Selection and Evaluation of Media for Behavioral Health Interventions Employing Critical Media Analysis

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Although a growing number of psychosocial health promotion interventions use the critical analysis of media to facilitate behavior change, no specific guidelines exist to assist researchers and practitioners in the selection and evaluation of culturally relevant media stimuli for intervention development. Mobilizing Our Voices for Empowerment is a critical consciousnessbased health enhancement intervention for HIVpositive Black young gay/bisexual men that employs the critical analysis of popular media. In the process of developing and testing this intervention, feedback on media stimuli was collected from youth advisory board members (n = 8), focus group participants (n = 19), intervention participants (n = 40), and intervention facilitators (n = 6). A thematic analysis of qualitative data resulted in the identification of four key attributes of media stimuli and participants' responses to media stimuli that are important to consider when selecting and evaluating media stimuli for use in behavioral health interventions employing the critical analysis of media: comprehension, relevance, emotionality, and action. These four attributes are defined and presented as a framework for evaluating media, and adaptable tools are provided based on this framework to guide researchers and practitioners in the selection and evaluation of media for similar interventions.

Keywords: critical consciousness; critical media analysis; intervention development

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January 2018 Vol. 19, No. (1) 145–156 DOI: 10.1177/1524839917711384 © 2017 Society for Public Health Education Additional and behavioral health interventions use critical media analysis as a tool to facilitate behavior change (Bergsma, 2004; Bergsma, 2011; Bergsma & Carney, 2008; Watts, Abdul-Adil, & Pratt, 2002; Williams, Ramamurthi, Manago, & Harawa, 2009). In critical media analysis, media stimuli (e.g., video, music, print advertisements, and social media) are explored to deconstruct overt and covert messages and understand the meaning and impact of the media within historical and cultural contexts. Although interventions employing critical media analysis have the potential to address significant health and

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social problems, few evidence-based guidelines exist for selecting and evaluating media stimuli for use in such interventions. Data-driven guidelines to facilitate the selection of culturally relevant media stimuli would be beneficial to researchers, practitioners, and intervention participants.

Poland, Krupa, and McCall's (2009) work on evaluating settings for health promotion interventions highlights the usefulness of developing an intervention evaluation framework that is evidence-based, yet adaptable for varying contexts. To date, no such framework exists for the evaluation of media for use in health promotion interventions employing critical media analysis. However, data from our study to develop and test a culturally tailored, critical consciousness-based health promotion intervention have allowed us to identify crucial factors to consider when evaluating media stimuli and to offer an adaptable framework and tools for the selection and evaluation of media based on these findings.

MOBILIZING OUR VOICES FOR EMPOWERMENT: A CRITICAL CONSCIOUSNESS HEALTH PROMOTION INTERVENTION FOCUSED ON MEDIA ANALYSIS

Mobilizing Our Voices for Empowerment (MOVE) is a culturally based health promotion intervention developed for HIV-positive Black gay/bisexual young men. HIV-positive Black gay/bisexual men often encounter discrimination and oppression as a result of their stigmatized identities (Buseh et al., 2006; Harper, 2007; Wilson, 2008). This discrimination has been linked to feelings of powerlessness, low self-esteem, and low self-efficacy (Wheeler, 2005; Wilson & Moore, 2009). Studies have also suggested a link between these psychological factors and HIV risk behaviors, such as substance use, unprotected intercourse, and limited health care engagement (Wilson et al., 2016). Oppressed groups may also face greater social and structural barriers to accessing health care (Malebranche, Peterson, Fullilove, & Stackhouse, 2004; Wilson & Yoshikawa, 2007). Nevertheless, at the time that MOVE was developed, no interventions existed that were tailored to address issues of stigma, discrimination, and oppression in relation to health engagement among HIVpositive Black gay/bisexual young men.

MOVE was developed to integrate key principles in critical consciousness theory (Freire, 1973, 1970, 1990) and empowerment theory (Zimmerman, 1995; Zimmerman & Rappaport, 1988) and to create opportunities for participants to explore how hegemonic attitudes perpetuate inequalities and intensify oppressive societal forces. Developed from the work of Paulo Freire (1990), critical consciousness is an analytical thought process designed to increase feelings of empowerment by helping individuals identify and respond to social, historical, and political factors that sustain inequality. Although critical consciousness interventions have proven successful in enhancing feelings of empowerment and self-efficacy, increasing awareness of social injustice, and promoting community engagement (Balcazar, Tandon, & Kaplan, 2001; Campbell & MacPhail, 2002; Wallerstein, Sanchez-Merki, & Dow, 1997; Watts & Abdul-Adil, 1998), the critical consciousness approach has generally been underused in health promotion programs (Sharma, 2001).

Critical media analysis is an integral part of the learning and behavior change activities that occur in MOVE. Using techniques developed by Watts and colleagues (Watts & Abdul-Adil, 1998; Watts et al., 2002; Watts, Griffith, & Abdul-Adil, 1999; Watts & Guessous, 2006) to enhance critical consciousness, small groups of participants are shown popular media and exposed to a method of critically analyzing the media to identify oppressive messages related to race, sexual orientation, and/or HIV status. By identifying and then challenging social constructions of inequality through sociopolitical engagement, we aimed to increase feelings of empowerment and mastery among HIV-positive Black gay/bisexual young men, anticipating these changes would facilitate reductions in risk taking and engagement in health-promoting behaviors.

THE NEED FOR A FRAMEWORK TO ASSIST IN THE SELECTION AND EVALUATION OF MEDIA

Prior research describes general approaches for selecting media stimuli for interventions using critical consciousness and critical media analysis. Watts and colleagues' (Watts & Abdul-Adil, 1997, 1998; Watts et al., 2002) Young Warriors program, which was developed for young Black men in low-income urban environments, uses contemporary rap videos, movies, and television shows to stimulate analysis of messages in popular culture about race, gender, and social class. Watts and Jagers (1997) chose media based on the stimuli's ecological and cultural relevance to the priority population, the stimuli's coverage of topics of interest from varying perspectives, the stimuli's ability to validate forms of art often disliked by adults but popular with young men, and the stimuli's familiarity to young men, to increase their comfort using the media to explore novel ideas. Similarly, Morrell and Duncan-

Andrade (2002) argue for using hip-hop and rap music to facilitate critical consciousness among urban youth in their academic literacy program because the music is relevant to the community and contains conflicting messages that may foster thoughtful discussion. Rikard, Thompson, Head, McNeil, and White's (2012) work on the development of an HIV/AIDS health literacy tool kit for use with African Americans suggests that culturally relevant materials be understandable and include themes relevant to community members, while accounting for the diversity of the African American community. Thus, past research suggests the basic factors that should be examined in selecting media include relevancy, understandability, and the ability for the media stimulus to generate appropriate discussion. However, these factors constitute broad suggestions that have yet to be consolidated, validated, and expanded on using empirically supported evidence. Furthermore, previous research does not provide specific guidance on how to define, measure, or apply such attributes. Consequently, we aim to (1) provide details on the process of identifying and evaluating media for use in MOVE, a grouplevel, critical consciousness-based, health enhancement intervention for HIV-positive Black young gay/bisexual men, and (2) present guidelines and tools that researchers and practitioners can use to facilitate the selection and testing of media for use in interventions employing critical consciousness and the critical analysis of media.

METHOD

Design

To develop the media tool kit for MOVE, we employed a multimethod approach rooted in the principles of community-based participatory research; it involved reviewing past research studies, conducting focus groups, and convening Youth Advisory Boards (YABs) at several stages of intervention development and implementation (Israel et al., 2003). Data used to evaluate the media tool kit were also obtained from pilot trials conducted to explore MOVE's feasibility and acceptability (Trial 1) and initial efficacy (Trial 2). Thus, the media tool kit was continuously evaluated and revised in an iterative process, with participants engaging in critical analysis to provide feedback on intervention materials (YABs, focus groups, Trial 1, Trial 2) and test the feasibility and acceptability (Trial 1) and efficacy (Trial 2) of the MOVE intervention. Please see Figure 1 for a flowchart of study procedures.

Participants

Data from 73 individuals were used in developing and evaluating MOVE's media tool kit, including YAB members, focus group participants, intervention Trial 1 and 2 participants, and intervention Trial 1 and 2 facilitators. Refer to Table 1 for participant demographics. YAB members (n = 8) were recruited from local agencies and organizations and existing youth community advisory boards employed by the Adolescent Trials Network for HIV/AIDS Interventions. Focus group participants (n = 19) and intervention Trial 1 and 2 participants (n =40) were recruited from four Adolescent Medicine Trials Unit (AMTU) sites. Intervention Trial 1 and 2 facilitators included one doctoral-level mental health provider, two master's-level mental health providers, and three "peer buddies" who were HIV-positive young Black gay/bisexual men.

Procedures and Protocols

For 3 years, our research team engaged in activities that yielded data to develop, evaluate, and refine the media tool kit used in MOVE. All participants over 18 years provided informed consent before taking part in the intervention and focus groups. A waiver of parental consent was obtained for participants under 18 years, and these participants provided assent to participate in the intervention and focus groups. All study activities were approved by institutional review boards.

Formative Research. The research team's initial selection of media for MOVE was guided by past research. MOVE involves a five-step critical consciousness coaching technique developed by Watts and colleagues (Watts & Abdul-Adil, 1998; Watts et al., 1999; Watts et al., 2002; Watts & Guessous, 2006): In this technique, youth view media as stimuli for the critical analysis of societal messages about gender, culture, race, and class to increase critical thinking skills and feelings of empowerment. Five steps are taken in which participants consider key questions and discuss their responses in a group setting: (1) What did you see and/or hear? (i.e., perception of stimulus), (2) What does it mean? (i.e., interpretation and meaning of the stimulus), (3) Why do you think that? (i.e., defense of the interpretation), (4) How do you feel about what you saw or heard? (i.e., emotional and intuitive response), and (5) What would you do to make it better? (i.e., action strategies).

We used the five-step critical consciousness coaching technique as a guiding heuristic in identifying potential media for MOVE. Media needed to contain messages that participants could decipher (Steps 1-3), that would evoke an emotional response (Step 4), and that would prompt participants to devise responses to mitigate negative impacts or promote positive impacts (Step 5). Given the focus on addressing oppression

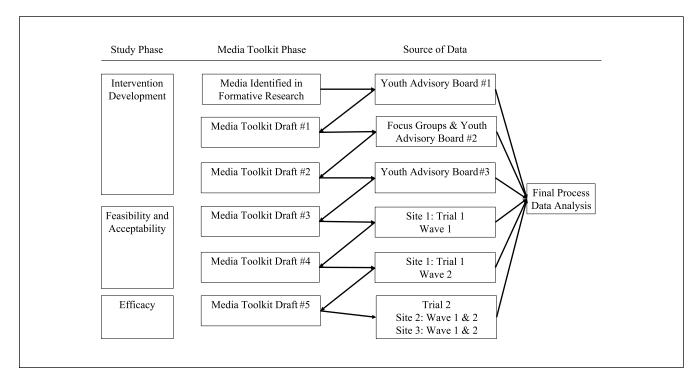


FIGURE 1 Flowchart Diagramming the Development, Testing, Revision, and Implementation of the MOVE Media Tool Kit NOTE: MOVE = Mobilizing Our Voices for Empowerment.

TABLE 1 Participant Demographics					
Group	Ν	Age (years)	HIV-Positive	Sexual Identity or Behavior	City
Youth Advisory Board members	8	21-26	Y	Gay or bisexual	New York City, Chicago
Focus group	19	17-23	Y	Sex with another man in previous year	Philadelphia, Los Angeles
MOVE Trial 1 participants	13	16-24	Y	Sex with another man in previous year	Chicago
MOVE Trial 2 participants	27	16-24	Y	Sex with another man in previous year	Los Angeles, New York City
Facilitator: mental health professional	3	—	—	_	Chicago, Los Angeles, New York City
Facilitator: peer buddy	3	_	Y	Gay or bisexual	Chicago, Los Angeles, New York City

NOTE: MOVE = mobilizing our voices for empowerment. Age, HIV status, and sexual identity are not listed for facilitators when these factors were not eligibility criteria and this information was not collected.

faced by HIV-positive Black young gay/bisexual men, we endeavored to identify media with messages about race/ethnicity, sexual orientation, and HIV. Youth Advisory Boards. To engage youth in the intervention development process, we convened two YABs of HIV-positive Black young gay/bisexual men. YAB members were recruited from local community organizations in New York City and Chicago, as well as existing AMTU community advisory boards. YAB members participated in a 2-day group meeting and one-on-one meetings with the research team during which YAB members provided feedback on potential media stimuli, identified new materials that could be added, and tested the usefulness of stimuli for spurring critical analysis. Feedback from the YABs was recorded in detailed notes taken by the research team.

Focus Groups. To obtain feedback on drafts of the media tool kit, members of our research team conducted four focus groups with HIV-positive Black young gay/ bisexual men at two AMTU health clinics is Los Angeles and Philadelphia. Participants were recruited by clinic staff from their existing patient population. Focus group participants provided input on the logistics of the intervention and tested potential media using the five-step critical consciousness coaching technique. Focus group sessions lasted for 2 hours and were audio recorded and professionally transcribed for analysis.

Process Data From Pilot Trials. To examine MOVE for feasibility, acceptability, and initial efficacy, we conducted two pilot intervention trials at three sites. In each of the four sessions of MOVE, groups of participants were shown media stimuli from the media tool kit and led by two facilitators through the five-step critical consciousness coaching technique to critically analyze the media; deconstruct messages related to gender, race, sexual orientation, and HIV status; and develop plans to address oppressive media. Through this critical media analysis, participants were encouraged to connect societal oppression to deleterious health behaviors and to view engagement in health-promoting behaviors as one way to resist these forces. The goal of the MOVE intervention was to increase empowerment, feelings of selfworth and self-efficacy, sociopolitical development, and health behaviors among HIV-infected young men who have sex with men. The MOVE intervention was pilot tested in a randomized control trial; investigation of efficacy is ongoing. Process data from these trials included (1) facilitator logs and interviews, (2) notes from researchers' reviews of intervention session recordings, and (3) participant evaluations of the intervention.

MOVE facilitators completed open-ended logs at the end of each of intervention session to document which elements of the intervention were delivered, how participants responded to intervention activities, and any unique issues that arose during the session. From these logs, we obtained facilitator perceptions on which media stimuli worked well when critically analyzed with the five-step coaching technique. Facilitators also participated in four interviews with members of the research team; these occurred after Sessions 2 and 4 of each wave. The interviews focused on the organizational structure/flow of the session, content-specific issues, and the implementation process. Through these interviews, the facilitators provided additional detailed feedback on their perceptions of the media stimuli and participant reactions to specific media.

Intervention sessions were audio recorded, and notes on the audio recordings were taken by members of the research team. The researchers listened to these recordings to obtain direct quotes from participants on the media stimuli, to acquire additional context and detail on the successes and failures of media stimuli, and to identify ways in which specific media stimuli, and messages embedded in the stimuli, were discussed by participants.

Last, participants' evaluations of each intervention session were obtained using three open-ended items from the Session Evaluation Form (Harper, Contreras, Bangi, & Pedraza, 2003), which aimed to elicit information about the participants' experiences with the intervention and views about what was most and least useful about the session. Responses were reviewed for feedback related to media stimuli.

Analysis

Throughout the development and testing of MOVE, process data from each stage were used to refine the media tool kit according to the stimuli's overall ability to engage participants in critical analysis. After the completion of Trial 2, all process data were integrated, coded by the authors, and analyzed using a thematic analysis. To discover patterns within the qualitative data, direct quotes from intervention sessions, facilitator logs, facilitator interviews, YAB meetings, and focus group transcripts were analyzed using the coding procedures outlined by Auerbach and Silverstein (2003). One member of the research team (1) read through all the process evaluation data and selected relevant text (i.e., text referring to media stimuli) manually, and a subset of four members of the research team collaborated to (2) identify repeating ideas and phrases within the text, (3) group repeating ideas into thematic categories, and (4) organize themes into the overall theoretical construct described in the findings. Notes taken by the researchers on the YAB meetings and intervention sessions were used to ensure no major themes or topics were overlooked, to guide the grouping of repeating ideas and themes, and to provide additional context to direct quotes. Research team members discussed the

key themes as a group until unanimous agreement was reached as to how to organize the repeated themes and describe the resulting theoretical construct. Research team members also listened to intervention recordings throughout this process to reexamine evidence related to the proposed findings.

FINDINGS

Description of Media Stimuli

From the formative research, the research team developed an initial list of 40 potential media stimuli, including themes related to being Black, gay/bisexual, and HIV-positive. Media stimuli were added and removed from the initial list based on participant feedback, so that 32 media stimuli were eventually shown to participants; 10 of these stimuli were included in the final version of MOVE used in Trial 2. The final media tool kit included a clip from an entertainment reality show, a tweet from a popular rap artist, a song from a popular rap artist, a news segment, two magazine covers, three print advertisements, and a short video about body image. Media stimuli included themes about being Black and/or gay or bisexual. Based on participant feedback, the final version did not contain stimuli about being HIV-positive, as it engendered a strongly negative emotional response from participants that was unproductive for encouraging continued engagement in the critical media analysis process.

Key Themes

Text was considered relevant if it pertained to YAB, focus group, or intervention participant responses to media stimuli and/or described characteristics of any media stimuli, including media from MOVE's media tool kit, media stimuli suggested for inclusion in future versions of MOVE, and media stimuli discussed as additional examples of key topics. Repeated ideas in relevant text were identified, and similar statements were grouped into categories, resulting in four themes that represent the attributes of the media stimuli and/ or participants' responses to the media stimuli most frequently cited in relevant text: (1) comprehension, (2) relevance, (3) emotionality, and (4) action. Table 2 summarizes the four attributes, with a definition of each attribute. Since we propose that these attributes are important to consider when evaluating media for behavioral interventions, we formulated questions related to the four attributes that researchers can use to collect feedback from priority populations on media stimuli. These questions, also listed in Table 2, reflect the various dimensions of each attribute that were present in our data or in other cited sources, as noted.

Comprehension

Comprehension refers to the ability of intervention participants to understand the point of the media and identify the implicit and explicit messages conveyed through the media. The degree to which participants easily identified key messages for further analysis varied widely. At some points, particularly in the beginning intervention sessions, facilitators suggested selecting media with more obvious examples of oppression. One facilitator noted, "Some [media] could have been more blatant. Participants will be able to see examples that are 'in your face' and compare them to examples that are more hidden." Another facilitator suggested that media clips need to "be a little bit more in-your-face, direct 'this is oppression.'" Participants also critiqued media stimuli without a clear point (e.g., "The clip was very random and pointless"). In some instances, participants identified a message but did not relate it to the theme of the intervention because it was not viewed as negative or oppressive. For example, a facilitator wrote, "Participants . . . were not seeing/ hearing the media stimulus in any offensive manner specific to [gay or Black men]. Felt the play on words made the examples too ambiguous." Other stimuli garnered mixed reactions (e.g., "Some [participants] had trouble seeing racism in the media prompts, while others saw the correlation") or contained subtle messages that became apparent only after engaging in extensive critical analysis. Conversely, some messages were immediately identified by participants, facilitating critical analysis (e.g., "The clip was a great help. It really showed the participants how someone's image is changed for society"). One facilitator noted that after viewing one stimulus, "All the participants were able to see how the stimulus could be seen as oppressive."

Participants' comprehension may be affected by participants' skills, facilitators' skills, the content of the media, and the context of the intervention; if not thoroughly explored, these factors may result in levels of comprehension that do not facilitate critical analysis. For this reason, we include questions in Table 2 that can provide insight on a participant's comprehension of a media stimulus in relation to the themes of the intervention.

Relevance

Relevance describes the participants' perceptions of the significance and importance of the media and messages embedded in the media, as well as the messages' applicability to their lives. Participants desired media they found important or relatable to their own lives or communities, writing "choose more pressing topics" and "more relatable topics and issues concerning HIV, Black gay men." One facilitator noted, "Some of the

TABLE 2
Key Attributes for Media Used in Behavioral Interventions Employing Critical Consciousness Coaching/Critical
Analysis

Attribute	Definition	Proposed Questions
1. Comprehension	Ability for intervention participants to understand the point of the media, the messages conveyed through the media, and key points expressed through the media	 What are the messages in this media? What is the point of this media? How obvious, or "in-your-face," are the messages in this media? Are some messages more obvious than others? Are the messages about (e.g., gay men) negative, neutral, or positive?
2. Relevance	Intervention participants' perceptions of the significance and importance of the media and messages embedded in the media and the message's applicability to their lives and the lives of members of their community	 Do you personally connect to anything in this media? If so, what? Are you familiar with the issues in this media? Are you familiar with the format (i.e., tweet, blog) of this media? Do you find anything in this media to be important to you or your community? If so, what?
3. Emotionality	Emotional and affective responses intervention participants have to the media and message conveyed in the media	 How did you feel (before/after) encountering this media? Emotional valence: angry, disgusted, fearful, happy, sad, surprised, and neutral Arousal: relaxed/calm/unaroused versus stimulated/ excited/aroused Interest: not at all interested to very interested Did your emotions ever become so strong that you no longer wanted to discuss or think about this media?
4. Action	Capacity for the media and/or message embedded in the media to spur intervention participants into action through introspection, communication, and/or strategies for behavior change	 Did this media make you want to discuss anything with your group? Did discussing/viewing this media make you think about anything in a new or different way or make you want to act differently? Did you understand what other members of your group were saying? Did you agree or disagree?

examples need to be less celebrities and let in more real people. There was a regular-ness about the people involved in that [media clip] that helped [the participants] relate." After viewing one video, a facilitator noted that the stimulus "really clinched their sense of relatability to them, their lives, their backgrounds." Facilitators suggested making media more current (e.g., "[Participants] had a slight issue relating to characters in the past") and reflective of their personal experiences. However, familiarity was not always conducive to critical analysis, such as when previous assumptions were not questioned (e.g., "I've been hearing it for years, so it ain't nothing new to me"), when participants focused on alternative media stimuli from the same source (e.g., a different episode of the same show, "participants kept referring to the show . . . as they knew it

. . . currently, not when this clip was produced"), or when participants identified with the media in ways that prevented them from critically analyzing oppressive messages (e.g., identifying with stereotypes and/or viewing them as accurate). Based on these findings, Table 2 contains questions for teasing out the personal salience, relatability, and familiarity of the media to the priority population.

Emotionality

Emotionality describes the emotional and affective responses that participants have to the media. Responses varied in emotional valence, arousal/intensity, and the degree to which the emotions facilitated interest and critical analysis. The emotional valence of participants' responses ranged from negative ("Most of [the participants] were upset, some of them were irritated") to positive (e.g., participants were "happy"; they "enjoyed the media clips") and mixed (e.g., a "feeling of 'normalcy' turned to feeling of disdain"). One participant states, "You feel excited, happy because you see something [as] entertainment . . . but at the same time [after discussing the underlying message] it becomes degrading." In Table 2, we suggest asking participants involved in media selection, "How did you feel before/after viewing/hearing/discussing the media?" to gain an understanding of the valence of their emotional response.

Emotional responses varied not only in valence but also in intensity/arousal. Descriptions of participants' reactions ranged from "a very strong reaction," "very emotionally charged," and being in "a frenzy," to placid reactions from participants who "don't care." Facilitators stated that with some media there was "a lot of emotional pull." For example, one facilitator noted in his interview, "Most [participants] were upset, some of them were irritated. . . . I think that it was a positive thing because . . . it was a sign that they were definitely paying attention." However, with different stimuli, a facilitator noted that "getting to an emotional reaction has been difficult." Both extremely high and low arousal to media was identified as problematic by the facilitators. For example, a facilitator wrote, "Participants still not connecting any emotional component, making [one step of the critical analysis] feel hollow." In other cases, participants were "too frustrated to continue" with the activity, due to the highly emotional content. It should be noted, however, that an intense emotional reaction in itself does not necessarily constitute a problem. Indeed, strong reactions may be motivating to some participants if they do not become too overwhelming for participants or facilitators; one facilitator stated, "When they [participants] were enraged they were engaged."

Consequently, when evaluating media stimuli, we suggest measuring emotional valence, arousal, and whether emotional reactions might prevent further participation (Table 2). The response categories that we have provided as examples were chosen for their conciseness and previous use in research on emotional responses to media and are supported by our own process evaluation data (Bradley & Lang, 1994; Eckman, 1992; Morris, 1995).

Action

Action pertains to the media's tendency to engender personal or group action through critical thinking, introspection, discussion, or the development of action strategies among participants. Facilitators praised media clips that "generated lively discussions" and reported that participants "shared ideas about the messages around being gay and Black," were "highly engaged in analyzing and deconstructing visual stimulus," and "easily shared their interpretations" in response to certain media stimuli. One facilitator commented that "it made [participants] look at [the issue] from a whole different light." The discussion of one stimulus "opened the door to a lot of things." Though another stimulus "had everyone thinking and evaluating their thoughts," facilitators noted that "it was almost difficult to get the group to focus on the task . . . because the stimulus brought out a wide variety of issues that the participants wanted to address." A second facilitator stated that "the stimulus seemed to get everyone thinking and evaluating their thoughts. There were a range of opinions, and I don't believe that we had enough time to address all of the topics that came up," highlighting the need for more time to discuss certain stimuli. To better understand the level of action prompted by a media stimulus and accurately allot time for discussion, we suggest questions in Table 2 that seek to understand how the media facilitates the desire to share opinions and think about previous assumptions in a new way, as well as the ability for the stimulus to spark participants' contemplation of the topics discussed in the intervention.

DISCUSSION

Overall, our analysis includes data from 73 participants living in four cities across the United States where Black young gay/bisexual men are highly vulnerable to HIV and other poor health outcomes (Centers for Disease Control and Prevention, 2015). By obtaining feedback on media stimuli across five drafts of the MOVE media tool kit, we conducted a thorough thematic analysis that suggests there are four key attributes of the media and participants' responses to media that are important to consider for our intervention using critical media analysis. These key attributes are comprehension, relevance, emotionality, and action.

Our findings expand on previous work identifying basic features of media used in interventions employing critical media analysis (Morrell & Duncan-Andrade, 2002; Rikard et al., 2012; Watts & Jagers, 1997) by unpacking concepts of relevance and understandability and specifying emotionality and action as other key features. Most important, our study provides empirical evidence supporting key media attributes and informs future studies that aim to use this approach by providing specific guidance on how to define, measure, and apply media attributes.

Our analysis is the first to be able to provide datadriven guidelines regarding the selection and testing of media stimuli for critical consciousness interventions. Interventions to increase critical consciousness can enhance self-efficacy, feelings of empowerment, and awareness of social injustice (Balcazar et al., 2001; Campbell & MacPhail, 2002; Watts & Abdul-Adil, 1998). As the use of critical consciousness and critical media analysis in health promotion interventions becomes more widespread, additional research is needed to examine the direct effect of critical consciousness on health behaviors, as well as the putative mechanisms through which it operates to shape behaviors. Nonetheless, existing evidence supporting the roles of self-efficacy (Bandura, 1990, 1994; Glanz & Bishop, 2010; Strecher, DeVellis, Becker, & Rosenstock, 1986) and community engagement (Ramirez-Valles, 2002; Wallerstein et al., 1997) in promoting health behavior change suggests that critical consciousness may have an important role in health promotion interventions. For interventionists using the critical consciousness approach, the evaluation of media used in interventions is of central importance. We propose evidence-based guidelines that can be used to facilitate focus groups, interviews, and other community-based participatory research methods employed as a part of intervention development research.

The population and focus of MOVE may differ from other behavioral interventions, and the success of the specific media stimuli we used in spurring critical analysis may be limited to our sample; however, we believe that our findings provide a highly adaptable framework that researchers can use to avoid oversights and better determine how well a media stimulus works for their purposes by obtaining feedback from different priority populations. While the types and content of media stimuli we selected for MOVE may not be replicated for different populations, we believe that the media attributes and guidelines developed through this study can be applied to various subgroups targeted in critical consciousness interventions. By addressing how participants respond to media in terms of their comprehension, relevance, emotionality, and action, we believe that the framework presented in Table 2 will allow for a more thorough understanding of the usefulness of media stimuli for prompting critical media analysis in the context of a culturally focused behavioral intervention.

Our study is limited in that we can only propose that comprehension, relevance, emotionality, and action are important to measure; we cannot determine the configuration or criterion of these attributes that will guarantee the appropriateness of a media stimulus for any intervention. Rather, the selection of each media stimulus must be considered in relation to the intended participants and the context in which it is delivered. For example, although Table 2 provides questions for asking about emotional arousal, intervention practitioners must determine the level of arousal most appropriate for facilitating the activities in their intervention.

Various contextual factors should be considered when determining the ideal configuration of attributes for media stimuli, as these factors may also influence participants' responses to the media. Based on what we have identified as the four key attributes, we have included a series of open-ended questions in Table 3 that intervention developers can ask themselves to better determine (1) contextual factors that might influence a participant's response to the media in relation to the four attributes and (2) the configuration or criteria for each attribute that will best facilitate the intervention. Our experiences conducting the research to develop MOVE suggest that asking these questions may help intervention developers interpret process evaluation data. For example, if participants indicate low emotional arousal after viewing a media stimulus, intervention developers may need to determine if this is due to the content of the media stimulus or to participants' greater experience coping with oppressive messages. Intervention developers can use the questions posed in Table 2 to collect feedback on potential media stimuli when shown to members of their priority population. Subsequently, the open-ended questions included in Table 3 may be used to interpret this feedback and make decisions around content to include in a media tool kit. It should be noted that additional research is needed to refine the open-ended questions posed in Table 3 and better understand the ideal criteria for each attribute in relation to specific interventions.

It is our hope that future studies will use the questions in Tables 2 and 3 in their formative research to develop culturally tailored health promotion interventions involving critical media analysis for different populations, health issues, and settings, including mobile or online intervention delivery. Critical media analysis is a useful tool for implementing health promotion interventions, especially those focused on empowerment and designed to increase critical consciousness among participants. Such interventions offer an important avenue for addressing the myriad of health disparities affecting minority populations in the United States and globally. This is particularly relevant in the current era, as individuals have constant access to a vast supply of corporate-sponsored entertainment, news, and commercial media, alongside the proliferation of "fake

TABLE 3Proposed Questions Related to Intervention Context

What contextual factors might influence participants' responses to media stimuli?

- 1. What level of proficiency have participants attained in critical analysis?
 - a. Is this stimulus being viewed early in the intervention or later in the intervention? How much practice have participants had in this session, the intervention overall, and/or previous interventions or workshops? (comprehension)
 - b. Have participants learned how to cope with negative emotions elicited from media stimuli? (emotionality)
- 2. What is the format of the intervention?
 - a. Is the intervention multiple session or single session? (comprehension)
 - b. Will the intervention be conducted in small groups or large groups? (comprehension, action)
 - c. Will the intervention be implemented in person, via the internet, or through take-home materials? (comprehension, action)
- 3. What topics will be covered in the intervention?
 - a. Is there a chance that topics or themes will be extremely sensitive to participants? (emotionality, relevance)
 - b. Will topics be novel to participants? (comprehension, relevance)
 - c. Will topics relate to participants' everyday lives? (relevance, action)

What configuration of each attribute (comprehension, relevance, emotionality, and action) will best facilitate critical analysis of this media stimulus?

- 1. Will participants benefit from analyzing a stimulus that is easily understood or a stimulus that requires deeper critical thinking? (comprehension)
- 2. Will critical analysis be enhanced through a personal connection to the material? (relevance)
- 3. Will higher or lower emotional arousal be more beneficial for critical analysis? (emotionality)
- 4. Will positive or negative affect be more beneficial to critical analysis? (emotionality)
- 5. Are there any specific emotions that would be beneficial to critical analysis? (emotionality)
- 6. Is the goal of viewing the media to stimulate open group discussion or individual introspection? (action)
- 7. How much time can be spent discussing the stimulus? (action)
- 8. How does this media stimulus fit with the entire "media tool kit" used in the intervention? Is there a need for more diversity in the topics discussed or the responses elicited from participants? (all attributes)

news," all of which may be consumed passively without scrutiny of the underlying message or critical consideration of who is sending that message and why they are doing so. We hope that future studies will expand on the framework we have suggested and provide more detailed guidance on how to implement the framework in different health promotion interventions. In addition, technological advancements have made it easier to tailor interventions to an individual's preferences, as exemplified by the use of discrete choice experiments to customize mobile health interventions (Ramirez, Wu, & Beale, 2016), and our proposed method may help researchers understand the important elements that should be measured, such as emotionality, and elements that must remain constant, such as relevance. Future work that learns from the lessons of previous research and employs a media evaluation framework such as the one described in this study will enable the development of high-quality, well-tailored interventions to improve the health and lives of participants.

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