The Influence of Mediated Healthcare Environments on Preventative Healthcare-Seeking Intentions

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Student Bio (195 words)
Amy Huber, M.S., is an educator in the Department of Interior Architecture and Design and is a Ph.D. student in the School of Communication at Florida State University. Huber’s early research centered on the nexus between the built environment and persuasive communication. Her scholarship on organizational communication in design firm settings has been published in prominent design-orientated journals, including the Journal of Interior Design. Huber came to pursue a Ph.D. in Communication after years of teaching a healthcare design studio course, during which her underrepresented students frequently noted more anxieties about visiting ambulatory healthcare environments and attending routine medical screenings. With these students in mind, Huber seeks to aim her research program at mitigating healthcare inequalities through an interdisciplinary understanding of the intersections between mediated communication, human perception, and the built environment. For her dissertation, Huber hopes to disentangle innate preferences for the built environment versus those socially conditioned. The goal is to assist health communicators and designers in better attending to patient needs and perceptions. Prior to teaching, Amy was a project designer at the global architecture firm Gensler. She is an Evidence-Based Design and LEED AP BD+C accredited professional, and an NCIDQ-certified designer.

Faculty Bio (196 words)
Dr. Rachel L. Bailey is an associate professor at Florida State University. Her research program seeks to explicate complex human interactions with and via media and is rooted in biological and evolutionary perspectives, including embodied, situated cognition, and motivated cognition. She commonly uses this lens to investigate how media are influential in important social and health contexts, such as health perceptions, food choice, and substance use. Most recently, Dr. Bailey has begun investigating media influences in the context of perceptions of policing, violence, and social and racial justice. Dr. Bailey's research is especially relevant in the fields of media psychology, health communication, and media processes and effects. Her work is published in leading journals in the field, including Journal of Communication, Communication Research, Communication Monographs, Human Communication Research, Health Communication, and Journal of Health Communication. She also has published in interdisciplinary journals, including Appetite, Journal of Nutrition Education & Behavior, Cognition & Emotion, Motivation & Emotion, and Criminal Justice & Behavior. Dr. Bailey currently serves on the editorial boards of Health Communication and Media Psychology, as the Chair of International Communication Association Information Systems Division, and as Director of Doctoral Studies for FSU’s School of Communication.

Abstract (294 words)
"Nowhere are the divisions of race, ethnicity, and culture more sharply drawn than in the health of the people in the United States."¹

Individuals with an established primary care provider have greater access to healthcare services and enjoy better health outcomes. Yet, African Americans and Hispanics are less likely to seek healthcare services or have a primary care physician and suffer from more health issues that can be prevented or mitigated with regular healthcare screenings. Given healthcare inequities in the United States; it is crucial to leverage opportunities that may enhance perceptions and decrease anxieties surrounding preventative care amongst underserved populations. Research positions environmental and population characteristics (e.g., social factors, health beliefs, and cultural orientations) as determinants of health behaviors. While healthcare-orientated dramas and reality shows may impart unrealistic expectations, mischaracterize health experiences, and stigmatize health issues, evidence suggests audiences may deem them realistic and informative. Cultivation theory and the social construction paradigm posit that infrequent healthcare users may substitute media depictions for actual experiences when formulating perceptions of healthcare spaces and experiences; thus, these portrayals may influence healthcare-seeking intentions. Given these issues, this mixed-methods inquiry focuses on the mediated healthcare environment’s connection to health beliefs via preventative healthcare-seeking intentions.

This research explores how patients of different ethnic backgrounds prioritize waiting room elements and features (e.g., patient choice, autonomy, positive distractions) and compares these preferences to mediated depictions of healthcare environments. By assessing audience reactions to mediated portrayals of healthcare environments, its findings will reveal how these depictions align, ignore, or refute the patient’s priorities. Moreover, by ascertaining how audience reactions may influence preventative healthcare-seeking behaviors, this study will offer valuable insights to scholars in media effects, health communications, and design fields.

The Influence of Mediated Healthcare Environments on Preventative Healthcare-Seeking Intentions

¹ Cultural Competence In Health and Human Services | NPIN, n.d., para 1
**Scope and Purpose**

Ambulatory care services help ensure that patients receive screenings and immunizations that prevent poor healthcare outcomes ([Health.Gov](https://Health.Gov), n.d.; O’Neil et al., 2010). Individuals with an established primary care provider have better access to healthcare (Peckham et al., 2021) and enjoy better health outcomes (Vargas Bustamante et al., 2010). Yet, in 2015, only 64% of Hispanics and 71% of African Americans had a primary healthcare physician, compared to 79% of non-Hispanic whites (Levine et al., 2020). Moreover, trends suggest that U.S. adults are moving away from having a primary care physician (Levine et al., 2020). This trend may be especially problematic amongst those from minority, underrepresented groups, who are less likely to seek healthcare services, visit a usual healthcare provider, and have health insurance (Chan et al., 2020; Cohen et al., 2021; Levine et al., 2020). These factors may be why Hispanics and African Americans suffer from more health issues that can be prevented or mitigated with regular healthcare screenings ([The Office of Minority Health](https://minorityhealth.gov), n.d.; Torres, 2018). Given healthcare inequities in the United States (Shi et al., 2013), it becomes crucial to leverage any efficacious opportunities to enhance perceptions and decrease anxieties surrounding preventative care amongst underserved populations.

Andersen’s (1995) Behavioral Model of Health Services Use positions the environment and population characteristics (e.g., social factors and health beliefs) as determinants of health behaviors and, by extension, health outcomes. Still, other work points to the role of cultural-orientations in influencing healthcare utilization (Yap et al., 2021). To interrogate these connections, this inquiry focuses on the relationship between the environment, as conveyed in media portrayals, to health beliefs that influence preventative healthcare-seeking behaviors.

A body of work connects healthcare environments to human perception, behavior, and healing (Andrade & Devlin, 2015; Joseph & Malone, 2012; Ulrich, 2001). Health environments have been shown to ameliorate stress (Fenko & Loock, 2014; Higuera-Trujillo et al., 2020) and impact patient engagement (Haddox, 2018). Yet, they can also exacerbate power imbalances (Liddicoat, 2020) and violate psychological privacy (Haddox, 2018; Pritchett & Buckner, 2004); thus, these environments can influence approach and avoidance behaviors (Nehme et al., 2021). Cultivation theory (Gerbner et al., 1986) and the social construction paradigm (Nairn, 2007) posit that those who do not visit healthcare environments may rely on...
media depictions to formulate perceptions of healthcare spaces and experiences. Some evidence suggests that media portrayals of healthcare settings are perceived to be realistic (Witzel et al., 2018) and informative (Hoffman et al., 2017). At the same time, they can impart unrealistic patient expectations (Witzel et al., 2018), mischaracterize healthcare providers and experiences (Cullen, 2012; Stanek et al., 2015), and stigmatize health issues (Goodwin, 2014). Still, little is known about how such media depictions influence the preventative healthcare-seeking behaviors of underrepresented, minority patient populations and whether reactions to these depictions are universal, based on innate human preferences, or socialized conditions.

This exploratory research seeks to understand how patients of different ethnic groups prioritize waiting room elements and features, such as patient choice and autonomy while waiting, and the presence of positive distractions (see Andrade & Devlin, 2015; Ulrich et al., 2020). By assessing patient reactions to mediated portrayals of healthcare environments, its findings will reveal how these depictions align, ignore, or refute the patient’s priorities, and how these reactions may influence preventative healthcare-seeking behaviors via measures of affect, medical trust, and behavioral intentions. To do so, it will compare quantitative and qualitative insights from African American, Hispanic, and white, non-Hispanic women, aged 20-35. This cohort was selected as only 56% of those in their 20's report having a primary care physician (Levine et al., 2020). However, this age range presents the most prolific childbearing years of women in the U.S. (Ely, 2018; Livingston & Cohn, 2010), at a time when maternal death rates are rising at disproportionate rates (Hoyert, 2022). As such, this study's findings may have a generational impact on healthcare outcomes.

Contributions

In the face of healthcare inequities in the United States, this study will examine the potential influence of mediated healthcare environments on the preventative healthcare-seeking behaviors of adult African American, Hispanic, and white, non-Hispanic women. This study will evaluate whether mediated healthcare environments align with patient priorities relative to their affective states and perceptions of medical trust, and, in turn, whether healthcare-orientated programming contributes to or dissuades preventative healthcare-seeking intentions. Further, by prioritizing potential determinants of positive affect and medical trust in waiting room environments, this inquiry could contribute valuable insights to those making design decisions about healthcare spaces. Consequently, this study's findings may offer both theoretical and practical implications that may help mitigate healthcare inequalities.

Research Methods

This exploratory research would utilize a multi-staged, sequential mixed-methods approach to garner insights from a traditionally hard-to-reach population (namely, those not attending college). The first stage would begin with a survey utilizing Nehme et al.'s (2021) affect states scales to assess ideal and actual affective states while waiting for routine appointments. Respondents would then be asked to evaluate which waiting room features may help them to achieve their ideal affective state. The survey would then ascertain
media consumption patterns relative to healthcare-orientated scripted, reality, and news programming, with participants evaluating the validity of these programs. Respondents would then assess images of mediated health environments (i.e., waiting room scenes from medically-orientated media programs) based upon that environment’s attendance to their stated priorities for achieving an ideal affective state. Additionally, they would be asked to characterize the ability of these environments to engender trust in the medical provider using that space and the likelihood that they would visit such an environment on their own accord.

The second phase of data collection would involve interviews with a quota-based, purposive sample of the survey participant population. An equal number of participants from African American, Hispanic, and white, Non-Hispanic segments would be invited to participate, and those representing high and low affect healthcare discrepancy scores on the aforementioned survey. These interviews would be used to build a deep and nuanced understanding of environmental preferences and media effects by comparing mediated healthcare environments to idealized healthcare environments. Transcripts will be coded against priori themes involving factors in healthcare environments that have been shown to influence perceptions (i.e., sense of control, coherence, opportunities for socialization, and presence of positive distractions). These themes would then be compared to the quantitative data.

**Current Status and Timeline**

The project is currently in development, with instrumentalization and pilot testing underway.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Activities</th>
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<tbody>
<tr>
<td>April 2022</td>
<td>Instrument Development, Pilot Testing, IRB Review</td>
</tr>
<tr>
<td>May – June 2022</td>
<td>Participant Recruitment and Data Collection for Phase 1 Survey</td>
</tr>
<tr>
<td>July- August 2022</td>
<td>Participant Recruitment and data collection for Phase 2</td>
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<tr>
<td>September – October 2022</td>
<td>Data Analysis</td>
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<tr>
<td>November-December 2022</td>
<td>Manuscript Preparation</td>
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**Anticipated Outcomes**

The anticipated outcomes of this research offer important implications in two main ways. First, the study will provide an understanding of how healthcare environments are portrayed in media spaces and how those depictions influence the healthcare-seeking behaviors of different population cohorts, including those from marginalized groups. Second, its findings will inform the efforts of those designing healthcare spaces by offering them a better understanding of those design elements and features that elicit a positive affect, engender trust, and evoke pro-health behavioral intentions. Moreover, by comparing insights from different demographic cohorts, the study will help shed light on which aspects of human perception surrounding the built environment are based on innate biological imperatives that transcend race/ethnicity versus those socially constructed.
Potential publication venues

It is anticipated that this study’s findings can be disseminated to venues involving media effects, health communication, and healthcare design, including:

- AEJMC Annual Conference
- Center for Healthcare Design Conference (National, annual, peer-reviewed conferenced)
- Journalism & Mass Communication Quarterly
- Health Environments Research and Design Journal

References


## Budget

<table>
<thead>
<tr>
<th>Phase 1 Survey</th>
<th>Amount</th>
<th>Funding Source</th>
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<tbody>
<tr>
<td>• Survey Marketing Materials (i.e., Flyers with QR codes to be distributed &amp; displayed at local government facilities, churches, &amp; businesses)</td>
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<td>AEMJC Grant</td>
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<td>• Survey Incentives</td>
<td>$10 Amazon Gift Card Up to 290</td>
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<td>• Quantitative Data Analysis</td>
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<td><strong>Phase 2: Focus Group</strong></td>
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<tr>
<td>• Qualitative Data Analysis</td>
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<td>Performed on NVivo provided by Florida State University</td>
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