconceptions. For example 55% of respondents do not know that “A pregnant woman with HIV can take drugs to reduce the risk of her baby being born infected”. 18% do not know that “There is no cure for AIDS at present”. 12% of respondents do not know that “There are drugs that can lengthen the lives of people living with HIV”. 27% of respondents believe that “Magic Johnson has been cured of AIDS”. 24% of respondents believe that “There is a vaccine available to prevent people from becoming infected with HIV”. 17% of respondents believe that “There are drugs available that can cure HIV and AIDS”.

The idea that HIV is media constructed suggests that the media shapes the social existence of HIV. In a literal sense, HIV is a virus, but individuals and groups of people interact socially with the concept of HIV in ways that extend far beyond viral processes. One such example of the social reality of HIV is the recent ruling by federal Judge O’Connell Reed of the Northern District of the State of Texas. Judge O’Connell Reed determined that free coverage of HIV prevention drugs (PrEP) are a violation of religious freedom. In justification of this ruling Judge O’Connell Reed states, “[PrEP] facilitates and encourages homosexual behavior, intravenous drug use, and sexual activity outside of marriage between one man and one woman” (James A. 2022).

Judge O’Connell Reed’s reasoning is easily challenged by literature that would suggest that cisgender heterosexual women experience HIV risk most often from their primary partner, rather than non-monogamous sexual activity. The dissonance between the two understandings of HIV risk, transmission, and people impacted, suggests that there are two separate understandings of the virus. There are many such examples of HIV influencing social interactions through precautions taken to reduce transmission risk,
shame felt regarding an HIV diagnosis, vilification of those living with HIV, and compassion toward those who have been impacted (O’Leary A. 2000).

The concept of Media construction is derived of the concept of social construction. Social construction (SC), is a theory that “assumes that people construct (i.e., create, make, invent) their understandings of the world and the meanings they give to encounters with others, or various products they or others create; SC also assumes that they do this jointly, in coordination with others, rather than individually.” Language is considered an essential component of social construction as language determines the nature, method, and interpretation of social interactions. Linguistic idealism theorist Andrew Fisher suggests that all of reality is a product of language, and that language also determines the way that the human brain experiences the world. At the most granular level, it is believed that language constructs all of social reality (Gaskin, R. 2022).

Susan Sontag conducted a detailed exploration of AIDS and Its Metaphors. In Sontag’s discussion, she mentions the frequent framing of “AIDS” as a plague. Sontag explains that “AIDS”, when first introduced to the public, assumed many of the meanings and connotations associated with cancer and syphilis. “AIDS” came to represent impending death by way of blood. In response, medical and public health professionals respond by framing “AIDS” within the context of war and use of war-like metaphors, which induce violent imagery.

As viruses attack other cells, runs the metaphor, so ‘a host of opportunistic diseases, normally warded off by a healthy immune system, attacks the body,’ whose integrity and vigor have been sapped by the sheer replication of ‘alien product’ that follows the collapse of its immunological defenses. ‘Gradually weakened in months, but almost always within a few years of the first symptoms.’ Those who have not already succumbed are described as ‘under assault, showing the telltale symptoms of the disease,’ while millions of others ‘harbor the virus, vulnerable at any time to a final, all-out attack.’
Michael Polgar outlines a logical approach to understanding HIV as a social construct, in the article “Social Construction of HIV/AIDS: Theory and Policy Implicitizations”. Polgar organizes HIV discourse into five separate social constructions, much like communications researcher may organize media content into separate frames. The five categories Polgar uses are: Medical, Epidemic, Organizational, Moral, and Political (1996).
### Five Social Constructions of HIV and AIDS

<table>
<thead>
<tr>
<th>Medical Authority:</th>
<th>Epidemic Authority:</th>
<th>Organizational Authority:</th>
<th>Moral Authority:</th>
<th>Political Model:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science &amp; Biomedicine</td>
<td>Behavioral Science</td>
<td>Health Administration</td>
<td>Church</td>
<td>State</td>
</tr>
<tr>
<td>Rational, scientific</td>
<td>Cultural</td>
<td>Bureaucratic</td>
<td>Religious</td>
<td>Political, economic</td>
</tr>
<tr>
<td>Virus, infection, HIV-disease, AIDS</td>
<td>Risk behaviors, health services</td>
<td>Occupational health, organizational dynamics</td>
<td>Individual standards, behavior</td>
<td>Unequal impact, silence, neglect</td>
</tr>
<tr>
<td>Research, testing, and treatment</td>
<td>Public education &amp; prevention campaigns</td>
<td>Specialization, universal precautions</td>
<td>Abstain, avoid, restrict contact</td>
<td>Protest, educate, resist, survive</td>
</tr>
<tr>
<td>Virus, bodily disease</td>
<td>Epidemic, STD, social disease</td>
<td>Infectious disease, occupational hazard</td>
<td>Fall from grace, sin, evil</td>
<td>Danger, health problem</td>
</tr>
<tr>
<td>Blood, medical waste, universal precautions, color codes and barriers</td>
<td>Geographic, graphic, and numeric indicators, safer sex and injection supplies</td>
<td>Organizational behavior, infections, precautions</td>
<td>(Gay) plague</td>
<td>Stigma</td>
</tr>
<tr>
<td>Best medical treatments, HIV and immune function, vaccination and cure</td>
<td>Infection and transmission routs and rates, prevention effectiveness</td>
<td>Safety requirements, allocation of resources, non-discrimination</td>
<td>Moral behavior, protection of innocents</td>
<td>Responsibility, accountability, access</td>
</tr>
</tbody>
</table>

**Fig 2** – taken from Social Construction of HIV/AIDS: Theory and Policy

Implicitizations, by Michael Polgar (1996)

Polgar’s Five Constructs Model each HIV construct category is upheld by an institution, deriving a specific source of authority. Within each construct category, HIV poses a specific kind of threat to society, which requires a specific response depending on the construction category. Polgar also identifies metaphors and symbols associated with
HIV according to each construct category, and a specific question each construct category aims to answer. Communications professionals may recognize a striking similarity to research regarding the use of frames (1996).

For example, the medical construct category of HIV is upheld by the institutional authority form science and biomedicine, which is based on rationality and science. According to this construct category, HIV poses a threat as a virus or infection (specific to an individual). In response to this problem, research testing and treatment are conducted. Metaphors associated with HIV in this construct category is the prototypical virus or bodily disease. Associated symbols include blood, medical waste, universal precautions, color codes and barriers. This construct category intends to identify the best medical treatments, identify immunity, and develop a vaccine or cure.

The primary challenge of explaining the media construction of HIV, is the fact that no agreed upon definition of media construction exists among scholars. Unfortunately, media construction has come to mean something different to every expert (especially when comparing one discipline to another). The distinction between the concept of social construction and media construction would suggest that media construction emphasizes a more direct impact on the subjectivity of social reality. Whereas it has long been established that language alone is the quintessence of social construction.

1992 article “Media Images and the Social Construction of Reality” discusses the many stakeholders in media. The article discusses the many corporate interests involved in popular media, and the consolidation of power and influence. Williams states that media frames are the same as schema in psychology. He argues that Frame theory is not
enough effective at assessing the state of the media. The effect of the consolidation of media power has the effect of fragmenting information and distorting meaning. This conclusion may support the case for cultivation theory (Gamson, W. A. 1992).

Political Science professor Vanj Nisic’s 2001 “The Role of Media in the Construction of Social Reality” argues that media construction of social reality is a method of social control. According to Nisic “The structure of the media is very similar to other structures, aimed at producing intellectual and business elites that will support the interests of powerful groups of individuals”. The article argues that media keeps audiences passive as “A state that can not control people by force, is controlling their thoughts”. The argument is made that reality shows of the day are keeping people from engaging the issues of the day such as “poverty, risks, financial slavery, and ‘colonization of the human body’.

“Media construction of Social Reality and Communication Impact on an Individual” by Denis Chistyakov in 2020, states that digital media has become increasingly subtle in it’s influence over audiences. According to Chistyakov “actual concepts of media impact on a person in their process of constructing a social reality, which, in turn, acts as an unreal and unbiased world”. Chistyakov states that media is at times anti-communicative as conversation often occurs in one direction (to the consumer), and ideas are presented to the consumer as if they are the consumer’s own. This article may also support a case for cultivation theory, as Chistyakov seems to suggest that media is internalized without one’s conscious awareness.

Adoni, H introduces a model for understanding media construction based on Stephen Pollock’s Media Dependency model. Adoni’s model offers a basic framework
for understanding media construction. According to Adoni, three realities exist: Objective reality, Symbolic Reality, and Subjective Reality. Objective reality represents the objective world. Symbolic reality represents systems and institutions. Symbolic Reality represents all forms of art and communication. Within each of these realities, every individual falls along a continuum depending on how closely they interact with elements of a given reality. For example, one’s positioning within an institution may impact the distance between the individual and given elements of the social reality. Similarly, one’s ability or location may affect their proximity to aspects of the objective reality. Lastly, the ways that one interacts with, or accesses media may impact their proximity to aspects of the symbolic reality (Adoni 1984).

Fig 3 (Adoni 1984).

According to this model, many different areas of communications inquiry may be grouped according to the interactions between either objective reality and symbolic reality, subjective reality and symbolic reality, or a holistic analysis of all three. For example, a study of the interaction between symbolic reality and objective reality may
include studies on how magazines impact attitudes toward minorities. Studies involving Subjective reality and Symbolic reality include agenda setting studies. More holistic research includes studies of the Frankfurt school, interested in the ecological role of media within culture and society (Adoni 1984).

Research comparing media exposure and knowledge of and attitudes toward HIV and PLHIV, likely fall into both categories of Symbolic reality and Objective reality, as well as Symbolic reality and subjective reality. This is because elements of this inquiry involve comparisons of media to an objective reality such as the lived experiences of PLHIV, and stigma which is similar to a political position (subjective reality). However, this study is not holistic, as the intent of the study is not looking at the entire system. Specifically, the study is not looking at the way that HIV impacts media within the larger ecology.

One important aspect of HIV media is HIV-related stigma. The CDC defines HIV stigma as “negative attitudes and beliefs about people with HIV. It is the prejudice that comes with labeling an individual as part of a group that is believed to be socially unacceptable.” Also offering the following examples:” Believing that only certain groups of people can get HIV, making moral judgments about people who take steps to prevent HIV transmission, Feeling that people deserve to get HIV because of their choices.”

Although accurate, the CDC’s definition does not clearly communicate the full scope of HIV stigma and the full impact such stigma has on public understanding of the virus. HIV stigma is believed to have a direct impact on and prevention behaviors and HIV treatment outcomes. Prejudices, misinformation, and inaccurate perceptions of risk directly influence decisions to seek HIV testing or choose HIV prevention methods such
as condom use and PrEP (pre-exposure prophylactic medications). Stigma may also influence one’s decision to seek medical care, and actively engage in medical care.

Even Though HIV stigma harms the public health in the US, the vast majority of research on HIV stigma in communications comes from countries outside of the US. Chunbo Ren identified several patterns and frames within Chinese media, in 2010 at a time where China planned to use mass media to increase awareness and reduce HIV stigma. Though well-intended, Ren claims that media, including attempts to reduce HIV stigma, included stigmatizing content. Ren identified HIV stigma in terms of frames that present HIV as a threat (war-like) “war against AIDS”, metaphors comparing HIV to a plague or moral judgment, and the classification of impacted communities as “other”. These stigmatizing frames appear in article characteristics, HIV/AIDS information, photographs, HIV/AIDS stigma or anti-stigma articles, and the tone of anti-stigma articles.

Kathryn Wenham conducted a discourse analysis of Australia’s depiction of the HIV pandemic in Sub-Saharan Africa. As the global HIV pandemic response involves many different stakeholders, the tone of global dialogue directly impacts programmatic and philanthropic support. Wenham concluded that the discourse is unbalanced, as the Australian media prefers to give voice to industrialized nations. Views often support decisions made in favor of industrialized nations, and include racist undertones.

Evonne Kiptinness uses the concept of framing of HIV in the direction of media construction, in her analysis of Kenyan newspapers. Her research is all the more significant with Kenya, having one of the highest prevalence rates of PLHIV in the continent of Africa. Kiptinness examined articles between the years 2011 and 2015 and
concluded that a victim frame was prevalent in most media stories, as well as the regard for those at risk as “other.” Kiptinness’ research contributes to a growing body of research related to women’s reproductive health, which is also important to note within a victim frame.

A study by Mark Connelly acknowledges the social construction of HIV. Connelly claims that HIV is used as a device during times of political change. Framing of HIV is often war-like, using PLHIV as a scapegoat, “The disease… destroys the body’s immune system and allows a variety of opportunistic organisms to invade…” Another such example: “We have a desperate and pressing need to wage a war on all fronts to guarantee… good health.” Some articles referred to government and public health respondents as commanders and leaders in the war against HIV/AIDS. Connelly claims that the overuse of war metaphors depends fundamentally on the personification of HIV. Presenting the virus as a dark and mysterious enemy, associated with drug use and LGBTQ+ communities.

**METHOD**

If HIV is media constructed, and the media source determines attitudes and knowledge of HIV, then those who identify a friend or family member or public health departments and medical care providers as their primary source of health information on HIV will demonstrate lower levels of HIV stigma, and higher levels of HIV knowledge. This is because the those who receive information from a friend or family member, or from a medical or public health professional are likely to have first-hand experience with HIV, and don’t rely on media interpretation.

**Hypothesis**
I hypothesize that those listing personal experience with PLHIV as their primary source of HIV information will produce scores that correlate significantly in a positive direction with HIV Knowledge and negatively for HIV stigma compared to the sample average and those who rely primarily on traditional media for their HIV information. The Null Hypothesis is that media sources do not influence dependent variables and do not differ from those who receive information from friends of family members living with HIV.

**Research Question**

In this study, I will attempt to apply the theory of media construction to describe the social impact of HIV. The theory of media construction of social reality suggests that gatekeeping and media framing influence social perceptions of the world to such an extent that perceptions of reality are a product of the media source. This study will attempt to answer the question, “Does exposure to various media outlets affect the ways that audiences construct the social reality of HIV?”

According to researcher Stephen Pollock, “The media can act as a socializing agent by constructing reality and then disseminating this reality to the mass public. The “social” element comes into play when upon receiving the media’s “reality” message, the vast majority agree upon this reality and accept it. Following this pattern, social construction may be more appropriately referred to as social agreement of reality.”

**Operationalizing “HIV construct”**

The concept of “HIV” as a social construct has to be separated from the concept of the “HIV” virus of lived reality. For the purposes of this research, the HIV construct may be broken down into HIV-related social stigma and HIV-misinformation. Both of
which are measurable, with existing survey tools. The lived reality and scientific reality of HIV is not measured in this study, but refers to accurate up-to-date science regarding HIV as well as the lived experiences of those with the virus.

This study is designed as a correlational survey research study, examining the relationship between the sources of media and their impact on HIV knowledge and HIV stigma. The independent variable in this study is the source of media, and the degree to which each participant consumes media as a source of HIV education. The independent variable will be measured along with other demographic information by asking participants to identify which sources of media they have received HIV information from.

Variables

The dependent variable “HIV construct” is measured in two parts. The first part consists of an HIV stigma measure. This study will use an 18-item scale developed by the Public Health Agency of Canada in 2009. This scale asks specific questions pertaining to attitudes and behavior toward people living with HIV. This scale includes questions such as: “People living with HIV should be ashamed...” as well as “People who are suspected of having HIV/AIDS lose respect in the community.” Participants are asked to score each answer from 1 (disagree) to 5 (strongly agree).

In addition, portions of a 2006 inventory developed by the U.S. Agency for International Development will be used. The portions used will only pertain to community level indicators of HIV stigma, rather than care-provider stigma or internal stigma experienced by people living with HIV. Indicators fall into the following categories: Fear of causal transmission and refusal of contact with people living with HIV, values (shame, blame, and judgment), enacted stigma (discrimination), and
disclosure. Categories are mostly self-explanatory, such as “fear of casual transmission”. The “Values” category intends to measure attitudes related to shame, Blame, and judgment toward people living with HIV. “Enacted stigma” includes questions about behaviors directed at people living with HIV or how people with HIV are to be treated socially. “Disclosure” is described in the literature as a proxy for stigma and discrimination, as people living with HIV are often expected to disclose sensitive personal information pertaining to their HIV status. Questions are asked in a yes/no format.

The other portion of “HIV construct” that will be investigated, is misinformation about the topic. This variable will be evaluated using a Health Knowledge assessment. The “HIV Knowledge Questionnaire” or HIV-KQ-18, is an 18-item questionnaire of questions about HIV transmission and prevention, developed by Carey, M.P, & Schroder, K. E. E. in 2002. This version of the questionnaire is adapted from a 45-question survey that goes into more detail. As this study is combining several different measures, this abbreviated version seems the most appropriate in order to ensure that participants remain engaged in the survey process. All of the pre-developed measures include scoring guides to interpret results. Once data is collected and recorded, statistical tests can be used to interpret correlational relationships. Answers are given in “Yes”, “No”, or “Don’t know”.

**Procedure**

This study will use a randomized online sample of adults above the age of 18, representative of the racial, ethnic, and geographic demographics of the United States using Qualtrics survey and recruitment services. The survey will be nationally
representative in terms of race and age, and include samples from all regions of the country.

The survey can be completed online and should take no more than 20 minutes to complete. The first section of the survey will be a consent form and study summary explaining the intent of the research and detailing how the data will be used per the IRB agreement. Then a code will be assigned to anonymize data, in the event that someone must withdraw their survey from the study.

The first section of the survey will collect demographic data such as: age, race, region of the country, education level, if they know someone who is living with HIV. Any one of these variables may impact the sources of HIV information available or the ways that sexual health education is provided, as well as an account of media exposure over time. Media coverage of HIV has evolved over several decades and should be accounted for in the statistical evaluation process.

The next section will focus on the independent variable, by including questions about sources of HIV information. Sources may include news media and trusted media and other authoritative sources of information such as medical/public health professionals, personal experience. Along with each selection, participants will be asked to estimate how much of their knowledge of HIV each of the selected sources is responsible for using a ranking system.

The fourth section of the survey will include the 42-item HIV stigma questionnaire created by Marianne Beaulieu. Followed by the Segment from the 2006 “Can we measure HIV/AIDS -related stigma and discrimination?” tool created by USAID. Then the HIV-KQ-45 will be administered last.
Why This Approach?

Although the application of media construction theory to HIV is novel in some ways, the idea that HIV is somehow socially constructed and subject to media manipulation is not new. To date, scholars have investigated the subjective characteristics of HIV through metaphor, policy analysis, HIV stigma, and through frame research conducted outside of the U.S.. This study intends to apply quantitative analysis to establish the subjective nature of HIV as it exists in social reality. This is done using an operational definition of HIV construct, consisting of a measure combining HIV stigma and knowledge of HIV.

Although convenience sampling does allow for bias, convenience sampling is the most feasible method of recruitment. Demographic questions are included in surveys to account for potential confounding variables. Surveys are in abbreviated form, as to keep the total number of questions short, allowing for shorter survey time.

Statistical data is useful for describing relationships between variables and creating visualizations. If a relationship between media access and HIV construct can be established quantitatively, this research can serve as a basis for further investigation of the media construction of HIV, as well as furthering the theory of Media Construction of Social Reality.

Weaknesses

It is important to take note of potential confounding variables in this study. Stratified sampling is a potential threat to validity both internal and external because it depends on clusters pre-determined by the researcher. The reason for using a stratified sample is to ensure that the sample is as nationally representative as possible. A random
sample would be the most valid sampling method, but using Qualtrics, it is necessary to specify the parameters of the sample required for this study.

Analysis

The purpose of this research is to determine a relationship between types of media accessed for HIV information, and the degree to which participants have a media constructed concept of HIV. The primary statistical analysis needed to establish this relationship is a regression analysis. An regression compares the relationships of independent variables against a dependent variable to describe the degree to which independent variables impact the dependent variable.

In this study, groups will be defined according to the primary sources of HIV information. A regression will be used to determine weather media sources are related to HIV construct scores (defined as a high level of HIV stigma and low level of HIV knowledge) in a linear way. This will be done by comparing HIV construct scores with each media source on a scale from much exposure to none. If there is a significant impact of one media source on the level of HIV stigma or HIV knowledge, then the Null Hypothesis is rejected, and it can be assumed that media access informs the media construction of HIV.

How does this answer the question?

A regression is the most effective way to establish statistical relationships between the two dependent variables eight independent variables. Although relationships may exist at random, an “f” test can be conducted to determine whether the relationships are statistically significant.
I will also measure correlations between media sources and the degree of media construction, to establish a linear relationship between media sources and media construction of HIV. This will help to measure the impact of media on the construction of HIV.

**RESULTS**

The study sample was diverse in terms of age, race, ethnicity, region, and education level. 528 people participated in this study with ages ranging from 18 to 65+. 10.8% of participants are between the ages of 18 and 24, 16.5% between 25 and 34, 22.3% between 35 and 44, 9.7% between 45 and 54, 20.1% between 55 and 64, and 20.5% are over the age of 65. One participant did not indicate an age category.

The sample is racially diverse with 1.9% American Indian or Alaska Native, 4.5% Asian or Asian American, 12.9% Black or African American, 1.3% Native Hawaiian or Pacific Islander, 69.5% White, .4% Middle Eastern or North African, 5.1% Multi-racial, 3% other or not listed, and 1.1% prefer not to answer. 18.2% of the total sample identifies as Hispanic. Geographically 17.2% of the sample is from the Northeastern United States, 21.4% from the Mid-West, 23.1% from the West, 38.1% from the South.

In terms of highest level of education obtained, 4.5% completed some High school, 22.9% have a high school diploma or equivalent, 23.9% have completed some college, 13.6% hold an associate degree, 23.1% have a bachelor’s degree, 7.8% have a master’s degree, 2.8% have a professional degree, and 1.1% have a doctorate degree.
Variables

To record media sources, as the independent variable, participants are asked to indicate how much information about HIV they have received in the last 5 years from the following sources, on a scale (None, little, some, much, a great deal).

Two dependent variables are collected using two different scales. The HIV-KQ-45 is used to evaluate participant’s knowledge of HIV. The HIV-KQ-45 is a list of 45 questions, with answers: “true”, “false”, or “don’t know”. The HIV-KQ-45 is scored using the sum of correct answers. A high total score represents a high amount of knowledge of HIV.

Fig 4

Fig 4 is a frequency histogram of HIV Knowledge values. Scores appear to be almost normally distributed. There does appear to be a slight positive skew.
Figure 5 is a box plot of unstandardized residuals. This visualization is used to determine the normality of the distribution for HIV Knowledge. All values appear to be within a normal range.
Fig 6

Figure 6 is a box plot of standardized residuals. This visualization is also used to determine the normality of the distribution for HIV Knowledge. All values appear to be within a normal range.

The SAT-PLWHA is used to evaluate HIV stigma among study participants. The SAT-PLWHA is an inventory of 42 questions on a Likert scale from 1 to 4. In this study, a 1 to 5 Likert scale was used. Question 19 was altered “People infected with the aids virus should be allowed to immigrate to Canada.” by replacing “Canada” with the “U.S.” This scale is scored by reverse coding select questions indicated by the validation of the measure and taking the average score. A high average score represents a high level of stigma.
Figure 5 is a frequency histogram of HIV stigma sores. Values appear to be within a normal range with potential outliers to the right of the mean.
**Fig 8**

Figure 8 is a box plot of unstandardized residuals. This visualization is used to determine the normality of the distribution for HIV Knowledge. Most values appear to be within a normal range, but 359, 461, 227, 223 are potential outliers.

![Box Plot](image)

**Fig 9**

Figure 9 is a box plot of unstandardized residuals. This visualization is used to determine the normality of the distribution for HIV Knowledge. As with the unstandardized residual box plot, most values appear to be within a normal range, but 359, 461, 227, 223 are potential outliers. Regression analyses have been run to test the impact of independent variables on HIV stigma, using the complete data set Table 3, and a second regression omitting outlier data (359, 461, 227, 223). It is concluded that outliers do not significantly change conclusions.
Figure 10 is a scatter plot of HIV Knowledge and HIV Stigma. This scatter plot offers a visualization of the relationship between the two dependent variables. From this scatter plot, it appears that the two variables are not strongly correlated.
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**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Table 1 displays the correlations between all variables (both independent and dependent variables). All listed independent variables share significant correlations at the <.001 alpha level. There are notable correlations among the dependent variables (Knowledge of HIV and Stigma). Knowledge of HIV is negatively correlated with “News Media” at the .05 alpha level, and with “Friend or Family Member”, “Social Media post”, “Social Media Advertising”, “Blogs and Articles”, and “Print Media” at the .001 alpha level. Stigma is negatively correlated with “Entertainment Media”, “News Media”, “Social Media posts”, “Social Media Advertising”, and “Print Media” at the .05 alpha level.

Given the different ways that each of the dependent variables are measured (Stigma using the average score of a 5-point Likert scale, and HIV Knowledge using the sum of a knowledge questionnaire), it is necessary to evaluate each of these variables against the independent variables separately.

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Table 2

Table 2 is a linear regression tale examining the impact that each independent variable has on HIV Knowledge as the dependent variable. According to Table 2, “Friend or Family member “and “Social Media Posts” as sources of HIV information have a statistically significant negative impact one’s knowledge of HIV. The table also shows that “Medical or Public Health”
as a source for HIV information has a statistically significant positive impact on one’s Knowledge of HIV.

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Table 3

Table 3 is a regression table describing the impact that each of the independent variables have on HIV stigma scores. Only one media source (“Medical or Public Health”) has a statistically significant impact on HIV stigma.
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<th>F2 Avoidance of Personal Contact</th>
<th>F3 Responsibility and Blame</th>
<th>F4 Liberalism</th>
<th>F5 Non-Discrimination</th>
<th>F6 Confidentiality of Status</th>
<th>F7 Criminalization of Transmission</th>
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<td>Friend or Family Member</td>
<td>Pearson</td>
<td>-0.088*</td>
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<td>0.057</td>
<td>0.102*</td>
<td>-0.152**</td>
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<td>-0.075</td>
<td>0.101*</td>
<td>0.103*</td>
<td>0.147**</td>
<td>-0.138**</td>
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<td>Pearson</td>
<td>-0.092*</td>
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<td>0.063</td>
<td>0.108*</td>
<td>-0.120**</td>
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<td>0.003</td>
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<td>Blogs and Articles</td>
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<td>-0.044</td>
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<td>-0.123**</td>
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<td>0.046</td>
<td>0.169**</td>
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Table 4
HIV Stigma can be further broken down into seven factors that comprise HIV stigma. These factors are: Occasional encounters (Factor 1), Avoidance of personal contact (Factor 2), Responsibility and Blame (Factor 3), Liberalism (Factor 4), Non-discrimination (Factor 5), Confidentiality of status (Factor 6), and Criminalization of transmission (Factor 7). Table 4 is a correlation table measuring the relationships between each of the media sources, and each of the seven factors of HIV stigma. Many of the correlations are statistically significant at the .05 and .001 alpha levels. This analysis helps to determine the types of HIV biases participants hold based on media source.

**DISCUSSION**

The intention to this study is to answer the question “Does exposure to various media outlets affect the ways that audiences construct the social reality of HIV?” The hypothesis focuses primarily on the “Friend or Family Member” category. Assuming that of all sources of information listed in this study, access to those with personal experience is somehow different from the rest of the population. The Hypothesis states “Those listing personal experience with PLHIV as their primary source of HIV information will produce scores that correlate significantly in a positive direction with HIV Knowledge and negatively for HIV stigma compared to the sample average and those who rely primarily on traditional media for their HIV information. The Null Hypothesis is that media sources do not influence dependent variables and do not differ from the those who receive information from friends or family members living with HIV.”

Answering the question “Does exposure to various media outlets affect the ways that audiences construct the social reality of HIV?” will bring visibility to the ways that the media, and HIV by extension, impact the ability of those living with the virus to function normally in society. For the past three decades, the predominant way of discussing the impact of media on
people living with HIV is solely through the lens of HIV-related Stigma. The inclusion of Media construction into the discourse of public health introduces an opportunity to apply other existing communications theories to understand the experiences of PLHIV.

According to the data, “Friend or Family Member” as a source of HIV information is negatively correlated with HIV Knowledge at a 0.177 correlation, and an r value of <.001.

According to the regression analysis the beta score for “Friend or Family Member” is -.767 with a p value of .042. This means that the more information about HIV that one claims to gather from a friend or family member living with HIV, their knowledge of HIV declines by 0.767. There is no significant correlation between “Friend or Family Member” and HIV stigma, but the correlation does trend negative. The Hypothesis is not supported entirely but offers many important insights into the ways that HIV information is received by broad audiences.

One of the benefits of this study sample is the sample size N=528. A sample of this size allows for the statistical tests to detect weak relationships and subtle changes within the sample. Many of the correlations were weak, but statistically significant. It would not be possible to detect these patterns otherwise.

Among the most confounding discoveries of this study is the relationship between HIV knowledge and HIV stigma. Figure 10 is a scatter plot of these two dependent variables, where there is not much of a linear relationship to be observed. According to table 1 the two variables have a .027 correlation and .576 Pearson r score, which indicates a very weak insignificant correlation between the two.

The reason why this finding is so perplexing is the fact that many anti-HIV stigma campaigns are built around the idea that the best way to combat HIV stigma is to increase the audience’ knowledge of HIV. Usually by using a campaign, built around the health belief model
or the model of behavior change. However, data from this study suggests that the two concepts are almost completely unrelated. This insight could be useful in campaign design to address both knowledge and HIV prevention.

This enigma is reenforced by the fact that all the significant relationships identified for knowledge of HIV are negatively correlated. This suggests that the more that respondents report receiving information from a “Friend or Family Member”, “News Media”, “Social Media Posts”, “Blogs and Articles”, and “Print Media”, the more their knowledge of HIV declines.

This data is more successful at identifying opportunities to decrease HIV stigma, with significant negative correlations with HIV and “Entertainment Media”, “News Media”, “Social Media posts”, “Social Media Advertising”, and “Print Media”. The more that respondents indicate receiving HIV media from these sources, their scores on the stigma scale decrease, suggesting that they hold less stigma against HIV and those living with HIV.

One other way that this sort of data may be applied is in policy, using Schneider and Ingram’s social constructionist framework. This model is used to assess the relative positioning of target populations in the policy discourse on a matrix with their perceived social power along the y axis, and positive to negative impression of the group along the x axis. According to research conducted by Emma Sophia Kay using this social construction of target population model, “People living with HIV are perceived as deviants, when we know that different categories of people living with HIV attain different moral judgments. Some are perceived as ‘innocent’ even among populations that harshly judge and seek to punish others. “ According to this model target populations are placed into one of four groups according to their positioning in the matrix: “Advantaged”, “Contenders”, “Dependents”, and “Deviants”. “Deviants” represent those considered to have little power, and negatively represented in public discourse.
Perhaps, these correlational trends are evidence of cultivation theory. Cultivation theory, first introduced by George Gerbner in the 1960s suggests that the values of audiences can adapt to the media that they are exposed to over time. The theory continues to evolve over the years as media changes, but this general concept remains mostly the same according to researcher Eman Mosharafa. The reason why this theory may apply to the data in this study is because we are able to observe a sample that has a low level of knowledge of HIV and negative correlations in their knowledge of HIV yet declines in stigma according to the amount of certain types of media that they are exposed to. Perhaps media construction from a cultivation theory model or perspective could provide more insight into the nature of attitudes and knowledge of HIV (2015).

**Limitations**

It is worth noting that the validation of the SAT-PLWHA-S scale for HIV stigma recommends using a 4-point Likert scale for each question. In this study, participants were given a 5-point Likert scale. This is not likely to impact the external validity of the sample but does allow for regression to the mean. Especially considering the taboo and stigmatizing subject matter. However, using the recommended scales, HIV stigma scores are likely to be more polarizing. Some of the questions included in the SAT-PLWHA-S are likely to be triggering to participants who are living with HIV.

The SAT-PLWHA-S contains many questions using the outdated term “AIDS” interchangeably with HIV. Many adults who have lived with the HIV virus for many decades feel strongly about identifying their condition as “AIDS” rather than “HIV”, “Late Stage HIV”, or “Stage 3 HIV”. Although “AIDS” many do not consider “AIDS” an appropriate medical term. Younger people diagnosed with late-stage HIV or “AIDS” in more recent years are grouped separately from those diagnosed with “AIDS” in the 90s.
In the data analysis, it is surprising to see that all the independent variables are positively correlated at the <.001 alpha level. Even though differences appear among the independent variables in their correlations with the dependent variables, it is worth noting that relationships exist between all the identified ways that people receive information about HIV.

These relationships could indicate the ways that target audiences are selected for HIV prevention messaging or marketing. These relationships could also point to echo chambers of social media conversations, or other ways that HIV is discussed that have not been captured in this study. Further investigation can be dedicated to examining these relationships and what they mean to HIV stigma and Knowledge, and to each other.

One tool that would help to alleviate some of the uncertainty regarding information sources and their relationships with each other, is consideration for audience segmentation built into the study design. This study used a nationally representative sample. For HIV stigma and treatment adherence campaigns, target audiences are most likely determined by HIV surveillance data, prioritizing communities most at risk for HIV, or those with the highest prevalence of HIV. The effects of this sort of targeting, and their relationship to health literacy and HIV stigma could contribute to better public health outcomes.

CONCLUSION

This study brings me a step closer to answer in the question “Does exposure to various media outlets affect the ways that audiences construct the social reality of HIV?” This question is surprisingly complex. HIV carries historical and cultural significance similar to, yet unlike many other communicable diseases due to stigma and the historical impact the virus has had on marginalized communities. Yet, this is a condition that most people don’t think about outside of
the historical impact. At the same time, there are certain communities that still face a daily threat of HIV incidence.

In place of a clearly defined theory of Media Construction, the model presented by Adoni is flexible enough to define the concept of Media Construction, and function in conjunction with other media theories such as framing, gatekeeping, priming, agenda setting, etc. Operationalizing the HIV construct as two components (HIV knowledge and HIV stigma), allows for quantitative comparisons of one’s perception of the condition. This approach allows for statistical significance testing, which cannot be accomplished by qualitative analysis.

Perhaps a better way to model to use in addition to media construction, is cultivation. From the analysis it appears that values around HIV are informed more readily by the media source than knowledge. An exploration of progressive values and non-discrimination and liberalism aspects of HIV stigma may offer further insight into values regarding HIV.

This study of the impact of media on the social reality of HIV fits within the context of other studies on the impact of media on people with disabilities. One such example: “The Role of the Media in Promoting Images of Disability-Disability as Metaphor: The Evil Crip” by Marilyn Dahl incorporates metaphor analysis and literary associations of disability and deformity, which have historically presented people with disabilities as evil. Dahl also discusses the construction of the “Disabled Superstar” by media (1993).

Similar media effects may be observed in the context of HIV. Which may contribute to the disabling impact of HIV as a health condition. For example, it is believed that a supportive social environment is positively associated with better health outcomes of people living with HIV, and reduced stigma and risk of depression. Social stigma, in other forms, is also believed to discourage HIV testing behaviors and engagement in health care (Shan Qiao. 2015).
A number of limitations remain. First, convenience sampling allows the potential for bias, as the sample is limited to primarily white undergraduate students attending the University of Missouri Columbia. Most of whom are majoring in communications with an age range between 18 and 24. A follow-up study may be necessary to include more diversity in terms of age cohort and racial identity. As a researcher, I may also be a source of bias, as I am living with HIV and deeply involved in HIV advocacy.

Disaggregation with considerations for audience segmentation is likely to tell us more about the impact of HIV communications than a nationally representative sample, because of the ways that messages have been siloed. Resource allocation is a hotly debated issue in response to HIV incidence. Prioritized populations are often more represented in campaigns and outreach materials, especially for LGBTQ+ communities. The LGBTQ+ community also a highly stigmatized group, even without consideration for HIV.

The intentional effort to reach LGBTQ+ people often leave cisgender heterosexual people (especially those living with HIV) left out of prevention and treatment efforts. It can only be assumed that those who are not at risk for HIV experience some sort of distance from HIV treatment and prevention messaging as well. Perhaps a study comparing media constriction of non-LGBTQ+ people to concepts of LGBTQAI+ people and their impression of HIV would help to understand attitudes and media construction of HIV.

Findings of this study are significant enough to warrant a follow up. Future directions of this research could involve a follow up using this same method, with considerations for gender and sexual orientation.

Data of this study also challenges held beliefs that knowledge of HIV reduces HIV stigma. An article published in 2019 by Alexis Rivera, “Prevalence of U = U Awareness and Its
Association with Anticipated HIV Stigma Among Low-Income Heterosexually Active Black and Latino Adults in New York City, 2019”, used a different HIV stigma inventory and found that the U=U social marketing campaign is effective at reducing stigma. The U=U campaign may have a dual function (addressing stigma as well as increasing knowledge of the virus). With this considered, it could benefit researchers and public health advocates to know exactly which elements of a social marketing campaign reduce stigma, which increase knowledge, and if it is possible to accomplish both goals (2019).
REFERENCES


VITA

Devin Hursey is an advocate for people living with HIV and public health, from Kansas City Missouri, currently completing dual master’s degrees in public health and Journalism at the University of Missouri Columbia. In 2019, Hursey was honored as one of the 40 under 40 in public health by deBeaumont. Recognized as one of the Amazing People Living with HIV by Plus magazine Dec of 2020. A 2021 recipient of The Edna Dell Weinel Scholarship, by the Missouri Public Health Association, and a 2023 recipient of the Donald S. Mosley Journalism Scholarship. As well as a 2021 semi-finalist of the Kenneth and Ann Baum Pinnacle Prize. His local and state work includes legislative advocacy with the Missouri HIV Justice Coalition, and board membership of Blaqout KC. In addition, Hursey is a steering committee member of the U.S. People Living with HIV Caucus. Formerly: an appointed member of the CDC/HRSA Advisory Committee on HIV and Viral Hepatitis.