Using the Meaningful Involvement of People Living with HIV/AIDS (MIPA) Framework to Assess the Engagement of Sexual Minority Men of Color in the US HIV Response: a Literature Review

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Abstract

Black and Latino sexual minority men (SMM) continue to be disproportionately impacted by HIV. We utilized eight components of the Meaningful Involvement of People Living with HIV/AIDS (MIPA) framework to assess the engagement of Black and Latino SMM. Thirty-six (36) studies were included in the literature review. Forty-two percent of studies were Black SMM-specific, followed by Latino SMM-specific (31%) studies. Twenty-eight percent of studies were conducted among both groups. Most studies (72%) were intervention-related and focused on HIV prevention. The top five most common methods of community engagement were focus groups (39%), followed by interviews (36%), community-based participatory research (14%), the utilization of community advisory boards or peer mentorship (11%), and the establishment of multi-stakeholder coalitions, observations, or surveys (8%). We documented at least 7 MIPA components in 47% of the included studies. Community-based participatory research was more commonly utilized to engage Latino SMM. Researchers were more likely to initiate the engagement across all included studies. Few studies documented how Black and Latino SMM perceived the engagement. Engagement responsiveness was a well-documented MIPA component. In terms of engagement power dynamics, there were several examples of power imbalances, especially among Black SMM-specific studies. The inclusion of Black and Latino SMM had robust impacts on HIV research and interventions. There were limited examples of engagement capacity and maintenance. This is one of the first studies focused on utilizing MIPA to document the engagement of SMM of color. MIPA served as a useful framework for understanding the engagement of SMM of color in the US HIV response. The engagement of SMM of color is critical to reducing health inequities.

Keywords Community engagement · MIPA · HIV · Black men who have sex with men · Latino men who have sex with men

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Introduction

Black and Latino sexual minority men (SMM) continue to be disproportionately impacted by HIV in the United States (US) [1, 2]. In 2019, among all SMM in the US, Black SMM accounted for 37% and Latino SMM accounted for 32% of new HIV diagnoses [1]. Recent alarming data reveals an urgent national emergency among Latino SMM, labeled "The Invisible US Hispanic/Latino HIV Crisis [3]." While the number of new HIV cases decreased from 2010 to 2019 for both Black and White SMM, cases among Latino SMM have increased from 6800 to 7900 new HIV cases [2]. Pre-exposure prophylaxis (PrEP) and antiretroviral treatment (ART) are effective in reducing new infections; however, uptake of these biomedical interventions remains lower among Black and Latino SMM compared with their White counterparts [2, 4, 5].

The engagement of priority populations (i.e., Black and Latino SMM) in the HIV response has been identified as a best practice [6–9]. This has taken many forms, including but not limited to developing community advisory boards, hiring and training staff from the priority populations, supporting their membership in formal decision-making bodies, collaborating with diverse researchers and community-based organizations, and conducting community education and organizing [6–12].

The engagement of Black and Latino SMM can shift acceptance, availability, and uptake of HIV services and clinical trials [6–13]. However, Black and Latino SMM are infrequently involved in the full array of HIV research and programmatic activities, from priority setting to intervention development, implementation, results interpretation, and dissemination [6–12]. Models for engaging communities vary across discipline and intent. For some, community engagement intends to increase enrollment in research studies or programs designed to improve access and retention in services [14]. These models often limit what priority populations can inform and affect. For example, even within community advisory boards, members may not have the necessary skills, resources, and support to contribute effectively. In addition, the research or programs may not have the flexibility to change to emerging community concerns or readjust if community concerns are not adequately addressed. While this is technically community engagement, the potential impact within the community is limited [15].

The Meaningful Involvement of People Living with HIV/AIDS (MIPA) serves as a framework for the inclusion of priority populations such as Black and Latino SMM in the HIV response [8, 16]. From the epidemic's earliest days, people living with HIV (PLWH) have advocated for their self-determination as a community in the HIV response [17]. MIPA has been essential in increasing the efficacy of services and in ensuring that the needs of PLWH are not only central to the response, but they are also met [18]. MIPA ensures that PLWH have the capacities and opportunities to access, choose, and participate in the HIV response in whatever ways they choose [19].

Our goal in the current literature review is to advance understanding of the different ways in which Black and Latino SMM have been engaged in the US HIV response including HIV research and programs across the HIV care and prevention continua. We also sought to identify recommendations to inform future efforts to engage Black and Latino SMM in the HIV response. Even though MIPA is focused on PLWH, we used it as a broad framework to guide our study. We focused on eight key elements of MIPA: (1) Engagement type (i.e., the method or type of interaction); (2) Engagement initiator (i.e., who initiated the engagement); (3) Engagement responsiveness (i.e., was there a concerted effort to engage Black and Latino SMM, where the concerns and/or recommendations of Black and Latino SMM identified, incorporated, and/or addressed); (4) Engagement perceptions (i.e., what Black and Latino SMM thought about the engagement relationship and/or the role); (5) Engagement outcomes (i.e., documented results of engagement); (6) Engagement power dynamics (e.g., opportunities for Black and Latino SMM to lead or be centered in discussions, their ability to determine the content of the discussions/efforts, and the extent to which their voices are being listened to); (7) Engagement capacity and support (i.e., mechanisms in place to assess and support Black and Latino SMM, resources and support provided, compensation for time and effort); and (8) Engagement maintenance (i.e., whether the engagement is sustained over time, potential factors that contribute to engagement longevity).

Methods

We conducted a review of the literature to accomplish our study goals. The key terms used for the literature search were based on race/ethnicity, sexual minority status, HIV, community engagement/involvement terms, and English language articles. Databases used for our literature review included PubMed, Cochrane Library, PsycINFO, and CINAHL. The decision to search within four databases required the removal of many duplicates but ensured a wide range of studies identified. Examples of search strings included "African American AND MSM AND HIV AND community engagement" and "Latino AND MSM AND HIV AND participatory research." An example search process on PubMed included (community[Title] AND involvement[Title] AND african[Title] AND american[Title]) AND "Men Who Have

Sex With Men"[MeSH Terms] AND English[lang] AND "HIV"[MeSH Terms]).

Articles were selected based on the following criteria: (1) had to include at least one component of MIPA and the primary outcome had to be related to HIV research, interventions, treatment, and/or prevention; (2) had to focus on Latino and Black SMM; (3) had to be English language articles published until December 2020 and (4) limited to studies conducted in the US to reflect the unique context of the US.

The search identified 385 potentially relevant articles for inclusion. Of these, 266 articled were excluded and 119 were assessed for eligibility. Ultimately, 36 articles were included in the literature review. Data were abstracted from these articles in a standardized format and coded based on the presence or absence of each of the eight MIPA components. For quality assurance, staff randomly chose entries to assess data collection accuracy and consistency.
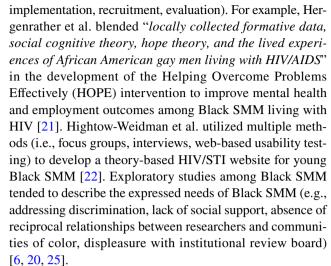
Results

We present the results in two tables, the first table providing an overview of the studies included and the second table summarizing the studies by the MIPA components. As shown in Table 1, a slightly greater percentage of studies were conducted among Black SMM (42%, 15) compared with Latino SMM (31%, 11). Twenty-eight percent (28%, 10) of the studies were conducted among both groups. Most of the studies were intervention-related (61%, 22) and focused on HIV prevention (72%, 26). Almost a third of the studies were conducted in the West coast (31%, 11). The top five most common methods of community engagement were focus groups (39%, 14), followed by interviews (36%, 13), community-based participatory research (14%, 5), the utilization of community advisory boards or peer mentorship (11%, 4), and the establishment of multi-stakeholder coalitions, observations, or surveys (8%, 3). We documented at least 7 MIPA components in 47% (17) of the included studies.

Black SMM-Focused Studies

Studies specific to Black SMM (*n* = 15) are shown in Table 2 [6, 11, 20–32]. The majority of studies (60%, 9) utilized multiple methods to engage Black SMM, and they were more likely to be engaged via interviews (60%, 9), followed by focus groups (40%, 6), and community advisory boards and observations (20%, 3). Researchers initiated the engagement in all but two instances (87%, 13).

The majority of Black SMM-only studies were intervention-related (60%, 9), and engagement responsiveness focused on ways to improve interventions (e.g., design,

implementation, recruitment, evaluation). For example, Hergenrather et al. blended "*locally collected formative data, social cognitive theory, hope theory, and the lived experiences of African American gay men living with HIV/AIDS*" in the development of the Helping Overcome Problems Effectively (HOPE) intervention to improve mental health and employment outcomes among Black SMM living with HIV [21]. Hightow-Weidman et al. utilized multiple methods (i.e., focus groups, interviews, web-based usability testing) to develop a theory-based HIV/STI website for young Black SMM [22]. Exploratory studies among Black SMM tended to describe the expressed needs of Black SMM (e.g., addressing discrimination, lack of social support, absence of reciprocal relationships between researchers and communities of color, displeasure with institutional review board) [6, 20, 25].

A limited number of Black SMM-only studies (40%, 6) documented how Black SMM viewed the engagement [6, 11, 25, 26, 28, 31]. Most Black SMM-specific studies (67%, 4) described the engagement as positive [11, 26, 28, 31]. For example, Mamary et al., who utilized photovoice to document the sexual health issues of non-gay identified Black SMM, reported that "*all participants reported an overall positive experience with the 'Our Lives' project. Many described particular benefits that they had derived from their participation. One man appreciated 'being a part of something that would positively help people', and another commented that he received gratification from helping with prevention and creating awareness of HIV in the black community. The process of telling one's story and hearing the stories of others was an important experience for several men. One man explained that hearing the opinions of others was mind expanding*" [26]. There were a couple of instances (*n* = 2) in which the engagement was not entirely positive [6, 25]. For example, Loue et al. documented tension between the community advisory board members and the lead researcher's institutional review board (IRB) in a study of mental health and HIV risk among Black SMM [25]. Community advisory board members "*believed that confidentiality and privacy were preserved to the greatest extent possible with the measures that had been put into place and that stigmatization was unlikely to occur as a result of a breach*" and "*viewed the IRB as paternalistic, authoritarian, and insensitive to the needs of African-American men and sexual minority communities. Members of the local IRB described the CAG's response to its concerns as 'aggressive' and 'questioning the IRB's ability and authority to review research involving human subjects.' The impasse seemed insurmountable, even as the funding source became increasingly concerned about the resulting delay in actually initiating the work involved in the study*" [25].

A handful of Black SMM-only studies documented the engagement outcomes (33%, 5) [11, 21, 25, 28, 30]. Results

Table 1 Summary of literature review studies focused on Black and Latino sexual minority men (N=36)

		N (%)
Populations		
	Black sexual minority men	15 (41.7%)
	Latino sexual minority men	11 (30.6%)
	Both Black and Latino sexual minority men	10 (27.8%)
Study design		
	Exploratory	14 (38.8%)
	Intervention-related	22 (61.2%)
Focus area		
	HIV prevention	26 (72.2%)
	HIV treatment	3 (8.3%)
	HIV treatment/prevention	2 (5.6%)
	HIV/STI prevention	5 (13.9%)
Location of study		
	East	6 (16.7%)
	Midwest	4 (11.1%)
	South	7 (19.4%)
	West	11 (30.6%)
	Multiple sites	8 (22.2%)
Engagement type		
	Focus groups	14 (38.8%)
	Interviews (individual and dyadic)	13 (36%)
	Community-based participatory research	5 (13.8%)
	Community advisory board	4 (11.1%)
	Mentoring	4 (11.1%)
	Coalitions	3 (8.3%)
	Observations	3 (8.3%)
	Surveys	3 (8.3%)
	Photovoice	1 (2.7%)
	Review of organization/activist groups	1 (2.7%)
	Film	1 (2.7%)
	Ethnography	1 (2.7%)
	Caucus	1 (2.7%)
	Theatre testing	1 (2.7%)
	Web-based usability testing	1 (2.7%)
Documented MIPA components		
7 or 8		17 (47.2%)
5 or 6		7 (19.4%)
≤ 4		12 (33.4%)

ranged from addressing the hurdles of getting a study approved by the IRB, as in the case of Loue et al. [25], to actual improvements in HIV-related outcomes, such as the study by Operario et al. that documented significant reductions in HIV risk behaviors (e.g., condomless anal sex with male partners, fewer numbers of sexual partners) as a result of participating in four individualized risk-reduction counseling sessions [30]. The latter was most common based on our literature review.

Most Black SMM-only studies (86%, 13) described some level of engagement in power dynamics. The more common

examples of engagement power dynamics (46%, 6) were tied to how the voices and recommendations of BSMM were being heard and incorporated into studies, that is, to improve some aspect of intervention development, study design, and as part of dissemination [21–26]. Several studies described uneven power dynamics between researchers, research institutions, Black SMM, and community members [6, 21, 25, 28]. As in the study by Loue et al., the IRB decided to seek out outside consultation related to the benefits and costs of the study versus accepting the recommendations of the existing community advisory board [25]. The study by Andrasik

Table 2 Summary of studies focused on Black and Latino sexual minority men organized by the Meaningful Involvement of People Living with HIV/AIDS (MIPA) components

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Andrasik MP et al. 2014 [6]	BSMM	Focus groups (exploratory)	Researchers	Concerns (lack of fair, reciprocal relationships with Black community) and recommendations (better collaborations) form basis for future interventions	Viewed engagements as missed opportunities, exploitative, or imbalanced	None	BSMM described a hierarchy among researchers and the larger community wherein researchers were at the top of the hierarchy There is no space for true dialogue Recommended guidelines that provide instructions on equitable relationships of power, influence, and resources	None	1-year follow-up feedback meeting
Garcia J et al. 2015 [20]	BSMM	Participant observations interviews community advisory board (exploratory)	Researchers	Concerns (LGBTQ discrimination, lack of social support) and recommendations (safe spaces) formed basis for future interventions	None	None	None	None	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Hergenrather KC et al. 2013 [21]	BSMM	Community-based participatory research (CBPR) interviews (intervention)	Community-based organization (CBO)	a. Interviewees' feedback solicited for improving intervention design b. CBPR partnership informed intervention focus (employment), theory selection, intervention sessions, training manual, assisted with recruitment, assessment instruments, data analysis, and interpretation	None	Improvements in goal-setting skills, problem-solving skills, health-promoting behaviors, and employment seeking behaviors	Directly involved in intervention development and study design Power disparities observed in CBPR partnership and groupthink may have been utilized to maintain cohesion	No mention of CBPR partners receiving compensation Financial compensation for interview participants CBPR members were experienced in both quantitative and qualitative analyses. For those with less experience, pairing with mentor occurred to assist with data analyses	10 year-long history in developing and implementing HIV interventions
Hightow-Weidman LB et al. 2011 [22]	BSMM	Focus groups interviews web design usability testing (intervention)	Researchers	Intervention lacked information about sexuality and sexual health which was later incorporated into intervention design	None	None	Design feedback was incorporated directly into the website / participants were able to speak unprompted	$50 or $35 for engagement	None
Kipke MD et al. 2013 [23]	BSMM	Community advisory board (intervention)	Researchers	Language of recruitment & survey questions incorporated into study design	None	None	Recommendations incorporated into question design	NA	None
LeGrand S et al. 2014 [24]	BSMM	Focus groups (intervention)	Researchers	Concerns incorporated directly into website intervention design	None	None	Design feedback was incorporated directly into the website	$50 for engagement	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Loue S et al. 2012 [25]	BSMM	Community advisory board focus groups informal interviews (exploratory)	BSMM community members	Concerns incorporated into recruitment strategies, compensation amount, language	The institutional review board (IRB) and community advisory board differed with respect to their perceptions of participant benefits. The CAB saw direct benefits from the study while the IRB only saw risks and no direct benefit to participation	The outcome here is that the study was finally approved by the IRB after the principal investigator (PI) completed informal interviews and a focus group to determine whether individuals believed that contact with the PI would result in their stigmatization and ostracism. The IRB also utilized a "cultural expert" of their choosing to examine the ethical issues posed by the study and the consultant's feedback supported much of what the community advisory board had stated in regards to risks and benefits of the study	CAB could speak directly with IRB, PI to influence and determine outcomes of study CAB power was limited when it came to influencing IRB decision. However, results from the focus groups and informal interviews with BSMM influenced the IRB's decision to approve the study	None	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Mamary E et al. 2007 [26]	BSMM	Photovoice (exploratory)	Researchers	Publication / community events	Participants enjoyed their role in the engagement	None	Participants had direct hand in planning the meetings and disseminating results, were given space to speak and ask questions	Participants compensated $150, received materials for photovoice, trained in photography	None
Magnus M et al. 2014 [27]	BSMM	Surveys interviews (intervention)	Researchers	Recommendations (diverse staffing) incorporated into research	None	None	Participants developed relationships with staff members	None	None
Miller RL et al. 2012 [28]	BSMM	Participant observations interviews (intervention)	Researchers	Concerns (cultural-specificity, leadership development, safety) influenced intervention adaptation	Participants enjoyed the intervention established leadership positions and roles	Created a more effective intervention	Mpowerment Detroit established a 5-tier structure with each tier having progressively greater levels of authority and responsibility	Trained, given access to CBO resources Mpowerment Detroit has sought to enlarge its emphases to include developing young men's leadership skills and personal potential	None
Mutchler MG et al. 2015 [29]	BSMM	Dyadic interviews (exploratory)	Researchers	Concerns and recommendations form basis for future research	None	None	Participants had space to voice concerns about PrEP rollout	$50 / interviewees were given space to speak alone for comfort	None
Operario D et al. 2010 [30]	BSMM	Interviews focus groups participant observations (intervention)	Researchers	Concerns (e.g. recruitment) incorporated into HIV-prevention counseling intervention development	None	Intervention effects included a reduction in condomless sex, number of sex partners, and amount of sex while under the influence of drugs	None	None	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Senn TE et al. 2017 [31]	BSMM	Interviews peer mentors surveys (intervention)	Researchers	Formative research used as basis, suggestions for improvement included Able to access text messaging interventions and made suggestions for improvements throughout	Participants/mentors were generally satisfied with their time in the study	None	Mentors had autonomy within the program	Mentors were unpaid volunteers	None
Voisin D et al. 2013 [32]	BSMM	Focus groups (exploratory)	Researchers	Basis for future research	None	None	None	$20 compensation Steps taken to ensure anonymity and public space	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Watson CC et al. 2020 [11]	BSMM	Black Caucus interviews (intervention)	Researchers	Concerns (lack of BSMM-focus, leadership, and qualitative research) influenced the creation of a Black Caucus Black Caucus members could alter study procedures and objectives	Interviewees felt the HIV Prevention Trials Network (HPTN) improved with the inclusion of a BSMM-specific approach Black Caucus members informed the HPTN leadership and research agenda Acted as a liaison between study sites and HPTN leadership HPTN created scholarship program to include more minority investigators in the future	Network became more culturally responsive, reached more BSMM	Black Caucus members had positions of authority that enabled them to make policy changes	None	HPTN created scholarship program to include more minority investigators in the future
Alonzo J et al. 2016 [33]	LSMM	CBPR (intervention)	Partnership	None	None	Results indicate intentions to practice safer sex and better communication, as well as get tested more regularly	None	None	None
Beougher SC et al. 2011 [34]	LSMM	Interviews (exploratory)	Researchers (LSMM staff hired to recruit participants)	None	None	None	None	$40 compensation	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Martinez O et al. 2017 [35]	LSMM	Theater testing Focus Groups (intervention)	Researchers	Community stakeholders helped adapt the intervention & participant feedback formed the basis for future adaptations	Participants expressed support for more couples-based interventions, health care providers were happy to have culturally-specific interventions	HIV/STI couple intervention developed for LSMM Couples expressed support for a couples based approach Couples identified ways to communicate effectively Participants were connected to resources and found the intervention promising	Couples influenced the components of the interventions Community stakeholders had influence in the intervention adaptation (e.g., updates to couples referral process, retention strategies)	None	None
Melendez RM et al. 2013 [36]	LSMM	Surveys focus groups (intervention)	Researchers	Formative research used as basis, participant suggestions for improvement included	Participants felt supported by the intervention, close with members	Participants demonstrated intentions towards safer sex, expressed more positive feelings towards their sexual identities	Formative research directly influenced the intervention materials	None	None
Neme S et al. 2015 [37]	LSMM	Focus groups (exploratory)	Researchers	Concerns: fear of HIV stigma, cultural adaptation, lack of financial/legal/psychiatric services form basis for future research / adaptation	Initial hesitance gave way to support for interventions	None	None	$50 compensation	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
O'Donnell L et al. 2014 [38]	LSMM	Focus groups community advisory board (intervention)	Researchers	Intervention development and adaptation	None	Results indicate safer sex practices and higher HIV testing following intervention	Focus groups members' recommendations were presented to intervention designers and community partners	None	None
Ramirez-Valles J et al. 2003 [39]	LSMM	Interviews (exploratory)	Researchers	Concerns (lack of leisure time, stigma, cultural differences, racism) form basis for future research	Participants expressed that engagement modulated self-esteem, allowed them to help others/give back, and helped them be a part of the community	Participants reported safer sex behaviors, better mental/social/sexual health, development of professional skills	None	Participants often held administrative and volunteer positions within CBOs	None
Ramirez-Valles et al. 2014 [40]	LSMM	Focus groups with LSMM and community educators film production (intervention)	Researchers	Focus group concerns were directly incorporated into changing the film itself	None	Results indicate that the film could help to reduce stigma	Latino SMM were given the opportunity to tell their own stories on screen	None	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Rhodes SD et al. 2013 [41]	LSMM	CBPR (intervention)	Diverse CBPR partnership to include Latino SMM as well as Intervention Team which consisted of a subgroup of the broader CBPR partnership	a. Community members' desire for LSMM-specific intervention motivated project and partnership expansion b. Interviewees' concerns (lack of sex health information, sexual risk, and health care) informed intervention objectives c. Community forum finalized objectives d. pilot testing led to revisions	None	Community developed a long-term, culturally-specific intervention	Latino SMM had direct hand in determining the procedures and objectives of the intervention	Included in partnership and given access to partnership resources	Developed longitudinal intervention, expanded partnership

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Rhodes SD et al. 2015 [42]	LSMM	CBPR (intervention)	Latino SMM community members	Concern: lack of HIV prevention programming for LSMM led to development of intervention (i.e., HOLA en Grupos) Need for increased understanding about sexual diversity and capacity building to serve LSMM led to CBO sensitivity training and review of agency mission and values with staff	None	Development of Hola en Grupos enhancement intervention for LSMM Sensitivity training and review of agency mission and values with staff Assets-focused orientation to research	LSMM members provided input in the enhancement of Hola en Grupos intervention to include incorporating local data, identifying and refining needs and priorities, defining intervention core elements, developing a logic model and intervention logo, enhancing existing and developing new activities and materials, and intervention delivery	None	CBRP partnership has a long track record
Sun et al. 2015 [43]	LSMM	Peer mentorship (intervention)	Researchers	None	None	Peer mentors held 691 events and completed 1820 activities	Peer mentors discussed intervention with contact person	Peer mentors were given training, support, financial compensation, and sexual health resources (e.g. condoms) to act as health advisors	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Castillo M et al. 2012 [44]	Both	Coalition (intervention)	Organizational staff	Focus on Philadelphia Connect to Protect® Coalition Engaged SMM of color from the Mpowerment project and House and Ball Community Strategic planning process set in motion to develop activities and implement structural changes to increase HIV prevention education and testing among SMM youth of color. Resulted in training, health care resources (HIV testing, contraceptives), and community events/programs	Organization members and House and Ball Community (HBC) members were receptive	High engagement numbers at community events	SMM played a key role in developing events, receiving training, and working directly with health care professionals	Access to HIV prevention services, compensation provided to HBC through prizes etc	Continued relationship with HBC
Landers S et al. 2011 [45]	Both	Review of organizations/activist groups (exploratory)	None	None	None	National gay men's health agenda developed	Groups were all headed by SMM	None	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Lin AJ et al. 2012 [46]	Both	Coalition Surveys (intervention)	Researchers	Focus on involving key gatekeepers in the coalition (e.g., individuals from the HBC) Balance between broader youth and SMM of color priorities and structural change objectives	None	Increased collaboration that made partners more inclusive and successful in structural changes (i.e. implementing HIV testing programs)	Community coordinators were invited to share information via meetings, council hearing, and educational materials Coordinators created a safe meeting space with a consistent format and ground rules, in order for all voices to be heard and politics to be minimized Coordinators promoted a distributive leadership process and created opportunities for partners to take on smaller, more discrete tasks	Space within organization meetings and treated as partners	Offering financial support, administrative training, maintaining multiple points of support/outreach, giving partners more power, regular communication
Miller RL et al. 2016 [47]	Both	Coalitions (intervention)	Researchers	None	None	Participants increasingly felt that their resource needs were met	None	None	Longitudinal interviews, continued work with community coalitions
Mimiaga MJ et al. 2016 [48]	Both	Interviews focus groups (exploratory)	Researchers	None	None	Participants gained increased understanding of PrEP	Talked freely in focus groups / interviews	Free HIV test and $50	None

Table 2 (continued)

Author	Population	1—Engagement type	2—Engagement initiator	3—Engagement responsiveness	4—Engagement perceptions	5—Engagement outcomes	6—Engagement power dynamics	7—Engagement capacity and support	8—Engagement maintenance
Mutchler MG et al. 2013[49]	Both	Peer ethnography (exploratory)	Researchers	None	Peer ethnographers found their role empowering	Peer ethnographers were successful in capturing social dynamics unavailable to outsiders	Peer ethnographers ran the bulk of data collection but were excluded from analysis	Peer ethnographers were compensated and trained	None
Rodriguez K et al. 2013 [50]	Both	Focus groups (exploratory)	Researchers	None	Majority were first-time research participants, expressed skepticism	None	None	None	None
Williams JK et al. 2004 [51]	Both	Focus groups (exploratory)	Researchers	None	None	None	None	$20 compensation and light refreshments	None
Young SD et al. 2013 [52]	Both	Peer mentorship (intervention)	Researchers	None	None	Trained peer leaders gained increased comfort in discussing sexual health topics	None	Peer leaders received training	None
Young SD et al. 2014 [53]	Both	Peer mentorship (intervention)	Researchers	None	None	Results indicate increased social cohesion, communication about HIV prevention, and positive behavior change related to HIV prevention	None	Peer mentors received training and financial compensation participants received HIV testing kits and financial compensation	None

et al. also documented a hierarchy of power and perceived exploitation between researchers and Black SMM—"*most existing relationships were viewed as ones wherein all of the power and decision-making is placed in the hands of the research institution, and CBOs [community-based organizations] are largely exploited for their connections and access to the target population*" [6]. In addition, BSMM participants recommended, "*crafting guidelines for both CBOs and research institutions that went on to recommend guidelines provide instruction on establishing and maintaining equitable relationships of power, influence, and resources*" [6].

Interestingly, the study by Hergenrather et al. hinted at the possibility of unequal power dynamics and groupthink within the partnership when preliminary findings were being discussed as a group—"*in groups of community members having unequal power, group communication is reduced to those powerful members controlling the communication. This is likely to affect group cohesion because individuals with similar status are likely to interact with each other, form alliances, and engage all group members to concur on issues*" [21]. For Miller et al., a five-tiered structure among Black SMM was an intentional component of the intervention, and each tier level had progressively greater levels of authority, power, and responsibility was intentional [28].

Most BSMM-specific studies (53%, 8) discussed engagement capacity and support [11, 21, 22, 24, 26, 28, 29, 31]. Among studies that included this MIPA component, the most common support for BSMM was compensation for time and effort. Few studies documented instances where community partners received additional training to enhance their capacity to contribute to the partnership [21, 28].

A limited number of studies described elements of engagement maintenance [6, 11, 21]. One CBPR partnership, in particular, had a 10-year community partnership developing HIV interventions [21]. In the study by Watson et al., the Black Caucus endorsed establishing a HIV Prevention Trials Network Scholars program to support the career development of historically underrepresented researchers and the pool of future Black Caucus members [11].

Latino SMM-Only Studies

Studies specific to Latino SSM (*n* = 11) are shown in Table 2 [32–43]. Latino SMM were more likely to be engaged via community-based participatory research and focus groups (36%, 4), followed by interviews (18%, 2). They were less commonly engaged via peer mentorship, community advisory boards, film production, and surveys (9%, 1). Researchers initiated the engagement in all but three instances (73%, 8). Most studies were intervention-related (73%, 8).

Engagement responsiveness was centered on recognizing the broader needs of Latino SMM (e.g., fear of HIV stigma, lack of services, experiences of discrimination)

[37, 39, 41, 42] and ways to improve HIV-related interventions (e.g., design, implementation, recruitment, evaluation) [35, 36, 38, 40, 41]. In terms of engagement perceptions, more than a third (36%, 4) of studies specific to Latino SMM documented this component and positive engagement perceptions overall [35–37, 39]. For example, all couples participating in the adaptation components of *Connecting Latinos en Pareja* expressed strong support for this HIV/STI prevention intervention [35]. One participant noted, "*I have never seen a couple-based program—they usually focus on the individual gay man, and we need to help Latino gay couples with having a long-term healthy relationship and provide tools to deal with HIV*" [35].

Most Latino SMM-only studies documented the engagement outcomes (82%, 9) [33, 35, 36, 38–43]. Outcomes ranged from the development of culturally specific interventions [35, 41, 42] to actual improvements in HIV-related outcomes, particularly HIV risk behaviors such as intentions towards safer sex practices and improved communications between sexual partners [33, 36, 38, 39].

Most Latino SMM-only studies (64%, 7) described some level of engagement in power dynamics [35, 36, 38, 40–43]. The more common examples of engagement power dynamics (71%, 5) were tied to how Latino SMM had a direct role in influencing one or multiple aspects of intervention development (e.g., materials, core elements, goals) [35, 36, 38, 41, 42]. For example, Melendez et al. described how they utilized the focus group recommendations of Latino SMM in the development of *La Familia*, an HIV prevention program focused on disclosure and family acceptance. "*In light of the participants' desire for 'real world' examples and assistance, we incorporated the use of 'sexual scenes' in the sessions to help participants identify HIV risk factors and HIV preventive strategies by reconstructing a scene we presented to them as well as one they created themselves. Further, we incorporated a story-telling component through which participants tell their own stories related to the topics discussed in each session*" [36].

Less than half of Latino SMM-only studies (45%, 5) described some level of engagement capacity and support [34, 37, 39, 41, 43]. Among studies documenting this MIPA component, the most common type of support for Latino SMM was compensation for time and effort [34, 37, 43]. Few studies documented instances in which Latino SMM received training in a more formal capacity (i.e., administrative, volunteer, or peer mentor position) within a community-based organization [39, 43].

A limited number of studies hinted at elements of engagement maintenance [41, 42]. One CBPR partnership, in particular, described a track record of working together [42], while the other CBPR partnership described how they had expanded their partnership over time [41].
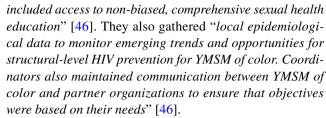
Both Black and Latino SMM Studies

Studies with both Black and Latino SMM ($n = 10$) are shown in Table 2 [44–53]. Black and Latino SMM were more likely to be engaged via coalitions and focus groups (30%, 3), peer mentorship (20%, 2). They were less commonly engaged via reviews, interviews, and peer ethnography (10% each). Researchers initiated the engagement in all but two instances (80%, 8). Half (50%, 5) of the studies conducted were either exploratory or intervention related.

Two of the ten studies focused on both populations of SMM documented experiences of engagement responsiveness [44, 46]. Both of these studies were part of the Adolescent Trials Network's (ATN) *Connect to Protect*® partnerships across multiple jurisdictions focused on young SMM of color [44, 46]. C2P staff, known as Community Coordinators, were employees of their hospital or center within the ATN [46]. "*They facilitated the process of forming each local coalition, developing action plans, constructing logic models, convening meetings, and identifying and implementing structural-level objectives with coalition partners*" [46]. Coalitions represented multiple stakeholders, including SMM of color, to ultimately develop structural-level changes to reduce HIV acquisition and transmission [44, 46]. Castillo et al. actively involved SMM of color from the Mpowerment Project, a CDC-funded intervention focused on SMM and those from the House and Ball Community [44]. Coalition discussions revealed a lack of education and outreach specifically for the House and Ball Community, and new strategies were urgently needed to address the gap [44]. Thus, a strategic planning process was set in motion to develop activities and implement structural changes to increase HIV prevention education and testing among SMM youth of color [44].

Lin et al. also described a commitment to engaging individuals from the House and Ball Community [46]. Coordinators actively sought "*community gatekeepers whose acceptance was regarded by the coalition as influential, like young gay men of color in the House and Ball community and public health officials*" to assure representation of essential stakeholders [46]. For Lin et al., maintaining a focus on SMM of color was a challenge for the coalitions, given the diverse nature of the coalitions and member priorities. Coordinators had to employ a delicate balance between a broader youth and SMM of color focus [46]. "*The sustained participation of partners whose agencies' missions did not include this population or who had a broader prevention agenda for youth required that the coordinators facilitated objectives that would impact YMSM (Young men who have sex with men) of color and those that would impact services to youth in general.*" "*Community Coordinators identified objectives that impacted youth populations but were particularly important for YMSM of color. In LA and NYC, this included access to non-biased, comprehensive sexual health education*" [46]. They also gathered "*local epidemiological data to monitor emerging trends and opportunities for structural-level HIV prevention for YMSM of color. Coordinators also maintained communication between YMSM of color and partner organizations to ensure that objectives were based on their needs*" [46].

In terms of engagement perceptions, less than a third (30%, 3) of included studies documented this component, and for the most part, the engagement was well-received or viewed as empowering and focused on the level of the research participant [44, 49]. In one study, participants expressed skepticism about participating in research, particularly research that involved them referring to their sexual or drug-using partners [50]. Their concerns were tied to confidentiality, physical safety, and criminalization [50].

Most Black and Latino SMM studies documented the engagement outcomes (80%, 8) [44–49, 52, 53]. Outcomes ranged from more process-related successes (e.g., participation in community events, development of a gay men's agenda) [44, 45, 49] to outcomes that were connected to HIV outcomes (e.g., sexual health, HIV testing, PrEP understanding, needs met) [46–48, 52, 53].

Half of the studies (50%, 5) described some level of engagement power dynamics [44–49]. There were a few instances in which Black and Latino SMM played a significant leadership role in intervention development and/or spearheading groups [44, 45]. However, several studies described uneven power dynamics between researchers, Black/Latino SMM, and other stakeholders [46, 48, 49]. For example, Lin et al. identified coalition-level challenges in forming community partnerships focused on decreasing HIV acquisition and transmission among SMM of color [46]. One challenge related to organizational and community politics described potential power dynamics within coalitions and the need to ensure representation and create an inclusive space [46]—"*The interplay of existing community politics could not be ignored by Coordinators. Gay and bisexual men of color, HIV prevention communities and related organizations have complex histories relating to collaboration and competition for scarce resources. Accordingly, community gatekeepers whose acceptance was regarded by the coalition as influential, like young gay men of color in the House and Ball community and public health officials were recruited to assure representation of important stakeholders. Coordinators worked to create a safe meeting space with a consistent format and ground rules, in order for all voices to be heard and politics among partners to be minimized*" [46].

Most studies (70%, 7) described some level of engagement capacity and support [44, 46, 48, 49, 51–53]. Among studies that documented this MIPA component, the most common type of support provided for Black and Latino SMM was financial or prize-related compensation for time

and effort [44, 48, 49, 51, 53]. Three studies documented instances in which SMM of color received training in a more formal capacity (i.e., peer mentor or ethnographer) [49, 52, 53]. Almost a third (30%, 3) of studies focused on SMM of color hinted at elements of engagement maintenance [44, 46, 47]. One coalition in particular described the ongoing nature of their partnership with the House and Ball community (HBC) which consisted of sponsoring several balls over time and their continued efforts to work with the HBC to conduct HIV prevention activities [44].

Discussion

The engagement of Black and Latino SMM in the US HIV response provides an added level of nuance and context to help meet the needs of these populations. This becomes even more critical in the US where the intersections of race/ethnicity and sexuality are central to effectively responding to the HIV epidemic [54]. To the best of our knowledge, this is one of the first studies focused on utilizing MIPA to document the engagement of Black and Latino SMM in the US HIV response.

We had anticipated that community advisory boards would be the most common form of engagement overall for SMM of color, but this was not the case. Focus groups were most utilized to engage SMM of color in HIV research and/or intervention development. However, CBPR models, viewed as a gold standard approach [55], were more commonly utilized for Latino SMM. We speculate that investigators influenced the utilization of this approach with a strong history and commitment to CBPR among Latino SMM [56].

It was unsurprising that in most of the studies, researchers initiated the engagement with Black and Latino SMM. This may point to the recognition among researchers of the importance of engaging SMM of color. However, most forms of engagement were not comprehensive. They were limited to one-time low-touch activities (e.g., focus groups and interviews) vs. longer-term high-touch activities (i.e., CBPR, coalitions, community advisory boards). We recognize that research budgets and timing to complete a study may influence the type of engagement, given that more resources and time are needed for ongoing high-touch engagement. We are also aware that many of the community-engaged initiatives led by community-based organizations and community stakeholders are less likely to be published in peer-reviewed journals. Further, new and innovative forms of engagement by researchers of color might be published or disseminated in non-peer reviewed journals such as twitter and other social media networks, and community forums.

Engagement responsiveness was a well-documented MIPA component. For most studies, the recommendations of Black and Latino SMM were incorporated into the design, implementation, and evaluation of interventions. The inclusion of Black and Latino SMM also had robust impacts on HIV research and interventions, as evidenced by the different outcomes described in the included studies.

Few studies documented how Black and Latino SMM perceived the engagement, which indicates the need to expand definitions of success. Successes and failures should not only be viewed in the traditional sense of whether specific HIV-related outcomes were achieved but should also include descriptions of the perceptions of the engagement. There were well-documented examples of power imbalances in the included studies, which were more commonly described among studies primarily focused on Black SMM. There were limited examples of engagement capacity and maintenance among the included studies. This may also be tied to the types of engagement efforts. For example, compensation and time-limited involvement may be used for focus groups and interviews. Whereas training, compensation, and longer-term involvement may be offered for ongoing high-tough efforts (i.e., CBPR, community advisory boards, coalitions). Future research is needed to create a validated quantitative MIPA scale among SMM of color and examine its correlation with HIV outcomes.

This study has several limitations. First, our literature review is limited to published scientific studies up to December 2020. Additional studies have been published after the cut-off date for this literature review. Second, this literature review did not include a review of the gray literature, including reports and policy briefs from community-based organizations and AIDS service organizations. We understand that a large body of literature related to community engagement is published in the form of reports and policy briefs. Third, we did not conduct critical appraisal of the included studies. The lack of critical appraisal is one of the primary limitations of literature reviews compared with systematic reviews.

Conclusion

MIPA provided a useful framework for understanding the engagement of SMM of color in the US HIV response. Our findings documented the importance of community engagement in HIV prevention and care research; particularly in the areas of intervention development.

Declarations

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Institutional Review Board approval was not required for this study since subjects were not enrolled.

Informed Consent Informed consent was not required for this literature review.

Conflict of Interest The authors declare no competing interests.

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