

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

PREPARED FOR



RESEARCH | INTEGRATION | STRATEGIES | EVALUATION

WIZDOM POWELL, PhD, MPH
LESLIE B. ADAMS, MPH



RESEARCH | INTEGRATION | STRATEGIES | EVALUATION

RISE for Boys and Men of Color is a field advancement effort that aims to better understand and strategically improve the lives, experiences, and outcomes of boys and men of color in the United States.

Support for this study was provided by a grant funded by The Atlantic Philanthropies, The Annie E. Casey Foundation, Marguerite Casey Foundation, WK Kellogg Foundation, and members of the Executives' Alliance to Expand Opportunities for Boys and Men of Color. The conclusions and opinions expressed in this study are of the author(s) alone and do not necessarily represent the views of RISE for Boys and Men of Color or its funders.

Table of Contents

INTRODUCTION.....	4
Background and Rationale:.....	4
THE ROLE OF MASCULINITY IN BMOC HEALTH	6
FIELD SCAN QUESTIONS AND THEORETICAL FRAMEWORKS:.....	7
DATA SOURCES.....	8
FIELD SCAN PROCESS.....	8
DATA EXTRACTION.....	9
RESULTS	9
Study Selection	9
Associations Between Masculinity and Health Outcomes - by Race/Ethnicity	10
African American Boys and Men	10
Hispanic or Latino Boys and Men.....	10
Alaska Native/American Indian Boys and Men	11
Measurement of Masculinity Across Studies.....	11
Summary and Limitations of the Findings	11
GREY LITERATURE SCAN DATA SOURCES.....	13
Field Scan Process & Data Extraction	14
Key Grey Literature Findings	14
RECOMMENDATIONS.....	15
Cross-Cutting Measurement Recommendations.....	15
Research Recommendations	15
Practice Recommendations	17
REFERENCES	19
ABOUT THE AUTHORS	21
APPENDICES A-E	22

Introduction

BACKGROUND AND RATIONALE

Problem statement: Across the United States, boys and men of color (BMOC) have poorer health status and live shorter lives than non-Hispanic white males. In general, BMOC in the United States have the highest chronic disease morbidities and shortest life expectancies (Kochanek et al. 2016). BMOC also have lower rates of healthcare access, insurance, and utilization (Sandman et al 2000; Green et al. 1999; Neighbors et al. 1987).

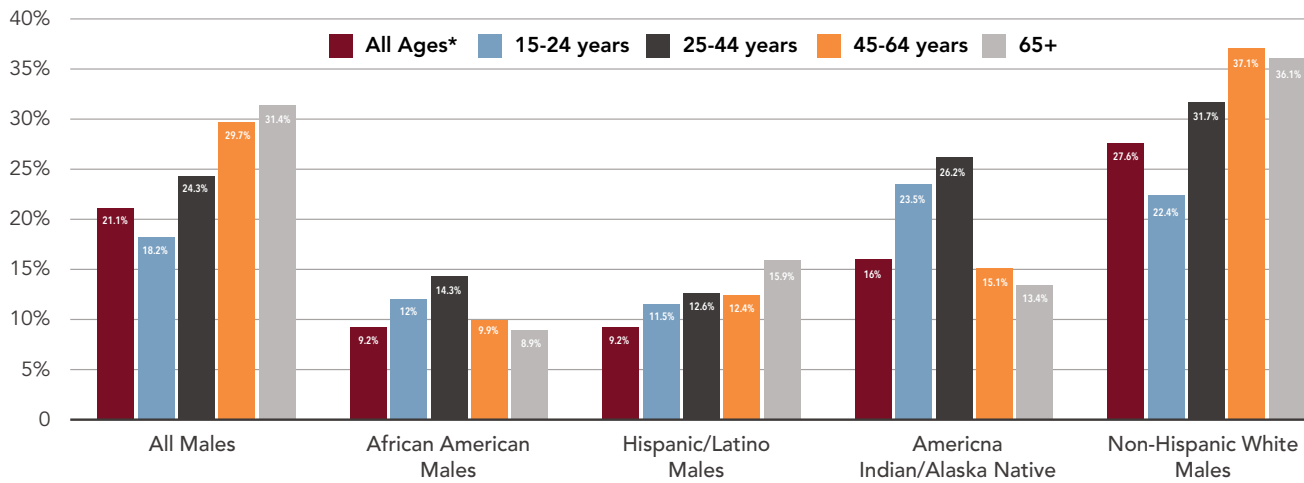
Underutilization of healthcare minimizes opportunities for early detection and preventive interventions that could improve chronic disease and mental health outcomes in BMOC. To be certain, healthcare underutilization among BMOC is not purely a consequence of limited insurance or access, but rather it is driven by broader social determinants (e.g., education, housing, transportation, neighborhood conditions, and income).

Lower levels of educational attainment/income, homelessness, diminished transportation access, residential instability, and neighborhood disadvantage each play a critical role in BMOC mortality, morbidity, and health-related quality of life. Such social determinants are also at the root of other health behavioral risk-taking, which play a central role in abridging the lifespans of BMOC.

This field scan report focuses on BMOC—African American, Hispanic/Latino, and Native American—groups who face some of the most compelling health disparities and inequities in our nation (National Center for Health Statistics 2016). We use the term “males” to refer to the population of men and boys as a whole. Given the significant amount of male mortality attributable to substance abuse and suicide or driven by depression (Kochanek et al. 2016), this field scan focuses on these three behavioral health outcomes. This focus is further supported by evidence documenting the notable amount of comorbidity between these behavioral health outcomes and other chronic diseases (e.g., cardiovascular disease, diabetes, and cancer) linked to the disproportionate health disadvantage shouldered by BMOC.

Higher rates of male substance abuse are often catalyzed by undiagnosed depression. Males often report less depression than females (Kessler et al. 2003; Rosenfield & Mouzon 2013; Scholz, Crabb, & Wittert 2014). In fact, recent prevalence estimates indicate that 5–10 percent, 20.7 percent, and 8.5 percent of African American, Hispanic/Latino, and Native American males meet diagnostic criteria for depression, respectively (Beals 2005; Compton 2006; Skarupski 2005; Wassertheil-Smoller 2014; Williams 2007). These estimates are an important starting place for gauging the impact of depression on BMOC. However, they also likely underestimate the extent of depression experienced by BMOC since males generally find it challenging to disclose and detect depression symptoms. Despite lower rates of depression, males in the United States have the highest rates of suicide completion (Kochanek et al. 2014). This gendered mental health paradox is even more compelling among African American boys who exhibited a recent increase in suicide (Bridge et al. 2015) and Alaska Native/American Indian boys and men who, during sensitive developmental periods (ages 15–24), have some of the highest suicide death rates in our nation (23.5 per 100,000) (see Figure 1). Recognizing this mental health paradox and the potential difficulty males have with disclosing depression, some practitioners and researchers suggest that male depression is masked (Addis 2008; Cochran & Rabinowitz 2000), manifesting most often as problem behaviors and increased health risk-taking (Byrnes, Miller, & Schafer 1999; Perdue et al. 2003; Richardson et al. 1993; Stall et al. 2003).

FIGURE 1 MALE SUICIDE RATES, 2014



Source: National Center for Health Statistics. 2016. Health, United States, 2015: With Special Feature on Racial and Ethnic Health Disparities. Hyattsville, MD.

Males are generally more likely than females to take health risks (Courtenay 2000). For example, data indicates higher illicit substance lifetime, past year, and past month use among males (National Center for Health Statistics 2015). The most recent data also suggests that age-adjusted alcohol-related mortality rates increased in 2014 by 7.2 percent for Hispanic/Latino males (Kochanek et al. 2016). Similarly, age-adjusted mortality rates due to drug-induced causes increased 8.6 percent among African American (black) males in 2014 (Kochanek et al. 2016). It is apparent, with some notable exceptions, that BMOC exhibit increased risk-taking during sensitive developmental transitions (e.g., transitions to adulthood) (Fergus, Zimmerman, & Caldwell 2007; Khan et al. 2012; Stone et al. 2012). Risk behavior engagement among BMOC is differentially patterned across the life course, yet most syntheses of the available literature fail to place it in a developmental context. The consequences of escalated health risk behavior engagement (e.g., substance use) among BMOC are steep and have far-reaching implications for their success and opportunities for upward social mobility. For example, BMOC receives disproportionately harsher sentences for crimes related to illicit substances (Doerner & Demuth 2010; Ulmer, Painter-Davis, & Tinik 2016).

These glaring health inequities among BMOC stemming from depression, substance abuse, and suicide are not insurmountable. In fact, such inequities are most striking in areas where preventive interventions addressing key psychosocial determinants at the individual, familial, community, and policy level could make considerable impacts.

Below, we discuss one determinant commonly linked to male health inequities and risk-taking: masculinity.

The Role of Masculinity in BMOC Health

Masculinity refers to those shared cultural expectations about appropriate male behavior (Levant et al. 1992). Male socialization is the process by which boys learn rules governing the display of masculinity. These rules of engagement shape health decision-making, outcomes, and behaviors. Given the variation in the enactment and conformity to these shared expectations, it is more appropriate to refer to them in the plural, as masculinities. In other words, there is more than one way to display masculinities. Masculinities are also situational and context-dependent, such that how BMOC enact them will largely be determined by the social environments and demands they are navigating. To wholly appreciate the potential role played by masculinities in BMOC health, it is important to know how the field has typically defined and measured them. A full review of these terms and the scholarship linked to them is beyond the scope of this field scan. Below, we provide a brief overview of the origin of masculinity conceptualizations and measurement.

Most of the field of masculinity and health scholarship stemmed from the Gender Role Strain Paradigm (GRSP) (Pleck 1995). The GRSP frames gender roles as socially determined and designed to maintain a specific patriarchal order. Primarily, the GRSP established that traditional or dominant masculine role norms are difficult to enact fully, are frequently violated, and that this violation often produces significant strains (e.g., negative psychological consequences). Gender role strains are especially more pronounced for BMOC whose access to the male opportunity structure is disproportionately blocked (Courtenay 2000; Williams 2003). Researchers use the term traditional masculinity ideologies to refer to the dominant cultural scripts or beliefs about what constitutes normative behavior among males (Levant & Hammond, in press). Gender role conflicts are the kinds of psychological states that arise when males enact masculine gender roles that result in negative health and social consequences (O'Neil 2008). The term "machismo" is often used to refer to a cultural standard of behavior exhibited by some Mexican men (Arciniega et al. 2008). It is important to note that behaviors typified by machismo can be positive (nurturance, hard work, honor, and responsibility) or negative (violence, aggression, hypermasculinity, and sexualized behaviors).

Male health behavioral risk-taking and the inequitable health outcomes they ignite are often by-products of male socialization occurring in the places where boys and men of color live, work, are educated, play, and receive healthcare (Addis & Mahalik 2003; Courtenay 2000; Williams 2003). Higher rates of male substance abuse are also likely to be driven by gender role strains and masculine ways of coping with and responding to the distress they produce. For example, males are often encouraged to cope with emotional distress by shutting down or suppressing signs of depression. The habitual use of this emotion regulation strategy may have adverse consequences for BMOC, especially when deployed in the face of structural racism or other race/ethnicity-related stress exposures (Hammond, Fleming, & Villa-Torres 2016). However, when males engage in substance use and deny depressive symptomatology linked to suicide, they are often doing so as a means of expressing masculinities (Hammond, Matthews, & Corbie-Smith 2010).

We recognize that the dominant scientific and public discourse position masculinity, male socialization, and male role norms as toxic or problematic. Yet masculinities and male socialization processes can also be leveraged as strengths to produce positive health outcomes among BMOC (Hamber 2016; Hammond et al. 2016; Englar-Carlson & Kiselica 2013; Kiselica & Englar-Carlson 2010). This possibility is scarcely acknowledged. With more systematic documentation, an understanding of the positive health benefits of masculinities can be leveraged by policymakers and practitioners to create more male health equity. Also, while evidence affirms relationships between masculinity norms and male health outcomes, to our knowledge, there are no existing systematic reviews of what is known about the association between masculinities and depression, suicide, and substance abuse among African American, Hispanic/Latino, or Alaska Native/American Indian boys and men. Such documentation would result in more intervention and policy development precision. This field scan fills this evidentiary gap.

Field Scan Questions and Theoretical Frameworks

FIELD SCAN

In light of the gaps and rationale provided above, the current field scan addressed the following questions:

- **FSQ1:** What is the state of the literature linking masculinity to depression, suicide, and substance abuse among African American, Hispanic/Latino, and Alaska Native/American Indian boys and men?
- **FSQ2:** Are there life-course differences in the sources of documented inequities in depression, suicide, and substance abuse among African American, Hispanic/Latino, and Native boys?
- **FSQ3:** Based on what is present in the literature, what policies or practices have been identified to reduce inequities in depression, suicide, and substance abuse?

THEORETICAL FRAMEWORKS

We frame both our interpretation of the literature, including in this field scan, and the subsequent recommendations offered with the following theories and models: 1) **Psychobiological models of stress, coping, and health risk-taking**; 2) **The Theory of Gender and Power**; and 3) **Structural theories of racism**. Below, we provide a brief overview of these theories and models and describe their utility for framing depression, suicide, and substance abuse among BMOC.

Health inequities among BMOC and the risk-taking that exacerbate them often stem from a broad range of stress and environmental exposures (Jackson, Knight, & Rafferty 2010; Hammond et al. 2016). Thus, this field scan relies principally on **psychobiological models of stress, coping, and health risk-taking** (Jackson & Knight 2006; Kotchik et al. 1992; Irwin & Millstein, 2014), which emphasize the interplay between biological maturation, cognitive-affective processes, and socioenvironmental factors. According to these models, risk-taking might be best understood as a coping response to experiences that are appraised as highly stressful, outside of individual control, and not offset by supportive resources. These models also presume that some individuals may experience accompanying changes in the biological systems regulating stress response that disrupt hormones and increase the likelihood of risk-taking. In other words, for some BMOC, engaging in substance use might serve as a means of reducing stress and depression.

The **Theory of Gender and Power** (Connell & Messerschmidt 2005) presumes that masculinity is a plural construct that is not rooted in biological sex, stable personality characteristics, or male bodies; rather, masculinities are socially constructed or defined by broader social power configurations. In other words, societies shape the values around masculinities that males internalize, ways that they are performed, and their impact on behaviors. Males operating at lower levels of social power structures often have limited access to the kinds of symbols that constitute idealized masculinities (e.g., economic stability). Central to the Theory of Gender and Power is the notion that behaviors are often used as tools for negotiating power and reclaiming some measure of control or autonomy (Courtenay 2000). Hence, substance abuse engagement, suicide, and denial of depression among BMOC might be best viewed as an embodiment, performance, and internalization of masculinities. Viewing the evidence unearthed from this field scan through this theoretical lens is essential for interpreting the results described later in this report. Finally, this field scan also relies on structural theories of racism (Bonilla-Silva 1996), which shift the focus from viewing depression, substance abuse, and suicide as individual-level behavioral health outcomes to illuminating the social systems that instigate them.

Data Sources

Original, empirical studies investigating masculinity and its influence on depression, substance abuse, and suicide outcomes published from inception to June 2016 were examined for this study. Studies conducted with a sample of African American, Hispanic or Latino, and Native American participants and a measure or theme related to masculinity were included in our study. The primary outcomes of interest were depression, suicide, and substance abuse. We searched MEDLINE (Pubmed) (1966– present), PsychINFO (199–present), Web of Science (1990–present) and CINAHL (1961–present). Search strategies for each database were developed in coordination with a research librarian specializing in field scans and systematic reviews. We limited searches to articles published in English and using search terms and Medical Subject Heading (MeSH) terms related to masculinity, substance abuse, depression, and suicide. We also included search terms for each racial and ethnic category examined in this scan (i.e., African American, Hispanic/Latino, and Native/American).

Field Scan Process

Two investigators (WP & LA) independently screened abstracts and titles for inclusion in the full text review. Full text articles were screened by the same two investigators. Discrepancies between investigators were resolved by the lead investigator (WP). In order to streamline review of articles, the investigators using Covidence software (www.covidence.org) to conduct the title, abstract, and full text review for the traditional peer-reviewed sources. We included studies using the following criteria: Studies must 1) only include human subjects and be published in English; 2) include African American, Hispanic/Latino, or Alaska Native/American Indian populations as the primary focus; 3) report findings that compare African American, Hispanic/Latino, or Alaska Native/American Indians to other racial/ethnic groups and those that compare males from this specified groups to females; 4) discuss depression, suicide, and/or substance abuse as key outcomes; 5) address constructs of masculinity, masculinity norms, and/or male socialization. Alternatively, studies were excluded if they: 1) are commentaries, reviews, or non-empirical studies or 2) focus exclusively on foreign-born men and boys of color (i.e., African men and newly arriving immigrants).

Data Extraction

Two investigators extracted study characteristics using a data extraction form. Information extracted for each study included participant characteristics (e.g., sample size, population focus, health outcome, etc.), setting, design, overall findings related to masculinity and health, other major findings, and limitations. Masculinity measurement features were also extracted from each study to include either the quantitative measure of masculinity, male role norms, or qualitative, descriptive definitions or themes.

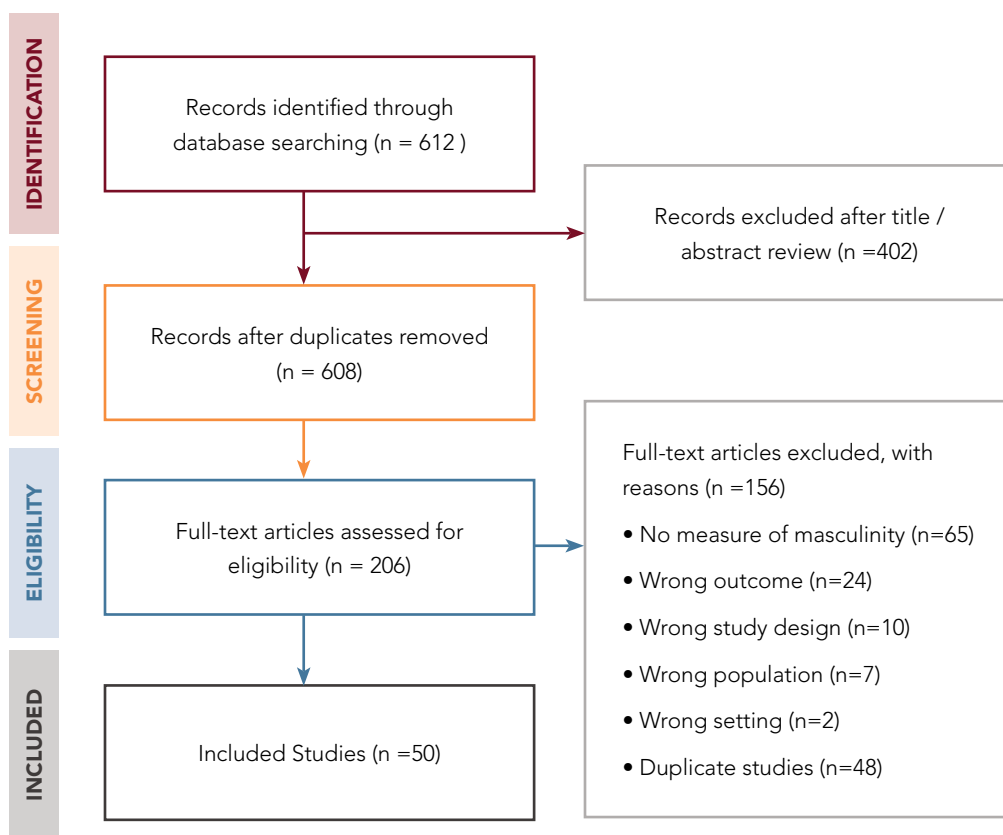
Disagreements on extracted content were resolved by consensus between the two investigators. Key study characteristics captured included title, year, methodology and analysis process, relevant measures, and findings related to masculinity and our aforementioned health outcomes. Additional items extracted included theoretical framework and life course-specific results, as applicable.

Results

STUDY SELECTION

Figure 2 provides details regarding the article selection and inclusion process of academic literature sources. The overall database search yielded 612 potential articles. After adjusting for duplicates, a total of 608 original articles were yielded from the initial database search, and the title and abstracts of these articles were reviewed. Because they did not meet our inclusion criteria, 415 articles were excluded during the title and abstract screening. We retrieved 193 articles for further review and excluded another 143 articles, leaving 50 articles for our final analysis. The final selection of articles included 37 quantitative, 9 qualitative, and 3 mixed-methods studies.

FIGURE 2 ARTICLE SELECTION AND INCLUSION PROCESS OF ACADEMIC LITERATURE SOURCES



Source: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med* 6(7): e1000097. doi:10.1371/journal.pmed1000097. For more information, visit www.prisma-statement.org.

Characteristics and detailed findings of the included studies are described in Table 1 (see Appendix A). The majority (79 percent) of studies were cross-sectional designs, followed by focus groups (10 percent). Sample sizes of included studies ranged from 11 to 49 participants for qualitative studies, and 85 to 4,426 for quantitative studies. The majority of studies focused on depression (57 percent), followed by alcohol use, and smoking.

ASSOCIATIONS BETWEEN MASCULINITY AND HEALTH OUTCOMES – BY RACE/ETHNICITY

African American Boys and Men

Twenty-four articles focused on African American men. Table 2 (see Appendix B) illustrates detected associations between masculinity and health by health outcomes across the 22 included quantitative studies. A positive association indicates studies in which higher scores of masculinity (meaning increased salience toward traditional masculine norms) are associated with higher rates of depression, substance abuse, and suicide. Negative association studies show higher scores of masculinity associated with lower rates of the aforementioned health outcomes. A conditional association indicated either a positive or negative association, but only for certain subpopulations, such as nationality or age group. Conditional associations yielded more nuanced depictions of masculinity and health outcomes among African American men. For depression-related studies, African American men were more likely to experience depression if they endorsed more traditional masculine norms, such as self-reliance and restrictive emotionality. However, one study identified that men endorsing positive beliefs about black masculinity are less likely to experience depressive symptoms. In substance-abuse related studies, endorsement of masculine beliefs was associated with alcohol, marijuana, and hard drug use, but was negatively associated with smoking. Of the 22 quantitative and mixed-methods studies, 22 total associations were captured, with 9 positive, 0 negative, 7 conditional, and 6 studies with no association.

The most commonly discussed outcome was depression, followed by substance abuse. Only one article (Tucker 2009) explored suicide among African American men. Because the included studies examined multiple associations across subgroups, the number of associations is higher than the total number of quantitative studies analyzed. Taken together, these findings suggest that masculinities may have deleterious effects on psychological states, substance use, and suicidal ideation and completion.

In qualitative studies, depression was the most commonly discussed outcome, with African American men expressing difficulties in disclosing depression status due to social stigma and norms of masculinity related to concealing emotions. Participants in one study also cited a lack of father figure or someone to model treatment-seeking behavior for depressive symptoms (Bryant 2014).

One study examined the influence of masculinity in the context of alcohol abuse. Respondents from this study cited alcohol and alcohol-related violence as a “solution” for problems of masculine deficiency, defined as being physically smaller than other men, the inability to provide financially due to underemployment or unemployment, and owning little or no property (Peralta 2010). Overall, studies utilizing qualitative methods found consistent themes in relation to emotional disclosure, strength, and providership as key dimensions of masculinity among African American men.

Hispanic or Latino Boys and Men

Thirty articles focused on Hispanic or Latino American men, which included 24 quantitative, 5 qualitative, and one mixed-methods study. Table 3 illustrates detected associations between masculinity and health by health outcomes across the 24 included quantitative studies. Of the 24 quantitative studies, 27 total associations were captured, with 11 positive, 2 negative, 3 conditional, and 11 studies with no association between masculinity and depression, suicide, and substance abuse. The majority of studies focused on depression and alcohol use among Latino boys and men. Of note, the majority of studies found no association between masculinity (commonly measured as machismo) and depression. The most conclusive evidence was in substance abuse, with higher levels of machismo or masculinity associated with increased substance use.

Three articles by the same author (Céspedes 2004, 2008; Céspedes & Huey Jr. 2008) examined suicidality among Latino adolescents and found mixed results. In two studies, there was no association between machismo and suicidality. However, one study found a significantly positive association between suicidality and machismo. One reason for this discrepancy may be the use of different measures used to assess suicide across studies. Because included studies examined multiple associations across subgroups, the number of associations is higher than the total number of quantitative studies. Taken together, these studies found limited conclusive evidence linking masculinity to health outcomes among Hispanic or Latino boys and men.

Qualitative articles explored paternal and peer socialization in the context of substance use, particularly alcohol, and male identity development (Fiorentino 2007; Beck 1993; Alaniz 1994). Depression was commonly conceptualized in the context of somatic discomfort, or general malaise, among Mexican American men. It is important to note that some idiom categories identified in one study found that commonly described feelings of ruminating, somatic symptoms, and anger fell outside of the established DSM-5 criteria for depression (Apesoa-Varano et al. 2015). Another study, which discussed comorbid depression and chronic disease statuses found that men commonly had to shift masculine identities to be more accepting of physical, social, and financial support. Qualitative studies focusing on depression also cited social stigma in relation to emotional disclosure of depressive symptomatology (Chan 2015). Overall, qualitative assessments of masculinity and machismo among Hispanic and Latino BMOC included socialization processes and long-cited challenges with emotional disclosure.

Alaska Native/American Indian Boys and Men

Only two of the articles in our systematic review focused on Alaska Native/American Indian men, which included one quantitative and one qualitative study. Both studies focused exclusively on substance use. In the single quantitative study, Neault and colleagues (2012) found that lifetime (but not current) use of illicit substances significantly predicted lower fatherhood involvement among Native American men. Qualitatively, one study found that use of crystal meth contributes experiences necessary to achieve masculine identity among Appalachian youth (Brown, 2010). Specifically, initiation and continuation of substance use were described in relation to pressures to exhibit hypermasculinity and to escape feelings of loneliness or shame.

MEASUREMENT OF MASCULINITY ACROSS STUDIES

Table 4 (see Appendix C) provides information about the scale properties of the masculinity measures used in the included quantitative studies. Sixteen different scales were used in the articles included in this review. The most frequently used scale was the machismo subscale of the Multiphasic Assessment of Cultural Constructs (Cuéllar et al. 1995), which assesses traditional gender role beliefs among Latino men. It is important to note that this scale was the one of only two validated and reliable measures used to assess masculinity among Latino men. The second validated measure was the Gender Roles Questionnaire (Laracantu 1989) and was only utilized in one study (Dolezal et al. 2000). Most studies did not report measures of scale reliability or validity.

However, some studies measured scale reliability and reported Cronbach's alphas. Of those studies, most reported Cronbach's alpha coefficients of above 0.80. Two measures, the Black Men's Experiences Scale and the Masculinity Norms Salience scale, assessed masculinity, meaning specifically among African American men, was utilized in four studies. The remaining measures generally assessed traditional gender-role norms or gender-role conflict related to masculinity. The Fatherhood Involvement Scale and the Masculinity Across Roles Scale were the only two measures that assessed masculinity across various roles (e.g., fatherhood) and social contexts (Spearman-Teamer 2008; Neault 2012).

SUMMARY AND LIMITATIONS OF THE FINDINGS

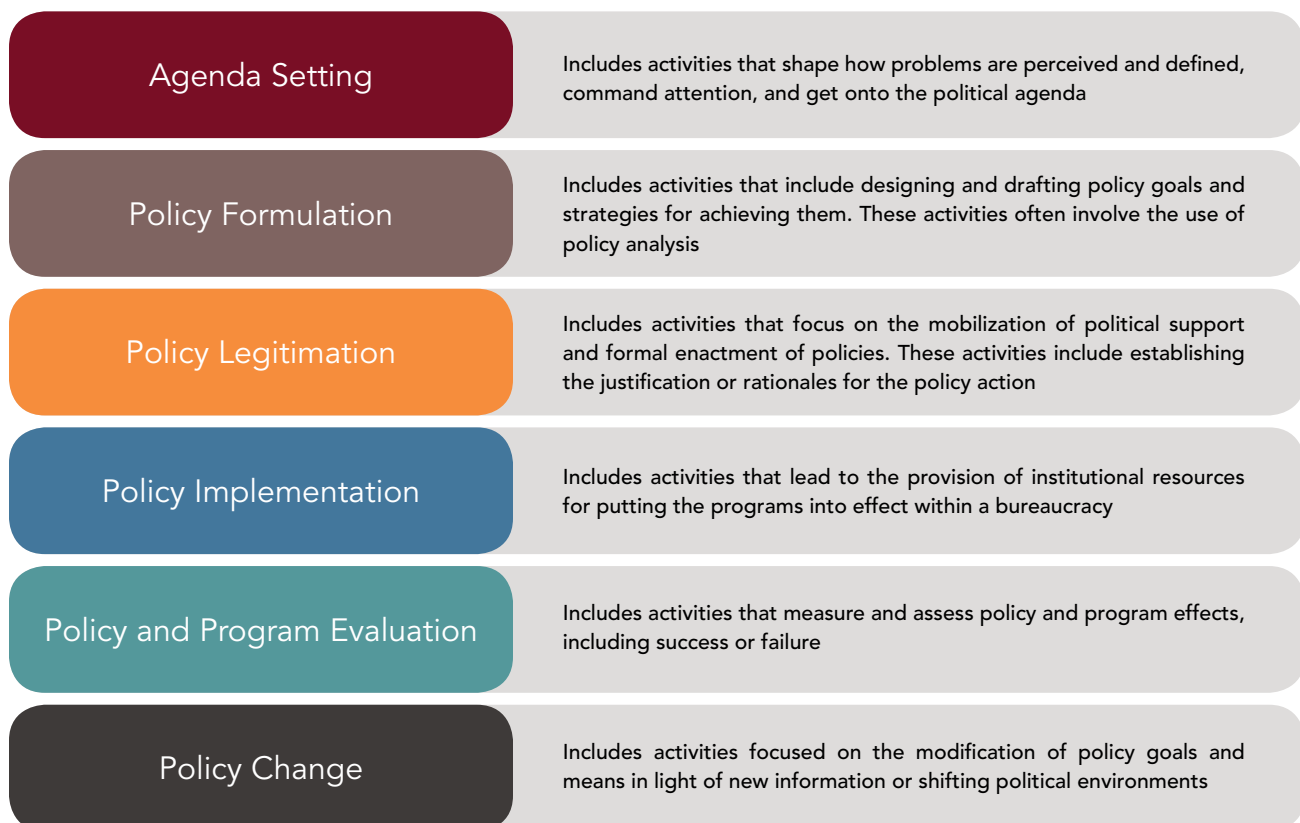
Academic literature identified in the field scan was selected from various search databases and focused on peer-reviewed publications. Overall, we found that the influence of masculinity on health outcomes varied by race/ethnicity. For African American men, findings revealed that masculinity is significantly associated with depression, meaning that more adherence to male role norms is associated with increases in depressive symptoms. There was limited evidence to conclusively link masculinity to substance abuse and suicide in this population. Among Latino men, most studies focused on the influence of machismo and substance abuse, particularly alcohol abuse and binge drinking. Findings show support linking machismo to alcohol abuse among Hispanic and Latino men. Few studies detected significant associations between machismo and depression among this population, which may be due to unidimensional measures used for machismo.

Finally, our search yielded few studies examining masculinity and health among Alaskan Native/American Indian boys and men. Of the two articles identified, little conclusive evidence can be gathered linking male role norms to our health outcomes of interest among Alaskan Native and American Indian men. Overall, studies used validated and reliable measures of masculinity, but some frequently used measures only explored masculinity within a unidimensional construct. Finally, few studies examined the unique role of male socialization and gender role norms using a life-course perspective.

Grey Literature Scan Data Sources

Grey literature was selected using a targeted search of health-focused policy reports and briefs that focused on our target populations. We also included unpublished dissertations in the systematic review but also frame them here as grey literature because these documents are not typically referenced in the peer-reviewed evidence base. Our intention in taking this approach was to conduct a circumscribed scan that would unearth literature and perspectives outside the reach of peer-reviewed scientific sources. The scan of health-focused policy reports and briefs focused on laws, ordinances, regulations, and programs that impacted the health of BMOC. As a result, the scan included not only local policies but also state and federal legislation, as well as policy reviews. Consistent with Weimer and Vining's six-stage Policy Process Model (Figure 3), we identified initiatives and recommendations made across multiple levels of the policy-making continuum (e.g., agenda setting, policy formulation, policy legitimization, policy implementation, program evaluation, and policy change). We defined policies as "laws, regulations, rules, protocols, and procedures, designed to guide or influence behavior." Included policies were either legislative or organizational in nature. Policies and programs that met our inclusion criteria were identified using databases at the national, state, and local level (e.g., North Carolina School Report Cards Database, CDC Chronic Disease State Policy Tracking System, etc.). Once selected and consensus was reached among investigators, information was submitted to a central database for further analysis.

FIGURE 3 WEIMER AND VININGS SIX-STAGE POLICY PROCESS MODEL (1991)



FIELD SCAN PROCESS & DATA EXTRACTION

Policy reports, initiatives, and programs were included if they met one or more of the following criteria: (a) an identified focus on policies and recommendations at the local, state, or federal level (b) are focused on a topic area relevant to young men of color, and (c) can be tied to depression, suicide, and substance abuse health outcomes. Organizations with a mandated focus on healthy living among men of color were examined for this arm of the field scan. We were especially interested in whether policies were gender-focused or addressed issues related to masculinity norms or male role socialization. The policy reports, initiatives, and programs reviewed are summarized in Table 5 (see Appendix D)

KEY GREY LITERATURE FINDINGS

In recent years, there have been increased efforts toward building a better foundation for BMOC in the United States. Most efforts have been centered on national campaigns and initiatives with increasing public interest. Of note, the **National Institute of Mental Health** has launched a Real Men Real Depression campaign aimed at reducing stigma toward depression among BMOC. In recent years, social media campaigns such as the #YouGoodMan and #ItsOkToTalk have increased visibility of mental health among men and deconstruct previous misconceptions about help-seeking. Outside of campaigns to raise awareness, policy scans conducted by various foundations devoted to the health and well-being of BMOC have produced cross-cutting policy recommendations to support this vulnerable population. Notably, with the exception of the NIMH campaign, none of the policy initiatives and programs we found explicitly addressed masculinities or gender role norms. Thus, we took a broader look at initiatives that are health and gender-focused and/or have the potential to be modified to address the behavioral health effects of masculinities. These findings are highlighted below. We discuss possibilities for building on aspects of these initiatives in the recommendations section.

Investigating in Boys and Young Men of Color: The Promise of Opportunity (RWJF): This report reviews the health needs of middle school—and high school—aged young men of color. Of note, this report had a particular focus on harsh school discipline and promoting educational attainment among young BMOC. This report presents recommendations for policymakers and advocates to leverage and address “opportunity factors” in ways that can promote better health among BMOC.

Putting Men’s Health Care Disparities on the Map: Examining Racial and Ethnic Disparities at the State Level (The Henry J. Kaiser Family Foundation): This report highlights the rapid growth of diverse BMOC in the United States as rationale for increased attention toward healthcare disparities in this population. The report takes a state-level approach to assess distinct health, health-care, and socioeconomic challenges by racial and ethnic minority category. Findings from this report uniquely highlight the health disparities faced by American Indian and Alaska Native men in comparison to other racial and ethnic minority groups.

Pathways Out of Poverty: Boys and Men of Color and Jobs in the Health Sector (The Greenlining Institute): This report examines under-employment and health services of BMOC residing in the state of California. It primarily outlines deficits in employment opportunities for BMOC and outlines barriers to health careers and health services use, using a social determinants approach. Recommendations from this report specify sustainable methods to improve pathway opportunities that specifically target BMOC in California.

My Brother’s Keeper (MBK) Initiative: In 2014, the Obama Administration launched the My Brother’s Keeper (MBK) Initiative to bring local communities, governments, and organizations together to address challenges faced by young men of color in the United States. Nearly 240 communities across the country have accepted the MBK Community Challenge, committing resources to fill opportunity gaps in the lives of young men. In accepting the challenge, communities were tasked with investigating salient policies impacting BMOC within their respective communities. Recommendations arising from this initiative were community driven and incorporated multiple perspectives from key stakeholders situated within the community.

Recommendations

Our field scan of the traditional literature revealed several gaps. We divided our recommendations into the following categories: 1) Cross-Cutting Measurement Recommendations; 2) Programs/Interventions; and 3) Policy. We believe that these recommendations have broad possibilities for improving risk for depression, suicide, and substance abuse for African American, Hispanic/Latino, and Alaska Native/American Indian populations.

CROSS-CUTTING MEASUREMENT RECOMMENDATIONS

Our field scan revealed notable lack of uniformity in the conceptualization and measurement of masculinity. At times, it was difficult to discern whether researchers were assessing personality attributes typically associated with masculinity, male role norms/ideology, or the conflicts associated with fulfilling masculine roles. Thus, our primary recommendation in this area is to **create a compendium of multidimensional measures to assist researchers, policymakers, and practitioners with accurate assessment of masculinities and various health impacts of masculinities**. Such efforts have been taken up by researchers investigating the role of religiosity and spirituality (see <http://fetzer.org/resources/multidimensional-measurement-religiousnessspirituality-use-health-research>). Doing so will strengthen the evidence base and assure that measurement across health studies are more aligned.

There is a notable paucity in measures that assess positive aspects of masculinities that could be leveraged in policy and programmatic initiatives to improve health outcomes among BMOC. This paucity is most notable in scholarship produced among Hispanic/Latino boys and men, where the overwhelming measurement focus lies with assessing machismo. **We recommend investment and attention to positive masculinity measurement development among BMOC.**

RESEARCH RECOMMENDATIONS

There is a clear gap in the evidence base for studies examining constructions of masculinities and their potential impact on Alaska Native/American Indian (AN/AI) boys and men. Given the noted disparities in substance abuse and suicide in this population and their association with masculinity norms, this evidentiary gap is particularly alarming. Hence, we **recommend investing in population-based and community-level epidemiologic studies examining both the social constructions of masculinities and their health impacts among AN/AI boys and men of color.**

Consistent with this recommendation, we also recommend further investment in collecting **large-scale population data on behavioral health outcomes that are aggregated by race, sex, ethnicity, and sexual orientation**. Doing so will improve our understanding of which BMOC are at greatest risk for depression, substance abuse, and suicide.

More research is warranted about the ways masculinities unfold in real-time, from moment-to-moment, and in varied situational contexts. Doing so will require the use of innovative data collection methods. We recommend **increased research that capitalizes on mHealth or smartphone-based technologies to examine how BMOC enact masculinities in real time and the consequence of these enactments for the health status.**

Our scan revealed very few studies investigating the ways that BMOC embody masculinities. Health embodiment research focuses on the ways that social phenomena impact physiology, biology, and health. We recommend **supporting more research focused on how masculinities get beneath the skin of BMOC and the biophysiological pathways to health inequities/disparities that drive these associations.**

Although we know that structural racism contributes to behavioral health outcomes, **there is less known about the mechanisms driving these associations, or how racism and masculinity interact to increase risk for depression, substance abuse, and suicide. We recommend more research in this vein.**

It is evident that toxic masculinities are being overwritten and substituted for more positive ones. For example, emerging evidence suggests that some Puerto Rican males are overwriting masculinities that reinforce substance abuse and addiction with new models of masculinities that amplify honor and spiritual power (Hansen 2012). **We recommend more research that evaluates the process, outcomes, and impacts of interventions designed to reshape or overwrite toxic, and risk-promoting masculinity norms among BMOC. We also recommend more research on connections between positive masculinity enactment among BMOC and health risk avoidance.**

Our field scan of grey literature revealed major gaps and areas for improvement in policy and programmatic development among BMOC. Most policy scan recommendations are directed at the state or local level. Additionally, few policy reviews outline strategies for enacting recommendations and outlined metrics for success. Many policy recommendations were not included due to their exclusive education, criminal justice, or workforce development scope. Although, opportunities exist to integrate insights from this field scan into initiatives in the school and healthcare sectors. The following recommendations are of particular interest to policymakers, local legislators, and educators committed to improving policies and procedures directed toward BMOC. The most commonly discussed recommendations across the programs and policy initiatives described above are as follows:

- **Create sustained career pathway programs to expose BMOC to diverse opportunities for upward mobility** (Greenlining Institute, My Brother's Keeper Initiative, RWJF).
 - This recommendation includes pushes for public-private partnerships, learning pathway programs, and hiring agreements to address economic challenges faced by BMOC.
- **Leverage provisions of the Affordable Care Act to improve health outcomes for BMOC** (Kaiser, My Brother's Keeper Initiative, RWJF).
 - Many policy recommendations identify the critical role states will play in expanding affordable healthcare to vulnerable populations, including BMOC. Medicaid expansion was explicitly recommended in multiple policy recommendations.
 - Improved data collection and expansion of the healthcare workforce are also targeted aspects of the ACA that are present in policy recommendations
- **Reduce the school-to-prison pipeline that disproportionately targets young BMOC** (MBK, RWJF)
 - Tailor mental health initiatives to address needs of BMOC uniquely exposed to violence and trauma (RWJF, MBK)

Building on these noted recommendations, we suggest the following:

Schools

To improve health outcomes for young BMOC, we must first give focus to school-based settings that support this population in early development. Improvement of school-based mental health services and continued training of school personnel adequately address the health needs of this vulnerable population. As such, **we recommend tailored school-based health services and health education curriculum to focus on male- centered health promotion and deconstruct norms regarding masculinity and health help-seeking.** In order to fully implement this recommendation, school personnel and administrators need increased training toward trauma recognition, male role norms, and health behaviors that occur among school-aged male youth. Given the focus of our field scan on depression, **we recommend that school-based health clinics should work to destigmatize mental health needs among youth by constructing positive narratives around masculinity and mental health help- seeking.** Furthermore, emphasis should be placed on building a supportive and culturally competent workforce in the school systems that positively influence boys in this critical developmental stage.

Implementation of these recommendations has been illustrated through previous successful initiatives. For instance, The Brown Boi Project has created educational tools centered on promoting healthy masculinities among school-aged youth in California. Educators should also leverage existing resources to support increased sensitivity around the needs of BMOC, such as the Commission on Teacher Credentialing.

Healthcare System

For policymakers, increased attention toward health promotion and chronic disease prevention will assist in reducing the long-term burden of healthcare costs and negative health outcomes among men as they progress through the life course. Access to quality and affordable insurance is available to support BMOG in securing preventive health services through the Affordable Care Act. As such, **we recommend legislators at the local and state level broaden their political support for Medicaid expansion.**

Legislators should allocate resources to build a more diverse and culturally competent healthcare workforce. We recommend that they **leverage the ACA's provisions for community health workers to increase training of male healthcare workers and lay health advisors.** Finally, policymakers invested in creating policies should be mindful to include explicit metrics of implementation, outcomes of interest, and sustainability plans to create long-standing and positive improvements in the health outcomes of BMOG.

Innovative practices for improving the career pipeline for BMOG have been implemented throughout the country. For example, The Alameda County Public Health Department has established a formal agreement to hire diverse graduates of the Emergency Medical Service (EMS) Corps program. Additionally, the GED Bridge to Health and Business Program can be another foundational tool used to increase health workforce opportunities specifically for BMOG.

Workplace

Findings from our grey literature scan yielded few discrete recommendations aimed at creating safe and equitable workplaces for BMOG. The workplace is a unique environment in which men experience stressors related to discrimination and everyday racism while supporting families and communities through employment. As such, employers in both the public and private sector have increasing responsibility to advocate for vulnerable populations within their workforce through inclusive employment policies and procedures. In order to create a more encompassing workplace, **we recommend partnering with employers to develop male-centered worksite wellness initiatives that increase awareness about and reduce stigma associated with using employee assistance programs (EAPs) to address mental health (e.g., depression).**

Employers committed to improving the workplace for all employees should take particular interest in **supporting workplace safety for young males of color employed in high-risk occupations.** Due to disproportionate contact with the criminal justice system, BMOG also have limited economic opportunities in the workforce. Companies committed to employing a diverse workforce should also **implement more inclusive policies, such as the Ban the Box policy, aimed at removing the check box that asks if applicants have a criminal record from hiring applications.**

Finally, employers aimed at day laborers and seasonal laborers, such as Latino immigrants, should be mindful of addressing the unique health needs of this often exploited working population through leveraging opportunities with nonprofit mobile health clinics and Latino worker coalitions in the local area.

PRACTICE RECOMMENDATIONS

The field scan yielded many opportunities to expand the current field of programs, interventions, and clinical practices aimed at BMOG. Although our search strategy did not specifically target best practices for program development, we were able to identify innovative programmatic strategies in our academic and grey literature search. As such, we make the following recommendations in regards to improving interventions aimed at improving health outcomes for African American, Hispanic or Latino, and Alaskan Native/American Indian boys and men.

To increase positive life outcomes for vulnerable BMOG, **interventions should be developed that address trauma through a masculinities-focused lens within communities where young men reside.** One such program, Youth Alive, implements a rapid assessment to trauma exposure and has been shown as an emerging tool for those interested in mitigating violence exposure in BMOG communities. Additionally, organizations aimed at addressing the needs of young BMOG should be mindful of adopting a tailored framework of assessing the needs of this population and, particularly, issues stemming from childhood trauma.

The ACEs (Adverse Childhood Experiences Framework) would provide this foundational tool for all practitioners and interventionists interested in addressing toxic childhood exposures. The ACEs has been adapted to serve various settings and has been retooled to assess specific childhood exposures related to health and toxic stress in children. Clinicians and healthcare professionals serving the health needs of BMOC also have an opportunity to expand services to encourage health promotion among men and boys.

By establishing male-centered health services, like the Young Men's Clinic(YMC), providers may be able to further promote preventive screening and healthy lifestyles in this population. Furthermore, these clinics should also expand to promote and destigmatize mental health services, particularly in early childhood and adolescence. Healthcare practitioners and public health interventionists can also be the champions of holistic, wraparound services to encourage health promotion from a social determinants perspective. One such method for encouraging this service delivery method is to promote sustainable, youth-focused leadership and advocacy, similar to The Brotherhood/Sister Sol in Harlem, NY. The organization specifically focuses on evidence-based programming to create sustainable support for youth and could be adapted to service the holistic needs of boys of color. Practitioners should be mindful to establish these services in community-based and culturally appropriate settings frequented by BMOC. For instance, Health Promotion in Barbershops has been a successful tool in academic communities for effective intervention settings aimed at black men.

References

- Addis, M. E. 2008. "Gender and Depression in Men." *Clinical Psychology: Science and Practice* 15(3): 153–68.
- Addis, M. E., & J. R. Mahalik. 2003. "Men, Masculinity, and the Contexts of Help Seeking." *American Psychologist* 58(1): 5.
- Alaniz, M. L. 1994. "Mexican Farmworker Women's Perspectives on Drinking in a Migrant Community." *International Journal of the Addictions* 29(9): 1173–88.
- Apesoa-Varano, E. C., J. C. Barker, J. Unutzer, S. Aguilar-Gaxiola, M. D. Johnson, C. Tran, . . . L. Hinton. 2015. "Idioms of Distress Among Depressed White-Non-Mexican and Mexican-Origin Older Men." *Journal of Cross-Cultural Gerontology* 30(3): 305–18.
- Arciniega, G. M., T. C. Anderson, Z. G. Tovar-Blank, & T. J. Tracey. 2008. "Toward a Fuller Conception of Machismo: Development of a Traditional Machismo and Caballerismo Scale." *Journal of Counseling Psychology* 55(1): 19.
- Beals, J., S. M. Manson, N. R. Whitesell, P. Spicer, D. K. Novins, & C. M. Mitchell. 2005. "Prevalence of DSM-IV Disorders and Attendant Help-Seeking in 2 American Indian Reservation Populations." *Arch Gen Psychiatry* 62(1): 99–108. doi:10.1001/archpsyc.62.1.99.
- Beck, K. H., & C. J. Bargman. 1993. "Investigating Hispanic Adolescent Involvement with Alcohol: A Focus Group Interview Approach." *Health Education Research* 8(2): 151–58.
- Bonilla-Silva, E. 1997. "Rethinking Racism: Toward a Structural Interpretation." *American Sociological Review* 62(3): 465–80.
- Bridge, J. A., L. Asti, L. Horowitz, J. B. Greenhouse, C. A. Fontanella, A. H. Sheftall, . . . J. V. Campo. 2015. "Suicide Trends Among Elementary School-Aged Children in the United States from 1993 to 2012." *JAMA Pediatrics* 169(7): 673–77.
- Brown, R. A. 2010. "Crystal Methamphetamine Use Among American Indian and White Youth in Appalachia: Social Context, Masculinity, and Desistance." *Addiction Research & Theory* 18(3): 250–69.
- Bryant, K., T. Haynes, N. Greer-Williams, & M. S. Hartwig. 2014. "'Too Blessed to Be Stressed': A Rural Faith Community's Views of African-American Males and Depression." *Journal of Religion and Health* 53(3): 796–808.
- Byrnes, J. P., D. C. Miller, & W. D. Schafer. 1999. "Gender Differences in Risk Taking: A Meta-Analysis." *Psychological Bulletin* 125(3): 367.
- Céspedes, Y. M. 2004. "Depression and Suicidality in Latino Adolescents: A Study of Acculturation and Gender Role Beliefs." Master's thesis, University of Southern California.
- Céspedes, Y. M. 2008. "Evaluating a Cultural Process Model of Depression and Suicidality in Latino Adolescents." PhD diss., University of Southern California.
- Céspedes, Y. M., & S. J. Huey Jr. 2008. "Depression in Latino Adolescents: A Cultural Discrepancy Perspective." *Cultural Diversity and Ethnic Minority Psychology* 14(2):168.
- Chan, I., & J. A. Corvin. 2016. "Chronic Disease and Depression Among Hispanic Americans Reconceptualizing the Masculine Self." *American Journal of Men's Health* 10(6): NP11–NP21.
- Cochran, S. V., & F. E. Rabinowitz. 2000. *Men and Depression: Clinical and Empirical Perspectives*. San Diego: Academic Press.
- Compton, W. M., K. P. Conway, F. S. Stinson, & B. F. Grant. 2006. "Changes in the Prevalence of Major Depression and Comorbid Substance Use Disorders in the United States Between 1991–1992 and 2001–2002." *American Journal of Psychiatry* 163(12): 2141–47.
- Connell, R. W., & J. W. Messerschmidt. 2005. "Hegemonic Masculinity: Rethinking the Concept." *Gender & Society* 19(6): 829–59.
- Courtenay, W. H. 2000. "Constructions of Masculinity and Their Influence on Men's Well-Being: A Theory of Gender and Health." *Social Science & Medicine* 50(10): 1385–401.
- Cuellar, I., B. Arnold, & G. Gonzalez. 1995. "Cognitive Referents of Acculturation: Assessment of Cultural Constructs in Mexican Americans." *Journal of Community Psychology* 23(4): 339–56.
- Doerner, J. K., & S. Demuth. 2010. "The Independent and Joint Effects of Race/Ethnicity, Gender, and Age on Sentencing Outcomes in US Federal Courts." *Justice Quarterly* 27(1): 1–27.
- Dolezal, C., A. Carballo-Diéguez, L. Nieves-Rosa, & F. Díaz. 2000. "Substance Use and Sexual Risk Behavior: Understanding Their Association Among Four Ethnic Groups of Latino Men Who Have Sex with Men." *Journal of Substance Abuse* 11(4):323–36.
- Englar-Carlson, M., & M. S. Kiselica. 2013. "Affirming the Strengths in Men: A Positive Masculinity Approach to Assisting Male Clients." *Journal of Counseling & Development* 91(4): 39–409.
- Fergus, S., M. A. Zimmerman, & C. H. Caldwell. 2007. "Growth Trajectories of Sexual Risk Behavior in Adolescence and Young Adulthood." *American Journal of Public Health* 97(6): 1096–101.
- Florentino, D. D., D. E. Berger, & J. R. Ramirez. 2007. "Drinking and Driving Among High-Risk Young Mexican-American Men." *Accident Analysis & Prevention* 39(1): 16–21.
- Green CA, Pope CR. 1999. Gender, psychosocial factors and the use of medical services: a longitudinal analysis. *Soc Sci Med*. May; 1999 48(10):1363–72.
- Hamber, B. 2016. "There Is a Crack in Everything: Problematising Masculinities, Peacebuilding and Transitional Justice." *Human Rights Review* 17(1): 9–34.
- Hammond, W. P., D. Matthews, & G. Corbie-Smith. 2010. "Psychosocial Factors Associated with Routine Health Examination Scheduling and Receipt Among African American Men." *Journal of the National Medical Association* 102(4): 276–89.
- Hammond, W. P., P. J. Fleming, & L. Villa-Torres. 2016. "Everyday Racism as a Threat to the Masculine Social Self: Framing Investigations of African American Male Health Disparities." In *APA Handbook of Men and Masculinities*, edited by Y. Joel & S. R. Wester, 259–83. Washington, DC: American Psychological Association.
- Hansen, H. 2012. "The 'New Masculinity': Addiction Treatment as a Reconstruction of Gender in Puerto Rican Evangelist Street Ministries." *Social Science & Medicine* 74(11): 1721–28.
- Irwin Jr., C. E., & S. G. Millstein. 2014. "Risktaking Behaviors and Biopsychosocial Development During Adolescence." In *Emotion, Cognition, Health, and Development in Children and Adolescents (PLE: Emotion)*, edited by E. J. Susman, L. V. Feagans, & W. J. Ray. San Francisco: University of California.
- Jackson, J. S., & K. M. Knight. 2006. "Race and Self-Regulatory Health Behaviors: The Role of the Stress Response and the HPA Axis in Physical and Mental Health Disparities." In *Social Structures, Aging and Self-Regulation in the Elderly*, edited by K. Warner Schaie & L. L. Carstensen, 189–207. New York: Springer.
- Jackson, J. S., K. M. Knight, & J. A. Rafferty. 2010. "Race and Unhealthy Behaviors: Chronic Stress, the HPA Axis, and Physical and Mental Health Disparities over the Life Course." *American Journal of Public Health* 100(5): 933–39.

- Kessler, R. C., P. R. Barker, L. J. Colpe, J. F. Epstein, J. C. Gfroerer, E. Hiripi, . . . E. E. Walters. 2003. "Screening for Serious Mental Illness in the General Population." *Arch Gen Psychiatry* 60(2): 184-89.
- Khan, M. R., A. T. Berger, B. E. Wells, & C. M. Cleland. 2012. "Longitudinal Associations Between Adolescent Alcohol Use and Adulthood Sexual Risk Behavior and Sexually Transmitted Infection in the United States: Assessment of Differences by Race." *American Journal of Public Health* 102(5): 867-76.
- Kiselica, M. S., & M. Englar-Carlson. 2010. "Identifying, Affirming, and Building Upon Male Strengths: The Positive Psychology/Positive Masculinity Model of Psychotherapy with Boys and Men." *Psychotherapy: Theory, Research, Practice, Training* 47(3): 276.
- Kochanek, K. D., S. L. Murphy, J. Xu, & E. Arias. 2014. "Mortality in the United States, 2013." NCHS Data Brief 178: 1-8.
- Kochanek, K. D., S. L. Murphy, J. Xu, & B. Tejada-Vera. 2016. "Deaths: Final Data for 2014." *NVSR* 65(4): 1.
- Kotchick, B. A., A. Shaffer, R. Forehand, & K. S. Miller. 2001. "Adolescent Sexual Risk Behavior: A Multi-System Perspective." *Clin Psychol Rev* 21(4): 493-519.
- Laracantu, M. A. 1989. "A Sex Role Inventory with Scales for 'Machismo' and 'Self-Sacrificing' Woman." *Journal of Cross-Cultural Psychology* 20(4): 386-98. doi:10.1177/0022022189204004.
- Levant, R. F., L. S. Hirsch, E. Celentano, & T. M. Cozza. 1992. "The Male Role: An Investigation of Contemporary Norms." *Journal of Mental Health Counseling* 14(3): 325-37.
- Levant, R. L., & W. P. Hammond. (In Press). "The Gender Role Strain Paradigm." In *Psychology of Men and Masculinities*, edited by Y. J. Wong & R. Levant. Washington, DC: American Psychological Association.
- National Center for Health Statistics. 2014. *Health, United States, 2013: With Special Feature on Prescription Drugs*. Hyattsville, MD.
- National Center for Health Statistics. 2016. *Health, United States, 2015: With Special Feature on Racial and Ethnic Health Disparities*. Hyattsville, MD.
- Neault, N., B. Mullany, J. Powers, V. Coho-Mescal, S. Parker, J. Walk-up, & A. Barlow. 2012. "Fatherhood Roles and Drug Use Among Young American Indian Men." *American Journal of Drug and Alcohol Abuse* 38(5):395-402.
- Neighbors HW, Howard CS. 1987. Sex differences in professional help seeking among adult Black Americans. *Am J Community Psychol*. 15(4):403-17.
- O'Neil, J. M. 2008. "Summarizing 25 Years of Research on Men's Gender Role Conflict Using the Gender Role Conflict Scale New Research Paradigms and Clinical Implications." *Counseling Psychologist* 36(3): 358-445.
- Peralta, R. L., L. A. Tuttle, & J. L. Steele. 2010. "At the Intersection of Interpersonal Violence, Masculinity, and Alcohol Use: The Experiences of Heterosexual Male Perpetrators of Intimate Partner Violence." *Violence Against Women* 16(4): 387-409.
- Perdue, T., H. Hagan, H. Thiede, & L. Valleroy. 2003. "Depression and HIV Risk Behavior Among Seattle-Area Injection Drug Users and Young Men Who Have Sex with Men." *AIDS Education and Prevention* 15(1): 81.
- Pleck, J. H. 1995. "The Gender Role Strain Paradigm: An Update." In *A New Psychology of Men*, edited by Ronald F. Levant and William S. Pollack. New York (NY): Basic Books
- Richardson, J. L., B. Radziszewska, C. W. Dent, & B. R. Flay. 1993. "Relationship Between After-School Care of Adolescents and Substance Use, Risk Taking, Depressed Mood, and Academic Achievement." *Pediatrics* 92(1): 32-38.
- Rosenfield, S., & D. Mouzon. 2013. "Gender and Mental Health." In *Handbook of the Sociology of Mental Health*, edited by C. S. Aneshensel, J. C. Phelan, & A. Bierman, 277-96. Boston: Springer.
- Sandman, D., Simantov, E., An, C., Fund, C., & Harris, L. 2000. Out of touch: American men and the health care system. *Commonwealth Fund Men's and Women's Health Survey findings*. New York (NY): The Commonwealth Fund.
- Scholz, B., S. Crabb, & G. A. Wittert. 2014. "'We've Got to Break Down the Shame': Portrayals of Men's Depression." *Qualitative Health Research* 24(12): 1648-57.
- Skarupski, K. A., C. F. Mendes de Leon, J. L. Bienias, L. L. Barnes, S. A. Everson-Rose, R. S. Wilson, & D. A. Evans. 2005. "Black-White Differences in Depressive Symptoms Among Older Adults over Time." *Journals of Gerontology Series B* 60(3): P136-P142.
- Spearman-Teamer, C. A. 2008. "African American Male Athletes: An Examination of a Conflicted Sense of Masculinity as a Source of Psychological Distress." PhD diss., Tennessee State University. ProQuest (AAI3320202).
- Stall, R., T. C. Mills, J. Williamson, T. Hart, G. Greenwood, J. Paul, . . . J. A. Catania. 2003. "Association of Co-Occurring Psychosocial Health Problems and Increased Vulnerability to HIV/AIDS Among Urban Men Who Have Sex with Men." *American Journal of Public Health* 93(6): 939-42.
- Stone, A. L., L. G. Becker, A. M. Huber, & R. F. Catalano. 2012. "Review of Risk and Protective Factors of Substance Use and Problem Use in Emerging Adulthood." *Addictive Behaviors* 37(7): 747-75.
- Tucker, T. M. 2009. "Examining the Impact of Historical/Developmental, Sociodemographic, and Psychological Factors on Passive Suicide Among African-American Men." PhD diss., Howard University. ERIC.
- Ulmer, J., N. Painter-Davis, & L. Tinik. 2016. "Disproportional Imprisonment of Black and Hispanic Males: Sentencing Discretion, Processing Outcomes, and Policy Structures." *Justice Quarterly* 33(4): 642-81.
- Wassertheil-Smoller, S., E. M. Arredondo, J. Cai, S. F. Castaneda, J. P. Choca, L. C. Gallo, . . . P. C. Zee. 2014. "Depression, Anxiety, Antidepressant Use, and Cardiovascular Disease Among Hispanic Men and Women of Different National Backgrounds: Results from the Hispanic Community Health Study/Study of Latinos." *Ann Epidemiol* 24(11): 822-30. doi:10.1016/j.annepidem.2014.09.003.
- Williams, D. R. 2003. "The Health of Men: Structured Inequalities and Opportunities." *American Journal of Public Health* 93(5): 724-31.
- Williams, D. R., H. M. Gonzalez, H. Neighbors, R. Nesse, J. M. Abelson, J. Sweetman, & J. S. Jackson. 2007. "Prevalence and Distribution of Major Depressive Disorder in African Americans, Caribbean Blacks, and Non-Hispanic Whites: Results from the National Survey of American Life." *Arch Gen Psychiatry* 64(3): 305-15.

ABOUT THE AUTHORS



Wisdom Powell, PhD, MPH



Leslie B. Adams, MPH

The EvidenceWatch Collective, Inc. team is comprised of African American women with a longstanding commitment to unearthing risk and protective factors that can improve the health and well-being of BMOC. Our intergenerational team also brings to this process more than 15 years of experience in producing evidence for action in the BMOC and health equity space. The work taken up by our team has been produced for academic and non-academic audiences and we view the translation of this evidence as central to moving the needle on poor health outcomes among BMOC. We are partners, daughters, sisters, mothers, and spouses of BMOC from various socioeconomic backgrounds but who are first-generation academicians. We acknowledge that African American women face similar structural and identity-related barriers to healthcare and may engage in behavioral risk-taking as a consequence of negative social exposures. However, we concede that these shared experiences fail to fully eliminate the impacts of our gendered positionality on data interpretation. Our analytic strategy, which included establishing consensus on the interpretation was undertaken specifically to address any blind spots produced by our positionality. We also view the health of BMOC as inextricably linked to the health of girls, women, families, and communities. Thus, we enter this work with an eye towards illuminating points of shared experience that positively connect us to and influence our work. We are a collection of strengths-based public health researchers and positive psychologists who believe that BMOC have an inherent capacity for growth, potential, and innovative contributions to our society.

APPENDIX A

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Alaniz	1994	Qualitative	observations and interviews	Hispanic/Latino	Alcohol abuse	N/A	N/A	Drinking in high quantities was associated with masculinity. Men in the study stated that they drink primarily because they are tired and stressed from work. They also reported drinking to enjoy themselves, pass the time, and talk to friends. Men also cited engaging in after work drinking with friends after work as a way to socialize with other males and reduce stress and fatigue. Women in the study added that men drink in high quantities due to competitiveness and fear of ridicule. The role of peer pressure within the context of male culture was also described as a contributor to prolonged drinking.
Apesoa-Va-rano et al	2015	Qualitative	Semi-structured interviews	Hispanic/Latino	Depression and suicide	N/A	PHQ-2, SCID	In describing depression, men, at least half of the participants used six of the eleven categories: depressed, rumination, general malaise, angry, worthless/useless, and no interest. In contrast, the more rarely used idiom categories included guilty, afraid, bored, pain, and lonely. Men generally used more than one idiom to describe their psychosocial distress, relying on a constellation of idioms from the identified categories. These idioms fell both within and outside established DSM-5 criteria for depression; that is, low mood and anhedonia—core depression symptoms—are combined with ruminating, general malaise, and anger, which are not part of established depression criteria. The authors found overarching similarities between WNM and Mexican-origin men. Both groups most commonly used the same six idiom categories: depressed, general malaise, worthless/useless, ruminating, angry, and no interest. The authors detected two notable differences between these groups. First, Mexican-origin men more frequently used the general malaise category compared to WNM who referred more commonly to the worthless/useless idiom. *

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Beck et al.	1993	Qualitative	Focus groups	Hispanic/Latino	Alcohol abuse	N/A.	N/A	Competitive drinking, especially among males was related by participants to test of virility or masculinity. Many male adolescents in the study cited that in some Latin American countries, adults tell their children that drinking beer is necessary to be a 'macho man'. A belief that drinking is a sign of masculinity appears to be strongly related to parental example.
Bingham et al.	2013	Quantitative	Cross-sectional	African Americans	Depression	Gender Role Conflict Scale	Brief Symptom Inventory 53 (anxiety, depression, and somatization)	Men who have sex with men and women (MSMW) reporting higher levels of GRC than other participants also reported more psychological distress, low self-esteem, greater internalized homophobia, less HIV knowledge, lower risk reduction skills, less disclosure of same-sex behaviors to others, and more unprotected vaginal or anal sex with female partners
Bowleg et al.	2016	Mixed Methods	Focus groups and cross-sectional survey	African Americans	Depression	Black Men's Experiences Scale (BMES)	Depression (PHQ-9)	The Positive Black Men Scale (BMES) and the Overt Discrimination and Microaggressions subscales were associated with higher depression. The author(s) hypothesis that more positive feelings about being Black men would be associated with higher resilience and lower depression was also supported.
Brewer	1998	Quantitative	Cross-sectional	African American	Depression	Gender Role Conflict Scale	Depression (CES-D)	Increases in restrictive emotionality and winning were significantly associated with depression Furthermore, avoiding femininity was significantly associated with depression
Brown	2010	Qualitative	Participant observation and semi-structured interviews	Native American/ American Indian	Substance abuse (crystal meth)	N/A	N/A	Findings support previous work suggesting that in very seasonal and unpredictable labor jobs, methamphetamine (meth) use provides access to a hyperreal world of masculinity (Boyd 1996). Men who do not have access to these increasingly limited labor opportunities, engagement in a pseudo-military sense of self (often coupled with manufacturing or trafficking drugs) forms another route for the production of a meaningful self, an Appalachian form of "lumpen masculinity" (Bourgois 2003b). The author(s) suggest that in these cases, crystal meth use "adds critically to the set and quality of experiences necessary to achieve a masculine sense of self and the world." The author(s) surmised that many of the motivations and affective states that Appalachian youth mentioned contributed to the initiation and continuation of meth use were similar and/or common to those noted in research conducted with MSM populations in urban area. Some of these commonalities include the desire and pressure to exhibit hypermasculine behaviors and the need to escape feelings of loneliness or shame.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Bryant et al.	2014	Qualitative	Focus groups	African Americans	Depression	N/A	N/A	The authors found one major theme related - Masculine Roles. This theme suggests that participants felt showing or expressing feeling is not part of the expectations of men. This sense seemed to be rooted in socialization experiences emphasizing what a “real” man is. Father figure absence, difficulties in admitting depression, and the need for more open discussions were discussed as central to this theme. The authors also described a theme emphasizing the Denial of Depression, which included various reasons participants felt that depression is ignored, such as social stigma, the belief that depression is a sign of weakness, and loss of pride.
Caldwell et al.	2013	Quantitative	Cross-sectional	African Americans	Depression and alcohol use	Masculinity Salience Scale (Hammond Mattis 2005)	Depressive symptoms (CES-D); Drinking Behavior (composite measure created from three self-report items of alcohol use)	More culturally based masculinity was associated with less depressive symptoms after controlling for demographic factors. Hegemonic masculinity was only marginally associated with more depressive symptoms. Co-parenting was associated with more depressive symptoms among fathers with high interconnected masculinity. However, none of the masculinity ideologies were associated with fathers’ drinking behavior after controlling for the demographic factor.
Cespedes et al.	2008	Qualitative	Cross-sectional	Hispanic/Latino	Depression and suicide	Gender Role beliefs (Attitudes Toward Women Scale-Spence 1973); the Machismo Scale (Cuellar 1995)	Depression (Reynolds Adolescent Depression Scale-2, 2002); Suicide (Columbia Suicide Screen-Schaffer 2004)	Attitudes towards Women and Machismo discrepancy were positively associated with family conflict, low family cohesion, depression as measured by the Reynolds Adolescent Depression Scale, and Suicide as measured by the Columbia Suicide Screen.. Gender role discrepancy was also significantly associated with depression, with more pronounced effects for Latina adolescents
Cespedes	2008	Quantitative	Cross-sectional	Hispanic/Latino	Depression and suicide	Gender Role beliefs (Attitudes Toward Women Scale-Spence 1973); the Machismo Scale (Cuellar 1995)	Depression (Reynolds Adolescent Depression Scale-2, 2002); Suicide (Columbia Suicide Screen-Schaffer 2004)	Moderator analyses suggest that the relationship between discrepancy in gender role beliefs and depression may be more robust for females than for males.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Cespedes	2004	Quantitative	Cross-sectional	Hispanic/Latino	Depression and suicide	Gender Role beliefs (Attitudes Toward Women Scale-Spence 1973); the Machismo Scale (Cuellar 1995)	Depression (Reynolds Adolescent Depression Scale-2, 2002); Suicide (Columbia Suicide Screen-Schaffer 2004)	The only significant interaction effect was found for the association between Machismo discrepancy and TeenScreen depression. The results are shown in Greater discrepancy on the Machismo scale was also associated with lower levels of depression. Latino males reported higher rates of gender role discrepancy across three of the four gender role measures than females. For males, discrepancy in gender roles was associated with a decrease in depression level.
Chan et al	2015	Quantitative	Focus groups	Hispanic/Latino	Depression	N/A	N/A	Men described financial stressors as contributors to chronic disease and depression management. The ability to provide as man was consistently discussed as a difficulty influencing depression. Recognizing mental health as an additional factor in men's experiences appeared to be notably related to shifts in self-identity, as some men were resistant to admit their current struggles with depression during the focus groups, even though they were prescreened for depressive symptomology with the Patient Health Questionnaire-2-item was a criterion for participation. Discussions further revealed that men struggling with comorbid depression and chronic disease also contend with identity issues on both an intrapersonal and an interpersonal level as they try to re-conceptualize themselves as someone susceptible to illness and needing additional support and assistance, physically, socially, and financially. Overall, diagnosis with a chronic disease and/or depression was accompanied by lifestyle adaptations, activity restrictions, and changes in income and health care demands that seemed to undermine traditional notions of Hispanic masculinity.
Cespedes	2008	Quantitative	Cross-sectional	Hispanic/Latino	Depression and suicide	Gender Role beliefs (Attitudes Toward Women Scale-Spence 1973); the Machismo Scale (Cuellar 1995)	Depression (Reynolds Adolescent Depression Scale-2, 2002); Suicide (Columbia Suicide Screen-Schaffer 2004)	Moderator analyses suggest that the relationship between discrepancy in gender role beliefs and depression may be more robust for females than for males.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Cuadrado et al.	1998	Quantitative	Cross-sectional	African Americans	Substance abuse	Traditionalism index was created to assess norms governing the behavior of men and women	A drug use index was created by combining data from positive answers to a listing of 6 categories of drugs used during the 12 mo prior to the interview.	Men with high levels of traditionalism were less likely to use drugs than those with low traditionalism (8 vs 12%). This relationship was not found to be statistically significant. Males were more than twice as likely as females to use drugs (14 vs 7%), score high on acculturation and score high on traditionalism (45 vs 32%), all significant at the .001 level. Among men, the authors found that levels of traditionalism at the extremes (low and high) had no effect on the relationship between drug use and acculturation before controlling for traditionalism.
Daniels et al.	2011	Quantitative	Cross-Sectional	African Americans; Hispanic/Latino	Substance abuse	N/A	DSM criteria for drug and alcohol dependence	For the most part, young men did not ascribe to attitudes about gender norms attributed to "gangsta" culture or "hyper-masculinity". For example, less than a quarter of the young men endorsed statements justifying violence within an intimate relationship. However, other responses suggest high endorsement of more traditional masculine norms. For example, 84% of participants agreed that "most men want to go out with women just for sex," and 45% agreed that "boys sometimes deserve to be hit by the girls they date," whereas only 24% agreed with "girls sometimes deserve to be hit by the boys they date," suggesting more stereotypical attitudes about gender. Few young men identified health-related issues such as substance abuse (13%), psychological problems (5%), medical problems (2%), or HIV (1%) as priority problems following release.
Davidson	2010	Quantitative	Cross-sectional	Hispanic/Latino	Depression	Conformity to Masculine Norms Inventory (CMNI; Mahalik 2003)	Beck Depression Inventory, Second Edition	Latino students reported higher adherence to the values of familismo (and machismo than European American students. Males also reported more emotion suppression and adherence to masculine gender norms than females, and females reported. Although nonsignificant, adherence to masculine gender norms among male adolescents (was positively associated with depressive symptoms. Adherence to masculine gender norms also did not significantly moderate the relationship between emotion suppression and depression. Adherence to machismo did not significantly moderate the relationship between emotion suppression and psychological functioning.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUT-COME MEASURE	STUDY RESULT DESCRIPTION
Fiorentino et al.	2007	Mixed methods	Focus groups; questionnaires	Hispanic/Latino	Alcohol abuse	N/A	Participants rated the importance of six reasons for their drinking. The six reasons were loosely based on the six subscales of the 120-item Alcohol Expectancy Questionnaire III (AEQ-III) developed by Brown et al. (1987). The participants were also asked to indicate the most likely location in which their drinking occurred before driving, and how many drinks were appropriate in a variety of circumstances, using an approach described by Tsunoda et al. (1992).	Drinking alcohol was seen by the participants as something they have always done, as did their fathers and grandfathers before them. In general, events unfold as follows. Young children reportedly observe male members of the family drink at family get togethers on weekends, where women and men are in separate rooms. Young boys are typically initiated to the ritual of drinking by being asked to fetch beer for the drinking members of the family. At an early age, they are offered a drink by a family member and those who do not drink are viewed as weak. At first, some of the boys do not like drinking, but they continue doing it because everybody else does it. All social occasions revolve around beer and alcohol. Relaxing and increasing sociability were given as primary reasons for drinking, but many participants recognized that problems accompanied heavy drinking. A frequently expressed belief was that for Mexican men every occasion is cause for drinking beer, and that masculinity is measured by how much one can drink. In general, women thought that the major underlying cause of excessive drinking and driving after drinking is machismo. The women felt that Mexican men are socialized to be drinkers; even women teach their young sons to be macho and to drink beer. They noted that in Mexico there are relaxed views on excessive drinking and there is limited enforcement of DUI laws, and that this results in a culture of permissiveness for men that is very hard to eradicate.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Fragoso et al.	2000	Quantitative	Cross-sectional	Hispanic/Latino	Depression	Machismo. We used the Machismo subscale of the Multiphasic Assessment of Cultural Constructs, Short Form (Cuellar, Arnold, & Gonzales, 1995); Gender role conflict. The Gender Role Conflict Scale (GRCS; O'Neil et al., 1986)	CES-D (Depression)	Higher levels of machismo were associated with higher levels of depression and stress. In addition, higher levels of gender role conflict (total GRCS score, SPC score, and RE score) were associated with higher levels of stress. Only the Restrictive Emotionality (RE) scale of the GRCS was significantly related to depression. However, less conflict related to affectionate behavior between men was associated with higher depression scores
Gordon, D. M.; Hawes, S. W.; Reid, A. E.; Cal-lands, T. A.; Magriples, U.; Divney, A.; Niccolai, L. M.; Ker-shaw, T.	2013	Quantitative	Cross-sectional	African American; Hispanic/Latino	Alcohol and substance abuse: cigarettes, marijuana, and hard drugs (e.g., crack, heroin, methamphetamines, and other hard drugs)	Masculine Role Norms Scale (Thompson & Pleck, 1986).	Alcohol and substance use were measured with the	The most consistent finding was for masculinity norms encouraging toughness. This set of norms was associated with more alcohol, hard drug, and marijuana use. Specifically: Higher endorsement of the masculine norm "toughness" norms was significantly related to drinking, marijuana use, hard drug use, and eating junk food. higher masculine norm "status" was related to less smoking for African American but not Latino and White/Other young men . Masculine norm "status" was related to less marijuana use for African American but not Latino and White/Other young men.
Hammond, W.P.	2012	Quantitative	Cross-sectional	African American	Depression	Masculine role norms were assessed with 3 scales: the Restrictive Emotionality and Self-reliance subscales of the Male Role Norms Inventory (Levant RF, Hirsch LS, Celentano E, Cozz TM. The male role: an investigation of contemporary norms. J Ment Health Couns. 1992;14(3):325--337). and the Masculinity Norms Salience scale, constructed from previous qualitative work on masculinity meaning among African American men (Hammond WP, Mattis JS. Being a man about it: manhood meaning among African American men. Psychol Men Masc. 2005;6(2):114--126). N/A	A 12-item version of the Center for Epidemiological Studies Depression Scale (CES-D), a self-report scale developed for the general population, was used to assess depressive symptoms.	Higher restrictive emotionality (as assessed by the Male Role Norms Inventory) was associated with more depressive symptoms. There was also a stronger, more pronounced association between everyday racial discrimination and depression among men with higher endorsement of norms encouraging restrictive emotionality.

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Holloway, I. W.; Padilla, M. B.; Willner, L.; Guilamo-Ramos, V.	2015	Qualitative	Cross-sectional	Hispanic/Latino	Depression/ psychological distress	N/A	N/A	The participants did not directly link masculinity to depressed mood, suicidality or substance use. But, they (at least one participant) did describe the stress induced by trying to adhere to masculinity norms that prohibit same-sex relationships/attractions as contributing to poor mental health. For example: "I would have to leave New York ,because I won't be able to face my friends and everybody, you know. I have, in my neighborhood, I got a reputation and so forth, and I won't be able to look anybody in the eye." He went on to indicate that this disclosure might prompt him to "have a nervous breakdown, go into drugs...or even[commit] suicide."
Hudson et al.	2016	Qualitative	Cross-sectional	African American	Depression	N/A	N/A	Men in the focus group described masculinity as a key barrier to depression treatment. Specifically some men "expressed concerns about being labeled as weak or crazy". A participant in his early 30s stated, "Man don't want to see them cry, breakdown." Another man in his mid-30s stated the following regarding depression and seeking help for depression: "The fact of being a man, you know, I don't feel like, but it's just like if we show a sign of weakness . . . so you got to be strong and hard forever, you can't cry not one time, you can't say nothing weak, it's just like alright, I'm going to just be this tough forever. You even bring your children up like that now. You tell your child, kill all that crying, he comes whining to you, calm all that down, even with the girls too, even with the girls, I don't want to see no tears." The study authors concluded: "Norms of masculinity was a factor that lead participants in this study to conceal their emotions and not share feelings of depression or seek treatment."

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Holloway, I. W.; Padilla, M. B.; Willner, L.; Guilamo-Ramos, V.	2015	Qualitative	Cross-sectional	Hispanic/Latino	Depression/ psychological distress	N/A	N/A	The participants did not directly link masculinity to depressed mood, suicidality or substance use. But, they (at least one participant) did describe the stress induced by trying to adhere to masculinity norms that prohibit same-sex relationships/attractions as contributing to poor mental health. For example: "I would have to leave New York ,because I won't be able to face my friends and everybody, you know. I have, in my neighborhood, I got a reputation and so forth, and I won't be able to look anybody in the eye." He went on to indicate that this disclosure might prompt him to "have a nervous breakdown, go into drugs...or even[commit] suicide."
Hudson et al.	2016	Qualitative	Cross-sectional	African American	Depression	N/A	N/A	Men in the focus group described masculinity as a key barrier to depression treatment. Specifically some men "expressed concerns about being labeled as weak or crazy". A participant in his early 30s stated, "Man don't want to see them cry, breakdown." Another man in his mid-30s stated the following regarding depression and seeking help for depression: "The fact of being a man, you know, I don't feel like, but it's just like if we show a sign of weakness . . . so you got to be strong and hard forever, you can't cry not one time, you can't say nothing weak, it's just like alright, I'm going to just be this tough forever. You even bring your children up like that now. You tell your child, kill all that crying, he comes whining to you, calm all that down, even with the girls too, even with the girls, I don't want to see no tears." The study authors concluded: "Norms of masculinity was a factor that lead participants in this study to conceal their emotions and not share feelings of depression or seek treatment."

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Kulis, S.; Marsiglia, F. F.; Nagoshi, J. L.	2012	Quantitative	Cross-sectional	Hispanic/Latino	Substance Abuse	Adaptive and maladaptive gender roles (Antill, Cunningham, Russell, & Thompson, 1981; Marsh & Myers, 1986; Ricciardelli & Williams, 1995; Russell & Antill, 1984) were measured by 12 items (Cronbach's alphas are based on the present sample). The 12 items that formed the four dimensions of gender roles asked students to describe how often they felt they fit gender-typed traits and behaviors, using a Likert scale from 0=rarely to 4 =always. Three adaptive masculinity items measured "assertive masculinity," which captured a sense of self-confidence, assertiveness, and goal orientation.	Substance use outcomes were measured by a series of questions where students self-reported the frequency and amount of their use of alcohol, cigarettes, marijuana, or inhalant within the past 30 days, with an additional question for frequency of binge drinking of alcohol ("5 or more drinks within a few hours").	One of the gender role scales, maladaptive masculinity, was strongly associated with greater use of nearly all substances, both for boys and girls. Adaptive masculinity was not correlated with substance use in boys, although, one positive correlation did emerge in the multiple regression analyses for alcohol frequency. For boys, greater maladaptive masculinity correlated with higher substance use across all outcomes. Greater adaptive femininity was a significant indicator of lower alcohol frequency, cigarette amounts and frequency, marijuana amounts, and inhalant frequency. Adaptive masculinity indicated only higher alcohol frequency, while maladaptive femininity indicated only lower alcohol amounts. Generally, greater adaptive masculinity was correlated with greater substance use for less acculturated boys, but indicated lesser substance use for highly acculturated boys. Interaction results suggest that substance use levels were highest among boys who were the least acculturated but high in adaptive masculinity. Across all variables, greater maladaptive masculinity predicted greater substance use for boys.

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Kulis, S.; Marsiglia, F. F.; Nagoshi, J. L.	2012	Quantitative	Cross-sectional	Hispanic/Latino	Substance Abuse	Measures of four gender role orientations were constructed from 12 items that were selected or adapted from those used by other researchers to map both positive and negative aspects of masculinity and femininity (Antill, Cunningham, Russell, & Thompson, 1981; Marsh & Myers, 1986; Ricciardelli & Williams, 1995; Russell & Antill, 1984). There were three positive masculinity items measuring "assertive masculinity" that captured a sense of self-confidence, assertiveness, and goal orientation ($\alpha = .51$). Three items measured negative or "aggressive" masculinity indicating dominance and control over others ($\alpha = .66$).	The alcohol use measure was computed by standardizing and averaging the responses across six items: number of days the adolescent had at least one drink of alcohol in the past 30 days, number of days the adolescent had five or more drinks in a row in the past 30 days, number of drinks of alcohol the adolescent had in the last 30 days, number of times the adolescent had drunk more than a sip of alcohol in the last 30 days, number of times the adolescent had drunk more than a sip of alcohol in his or her lifetime, and the extent to which the adolescent drinks alcohol without parents' permission. This last item is from the Youth Self-Report using a Likert scale from 0 (not true) to 3 (very true or often true; Achenbach & Edelbrock, 1987). The marijuana and other drug use measure was computed by standardizing and averaging the responses across six items: number of hits of marijuana the adolescent had in the last 30 days, number of times the adolescent had smoked marijuana in the last 30 days, number of times the adolescent had smoked marijuana in his or her lifetime, number of times the adolescent had sniffed inhalants to get high in the last 30 days, number of times the adolescent had sniffed inhalants to get high in his or her lifetime, and the extent to which the adolescent uses drugs (not including alcohol or tobacco) for nonmedical purposes. Overall cigarette use was measured by standardizing and averaging three items: number of cigarettes the adolescent had smoked in the last 30 days, number of times the adolescent had smoked cigarettes in the last 30 days, and number of times the adolescent had smoked cigarettes over the lifetime.	Assertive masculinity was a significant or nearly significant predictor of lower levels of alcohol use, even in the presence of internalizing and externalizing problem behaviors and peer substance use. For boys, alcohol use was negatively related to assertive masculinity, and this relationship was not mediated by internalizing/externalizing problem behaviors or peer substance use. Assertive masculinity predicted lower alcohol use among the boys.

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Lorenzo-Blanco, E. I.; Unger, J. B.; Baez-conde-Garbanati, L.; Ritt-Olson, A.; Soto, D.	2012	Quantitative	Cross-sectional	Hispanic/Latino	Depressive Symptoms	The authors used seven items to assess traditional gender roles. The items were adapted from the Multiphasic Assessment of Cultural Construct (MACCSF) (Cuéllar et al. 1995a, b). Adolescents indicated on a scale ranging from 1 (strongly disagree) to 4 (strongly agree) the degree to which they agreed with certain statements like "Boys should not be allowed to play with dolls and other girls' toys" and "Some equality in marriage is a good thing, but the father ought to have the main say in family matters." Higher scores reflect a greater endorsement of traditional gender roles (Cronbach's $\alpha = .80$).	The Center for Epidemiological Studies Depression Scale (CES-D) was used to assess adolescents' depressive symptoms (Radloff 1977).	Traditional gender roles were not significantly associated with depressive symptoms.
Lorenzo-Blanco, E. I.; Unger, J. B.; Ritt-Olson, A.; Soto, D.; Baez-conde-Garbanati, L.	2013	Quantitative	Longitudinal	Hispanic/Latino	substance use (smoking)	The authors used seven items to assess traditional gender roles. The items were adapted from the Multiphasic Assessment of Cultural Construct (MACCSF) (Cuéllar et al. 1995a, b).	One item assessed youth's smoking: "During the past 30 days, on how many days did you smoke cigarettes?" Responses were rated on a 7-point scale (1 = 0 days, 2 = 1 or 2 days, 3 = 3 to 5 days, 4 = 6 to 9 days, 5 = 10 to 19 days, 6 = 20 to 29 days, 7 = all 30 days).	No significant associations were detected between traditional gender roles and smoking.
Lyons, A. L.; Carlson, G. A.; Thurman, A. E.; Grant, K. E.; Gipsen, P. Y.	2006	Quantitative	Cross-sectional	African American; Hispanic/Latino	Depression	The Children's Sex Role Inventory (CSRI; Boldizar, 1991), a direct adaptation of the Bem Sex Role Inventory (Bem, 1974),	The Children's Depression Inventory (CDI; Kovacs, 1979, 1992), a 27-item self-report inventory of depressive symptoms in children, was used to assess depression.	Depression was not significantly correlated with masculinity.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Markides & Vernon	2016	Quantitative	Cross-sectional	Hispanic/Latino	Depression	A 7-item scale derived through item analysis was used to measure traditional sex role orientation. Sample items include, "a wife should do whatever her husband wants"; "Men should share the work around the house with women, such as doing the dishes, cleaning, and so forth"; "A wife should vote the way her husband wants"; "women should take an active interest in politics and community problems."	Depression was measured by the 20-item Center for Epidemiologic Studies Depression (CES-D) Scale.	Among men, traditional sex-role orientation was significantly related to life satisfaction in the older generation but not to depression. Middle-aged men exhibited a significant relationship between traditional sex-role orientation and depression, a relationship that remained significant after the control variables were introduced in the equation. Finally, opposite to what was hypothesized, traditional sex-role orientation had the most negative effects on younger men, where both depression and life satisfaction were significantly influenced even after the controls.
Matthews, et al.	2013	Quantitative	Cross-sectional	African American	Depression	Masculine self-reliance was assessed with the seven-item self-reliance subscale of the Male Role Norms Inventory (MRNI; Levant et al., 1992). Participants rated each item (e.g., A man should never count on someone else to get the job done") on a scale ranging from 1 (strongly disagree) to 7 (strongly agree).	Depression was measured a 12-item version of the Center for Epidemiologic Studies Depression (CES-D) Scale.	Masculine self-reliance was positively associated with depressive symptoms. However, in multivariate models, masculine self-reliance had no effect on depressive symptomatology for those men who did not actively respond to discrimination. But, masculine self-reliance was positively associated with depressive symptomatology among men reporting active responses to discrimination.
Muñoz-Laboy et al.	2015	Quantitative	Cross-sectional	Hispanic/Latino	Depression	Hypermasculinity was measured with the Machismo Cuellar Scale; 22-item measure that assess adherence to traditional male privilege ideology. The authors also used the gender equity ideology (GEM scale) assessing agreement with gender equity.	Depression was assessed with the Brief Symptom Inventory (BSI). The BSI is a 53-item, self-administered inventory that takes approximately 10 min to gauge psychiatric symptoms.	The authors found no statistically significant effects of machismo on depressive symptoms.

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Nagoshi, J	2012	Quantitative	Cross-sectional (as part of a cohort intervention)	Hispanic/Latino	substance use (alcohol, cigarette, marijuana, or inhalents); depressive symptoms	Positive and Negative Gender Roles were measured by 12 items assessed only at Wave 5. Three adaptive masculinity items measured "assertive masculinity". Three items measured maladaptive masculinity, or "aggressive masculinity"	Substance use was measured by 5 questions for which students reported the frequency and amount of their use of alcohol, cigarettes, marijuana, or inhalants within the past 30 days, with an additional question for frequency of binge drinking of alcohol ("5 or more drinks within a few hours"). Depressive symptoms were measured by a single Wave 6 item about the frequency of feeling sad (67% of the sample reported at least one occurrence of this).	For boys, the path analyses yielded significant direct paths from aggressive masculinity to composite alcohol, cigarette, and marijuana use measures, with all other effects of gender roles on substance use operating through the mediators. Bootstrapped mediation tests yielded significant indirect paths, where for boys the positive relationships between assertive and aggressive masculinity with substance use and the negative relationship of affective femininity with substance use were mediated through anti-sociality, which is predictive of increased substance use. None of the gender roles significantly predicted depressive symptoms,
Neff & Burge	1995	Quantitative	2nd wave of longitudinal study	African American; Hispanic/Latino	Substance use (alcohol)	Sex role orientation (traditional vs. liberal). This scale addressed marital decision-making and division of labor with additional items measuring attitudes toward women's rights to pursue their own interests, education, and careers.	Alcohol use was measured by assessing self-reported number of drinks consumed in a typical drinking episode (drinks/episode) and the typical number of days per week the respondent reported drinking (drinking days/week).	Black men had significantly higher means of sex-role orientation than Anglo men in both the drinking (25.07 vs. 22.48, $p<0.01$) and non-drinking group (26.02 vs 24.16, $p<0.001$). Mexican American men that drank had significantly higher mean sex-role orientation scores than Anglo men that drink (24.68 vs. 22.48, $p<0.001$). There were no significant differences in sex-role orientation scores between drinkers and non-drinkers for both the Black and Mexican American group, but there was a significant difference in the scores in the Anglo group.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Núñez, et al.	2015	Quantitative	Cross-sectional	Hispanic/Latino	Depression	Machismo gender role beliefs (MAN for Health Survey-Ayala 2008) and family provider attitudes, bravery, honor, and chivalry (caballerismo)	Depression (CES-D)	Traditional machismo and caballerismo were not significantly correlated to depression.
Peralta, R.; Tuttle, L.; Steele, J.	2010	Mixed Methods	Cross-sectional; semi-structured interview	African American	Substance use (alcohol)	N/A	N/A	In recounting their histories of violence, participants often discussed childhood experiences with familial alcohol use and violence. Findings reveal that participants had been exposed to considerable messages about particular forms of masculinity, masculinity's significance, and how to construct and defend masculinity. Also, findings imply that situated contexts are an important aspect of the violence discussed by participants. Men who are disenfranchised due to social class barriers and/or racism are further threatened by emasculation due to their inability to fulfill traditional roles expected of men. Providing financially for one's partner and/or children is important in the establishment of hegemonic masculinity and subsequent respect from others. A male's physical stature (i.e., the body) was described as having great importance; yet physical stature (e.g., height, strength, muscularity) was described as not being equally distributed among men. Masculinity deficiency, (e.g., being physically smaller than other men, the inability to provide financially due to underemployment or unemployment and owning little or no property) was discussed as requiring the task of finding alternative solutions to expressing local versions of masculinity (e.g., power, dominance). Alcohol and alcohol-related violence appeared to be viewed as resources or "solutions" for the problem of masculine deficiency. Participants descriptions reveal connections drawn between employment and a man's sense of dignity and fulfillment.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Pleck & O'Donnell	2001	Quantitative	Cross-sectional	African American; Hispanic/Latino	Substance use (cigarettes, alcohol, marijuana, inhalants)	Male Roles Attitudes Scale (MRAS)	Items assessed the frequency of use of cigarettes and alcohol in the last month (five response categories from never to every day), and frequency of marijuana use, inhalant use, and getting high ("drunk on alcohol or high on drugs") in the last year (seven categories ranging from never to every day, except that inhalant use had four categories truncated at several times a month).	Traditional attitudes about masculinity is positively associated with substance use risk behaviors, specifically cigarettes ($p<0.05$), alcohol, and marijuana ($p<0.01$).
Powell et al.	2016	Quantitative	Cross-sectional	African American	Depression	Masculinity Norms Salience Scale	Depression was assessed using the CES-D scale	Men with high CESD scores or more depressed mood reported increased barriers to health help seeking. Results from the path model further indicate that masculinity norms salience was positively associated with CES-D scores.
Richardson	2007	Quantitative	Cross-sectional	African American	Depression	Masculine Norms Salience Scale-RESTRICTIVE EMOTIONALITY AND SELF-RELIANCE SCALE; The Subjective Masculinity Stress Scale (SMSS)- Wong 2013;	Beck's Depression Inventory Rationale; CESD-R (Depression)	Restrictive emotionality, self-reliance, and subjective masculine stress was positively correlated with depression. Haitian men who have resided in the United States for longer durations exhibit a tendency to report greater restrictive emotionality and greater self-reliance but these associations were not statistically significant.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Sawyer, B	2015	Quantitative	Cross-sectional	African American, Hispanic/Latino	Depression	Conformity to Masculine Norms Inventory-46,	Symptom Questionnaire (SQ) from the Symptom-Rating Test (SRT)-Kellner and Sheffield (1973). The four subscales used to determine psychopathology are Depression, Anxiety, Somatization, and Anger-Hostility.	Conformity to the masculine norm of winning was found to be a significant predictor of depression in African American men but predicted decreased depression in this group of men. None of the masculine norms were found to be significant predictors of depression in Latino men.
Spearman-Teamer	2008	Quantitative	Cross-sectional	African American	Depression	Gender Role Conflict (O'Neil); Masculinity Across Roles Scale (Blazina)	Brief Symptom Inventory (BSI)	Trend level significant moderate correlations were found between Gender Role Conflict scores and the depression (overall BSI scores). Depression was not significantly correlated with masculinity as assessed with the Roles or Gender Role Conflict scales.
Tucker, T	2009	Quantitative	Cross-sectional	African American	Depression and Suicide	BEM Sex role Inventory (Bem-1974);	Beck Depression Inventory (Beck-1996); Drug Use Problem Survey (Eggert 1995); Violence-related attitudes and behaviors (V-Rabs)	In the community population, masculine identity, racial identity (subscales-assimilation, mis-education, self-hate, anti-white, afrocentricity, multiculturalism), and racism were significant predictors of substance abuse. [Masculine identity, racial identity, and racism were significant predictors of violence in the community population
Vaughan et al.	2014	Quantitative	Cross-sectional (part of longitudinal Add Health study)	Hispanic/Latino	Alcohol use	Gender role orientation (BSRI-S)	Binge drinking was dichotomized from two questions. Men were asked, "During the past two weeks, how many times did you have five or more drinks on a single occasion, for example, in the same evening?"	In Class 1, the protective personal masculinity class, personal masculinity (e.g., being a leader, defending one's own beliefs) was associated with a reduction in the odds of binge drinking. In Class 3, the mixed masculinity class, personal masculinity was associated with a reduction in the odds of binge drinking, whereas social masculinity (e.g., forceful, dominant) was associated with an increase in the odds of binge drinking. Males, those born outside the United States, and those with greater Spanish language usage were at greater odds of being in Class 3 (vs. Class 2).

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

AUTHOR(S)	PUBLICATION YEAR	METHOD	STUDY DESIGN	RACIAL/ ETHNIC GROUP	HEALTH OUTCOME(S) ADDRESSED	MASCULINITY MEASURE	HEALTH OUTCOME MEASURE	STUDY RESULT DESCRIPTION
Venegas et. al	2012	Quantitative	Cross-sectional	Hispanic/Latino	Alcohol use	Hypergender Ideology Scale	Daily Drinking Questionnaire (DDQ)-measures the average number of drinks over a time interval during a 90-day period	Hyper-gender ideology was not significantly different between participants engaging in heavy episodic drinking vs. those not engaged in heavy episodic drinking
Wong et. al	2012	Quantitative	Cross-sectional	Hispanic/Latino	Depression	Conformity to Masculine Norms Inventory-46,	Brief Symptom Inventory	Among all men: In Class 1 (labeled risk avoiders), conformity to the masculine norm of risk-taking was negatively related to psychological distress. In Class 2 (labeled detached risk-takers), conformity to the masculine norms of playboy, self-reliance, and risk-taking was positively related to psychological distress, whereas conformity to the masculine norm of violence was negatively related to psychological distress. A post hoc analysis revealed that younger men and Asian American men (compared with Latino and White American men) had significantly greater odds of being in Class 2 versus Class 1. Among Latinos, there was not significantly higher odds of Class 1 vs. Class 2 assignment among Latino American men
Wurzman, et al.	1982	Quantitative	Cross-sectional	Hispanic/Latino; African American	Substance abuse (opiates)	Machismo scale (unspecified)	Self-identified opiate addicts	Statements referring to four of the themes (the importance of the mother, machismo, the obligation of the family, and the need for respect) were found in at least one third of the Puerto Rican addicts' sentence completion protocols. Puerto Rican addicts mentioned these four themes significantly more often than Black and White addicts.
Zamboni et al.	2007	Quantitative	Cross-sectional	African American	Depression (psychiatric symptoms)	Male Gender Role Stress scale (MGRS)	Symptom Checklist-90	Experiences of gay bashing predicted psychiatric symptoms which, in turn, predicted sexual problems, and psychiatric symptoms fully mediated the relationship. The simple bivariate correlation between psychiatric symptoms and male gender role stress was significant. Male gender role stress still predicted sexual problems when psychiatric symptoms covaried. Male gender role stress predicted psychiatric symptoms which, in turn, predicted sexual problems, but psychiatric symptoms only partially mediated the relationship.

APPENDIX B

ASSOCIATION BETWEEN MASCULINITY AND HEALTH OUTCOMES AMONG AFRICAN AMERICAN BMoC

HEALTH OUTCOME	POSITIVE ASSOCIATION ^a	NEGATIVE ASSOCIATION ^b	CONDITIONAL ASSOCIATION ^c	NO ASSOCIATION ^d	TOTAL
Depression	4 (Davidson, 2010; Fragoso et. al, 2000*; Cespedes et. al 2008 (a & b)*)	1 (Cespedes, 2004* (Gender role discrepancy))	1 (Markides et al* (more negative effects for young men than middle aged));	7 (Sawyer, 2015, Lyons et. al, 2006; Daniels, 2011; Lorenzo-Blanco et. al, 2012; Muñoz-Laboy, M. et. al, 2015; Nuñez, A. et al, 2015; Wong et. al, 2012)	13
Substance Abuse	6 (Neff, 1995*, Pleck, 2001; Dolezal, 2000* Kulis, 2012*; Nagoshi, 2012*; Wurzman, 1982)	1 (Kulis, 2010*)	2 (Vaughan, 2014*, Venegas et. al.)	2 (Gordon et. al , 2013; Lorenzo-Blanco 2013)	11
Suicide	1 (Cespedes, 2008a*)			2 (Cespedes, 2004 & 2008b)	3
OVERALL TOTAL	11	2	3	11	11

^a When higher scores of masculinity were associated with higher rates of Depression, suicidality, or substance abuse

^b When higher scores of masculinity were associated with lower rates of Depression, suicidality, or substance abuse

^c When a positive or negative association existed but only under certain conditions (e.g. differences by gender or age subgroup)

^d When masculinity was not associated with Depression, suicidality, or substance abuse

* = Significant association (p<0.05)

APPENDIX C

PSYCHOMETRIC PROPERTIES OF MASCULINITY MEASURES

NAME OF MEASURE	ENTITY OF MASCULINITY MEASURED	NO. OF ITEMS	RONBACH'S α OF MEASURE	SAMPLE ITEM	ASSOCIATED STUDIES AND STUDY-SPECIFIC CRONBACH'S
Gender Role Conflict Scale (O'Neil et al, 1986)	Men's thoughts and feelings about gender role behaviors	37	0.75-0.85	"I worry about failing and how it affects my status as a man"	(Applewhite, 2006; Bingham, Harawa, & Williams, 2013; Brewer, 1998; Frago-so & Kashubeck, 2000; Lilly, 2000; Spearman-Teamer, 2008)
Black Men's Experiences Scale (BMES)	Black men's negative experiences with overt racism and positive evaluations of what it means to be a Black man	12	0.86-0.93	How often have you been fired from a job because you are Black?	(Bowleg et al., 2016)
Masculinity Norms Salience Scale (Hammond & Matti, 2005)	Masculinity meaning among African American men	25	0.62-0.83	, "How important are the following characteristics (e.g., being strong, in control in a relationship, and independent) to your identity as a man?"	(Caldwell, Antonakos, Tsuchiya, Assari, & De Lo-ney, 2013; Hammond, 2012; Powell, Adams, Cole-Lewis, Agyemang, & Upton, 2016)
Attitudes towards Women Scale (AWS; Spence, Helmreich, & Stapp, 1973)	The extent to which individuals hold traditional views of the female role	25	0.66-0.75	"Women should worry less about their rights and more about becoming good wives and mothers"	(Yolanda M Céspedes, 2004; Yolanda Maria Céspedes, 2008; Yolanda M Céspedes & Huey Jr, 2008)
Multiphasic Assessment of Cultural Construct (MACCS-F)-Machismo Scale (Cuéllar, et al, 1995)	Traditional male gender role beliefs	17	0.80	"Wives should respect a man's position"	(Yolanda M Céspedes, 2004; Yolanda Maria Céspedes, 2008; Yolanda M Céspedes & Huey Jr, 2008; Frago-so & Kashubeck, 2000; Lorenzo-Blanco, Unger, Baezconde-Garbanati, Ritt-Olson, & Soto, 2012; Lorenzo-Blanco, Unger, Ritt-Olson, Soto, & Baezconde-Garbanati, 2013; Muñoz-Laboy, Ripkin, Garcia, & Severson, 2015; Nuñez et al., 2015)
Masculine Gender role Stress Scale (Eisler & Skidmore, 1987)	Assesses stressful situations for men	40	0.90	"Telling someone you feel hurt by what they said"	(Zamboni & Crawford, 2007)
Conformity to Masculine Norms Inventory (CMNI: Mahalik et. al 2003)	Adherence to traditional male gender roles	94	0.94	"In general, I must get my way"	(Davidson, 2010; Sawyer, 2015)
Masculine Role Norms Scale (Thompson & Pleck 1986)	Assesses masculine ideology regarding men's expected behavior	25	0.77-0.90	"A man should never admit when others hurt his feelings."	(Gordon et al., 2013)
Gender Roles Questionnaire (Lara-Cantu 1989)	Assesses machismo among Latino men	15	0.81	--	(Dolezal, Carballo-Diéguez, Nieves-Rosa, & Díaz, 2000)
Male Role Norms Inventory (Levant 1992)	Traditional masculinity ideology and beliefs about the importance of adhering to normative male behavior	49	0.75-0.79	"A man should never reveal worries to others"	(Hammond, 2012; Matthews, Hammond, Nuru-Jeter, Cole-Lewis, & Melvin, 2013; Richardson, 2014; Wong, Owen, & Shea, 2012)

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

NAME OF MEASURE	ENTITY OF MASCULINITY MEASURED	NO. OF ITEMS	RONBACH'S α OF MEASURE	SAMPLE ITEM	ASSOCIATED STUDIES AND STUDY-SPECIFIC CRONBACH'S
Hypergender Ideology Scale	A gender neutral measure that allows comparisons of both hypergender men and women and is useful in assessing adherence to tradition gender roles	57	0.87	"Any man who is a man needs to have sex regularly."	(Venegas, Cooper, Naylor, Hanson, & Blow, 2012)
Fatherhood Involvement Scale	Assesses child care and child play involvement in the context of fatherhood	38	--	"Does your child live in the same household"	(Neault et al., 2012)
Male Role Attitudes Scale (MRAS-Pleck, 1993)	Traditional attitudes for male roles	8	0.56	"Men are always ready for sex"	(Pleck & O'Donnell, 2001)
Subjective Masculinity Stress Scale (SMSS; Wong et al., 2013)	To assess the meaning of masculinity among men	10	0.88	"As a man, I must be the breadwinner";	(Richardson, 2014)
Masculinity Across Roles Scale (MARS-Blanzina et. al 2006)	Measures masculinity across various roles and social contexts	5	0.90-0.95	Boys were asked to consider, "How they were as a man" in different roles	(Spearman-Teamer, 2008)
BEM Sex Role Inventory (BSRI-BEM 1974)	Assesses femininity, masculinity, and androgyny	60	0.85	"How desirable is it in American society for a man (woman) to possess each of these characteristics",	(Lyons, Carlson, Thurm, Grant, & Gipson, 2006; Tucker, 2009; Vaughan, Wong, & Middendorf, 2014)
Brannon Masculinity Scale	Self-reported endorsement of masculine norms	110	--	"A man always deserves the respect of his wife and children"	(Brewer, 1998)

APPENDIX D

PSYCHOMETRIC PROPERTIES OF MASCULINITY MEASURES

ORGANIZATION	TITLE OF POLICY REVIEW	YEAR PUBLISHED	BRIEF DESCRIPTION	NUMBER OF RECOMMENDATIONS	POLICY-MAKING PROCESS STAGE	KEY RECOMMENDATIONS
Robert Wood Johnson Foundation	Investing in Boys and Young Men of Color: The Promise and Opportunity	2013	The goal of this report is to review the health needs of middle school and high school-aged young men of color. Of note, this report had a particular interest towards harsh school discipline and promoting educational attainment among young BMoC. This report address recommendations as "opportunity factors" in which policymakers and advocates can leverage to promote health among BMoC.	7	Agenda setting	Promote School Discipline Approaches that Address Behavioral Problems without Pushing Students out of School
						Expand Opportunities for Young Men of Color to Work, Learn, and Develop Career-Enhancing Skills
						Elevate the importance of a "caring adult" in policy and programmatic efforts to re-engage out of school males
						Change the Philosophy and Culture of How Youth Systems Provide Service to Youth Experiencing Violence and Trauma
						Increase Access to Health Care Services for Boys and Young Men of Color
						Increase the Use of Data to Target Interventions to Boys of Color at Risk for Dropping out of School
						Provide Options for Out-of-School Males to Attain a Secondary Credential with Pathways to Postsecondary Education
						Increase the Cultural Competency of Health Professionals and Educators who work with Boy and Young Men of Color
The Henry J. Kaiser Family Foundation	Putting Men's Health Care Disparities on the Map: Examining Racial and Ethnic Disparities at the State Level	2012	This report highlights the rapid growth of diverse BMoC in the United States as rationale for increased attention towards health care disparities in this population. The report takes a state-level approach to assess distinct health, health care, and socio-economic challenges by racial and ethnic minority category. Findings from this report uniquely highlight the health disparities faced by American Indian and Alaska Native men in comparison to other racial and ethnic minority groups.	1	Agenda setting	Leverage provisions of the ACA to promote increased data collection, workforce expansion, and insurance access to BMoC

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

ORGANIZATION	TITLE OF POLICY REVIEW	YEAR PUBLISHED	BRIEF DESCRIPTION	NUMBER OF RECOMMENDATIONS	POLICY-MAKING PROCESS STAGE	KEY RECOMMENDATIONS
The Greenlining Institute	Pathways out of Poverty: Boys and Men of Color and Jobs in the Health Sector	2014	The goal of this report is to examine under-employment and health services of BMoC residing in the state of California. The institute outlines deficits in employment opportunities for BMoC and outlines barriers to health careers and health services use, using a social determinants approach. Recommendations from this report specify sustainable methods to improve pathway opportunities that specifically target BMoC in California.			Create industry buy-in to support linked-learning pathway programs
						Bring the state's statutory language to parity with the Equal Employment Opportunities Commission (EEOC) recommendations.
						Create targeted hiring agreements with local governments and health sector employers
						A meaningful portion of the money raised through the Mental Health Services Act (MHSA) should be spent on BMoC
						Conduct more research on the physical, emotional, and mental health of BMoC in California.
The White House	My Brother's Keeper Initiative	2014	In 2014, the Obama Administration launched the My Brother's Keeper (MBK) Initiative to bring local communities, governments, and organizations together to address challenges faced by young men of color in the United States. Nearly 240 communities across the country have accepted the MBK Community Challenge, committing resources to fill opportunity gaps in the lives of young men. In accepting the challenge, communities were tasked with investigating salient policies impact BMoC within their respective communities. Recommendations arising from this initiative were community-driven and incorporated multiple perspectives from key stakeholder situated within the community.	6	Agenda setting	Getting a Healthy Start and Entering School Ready to Learn
						Reading at Grade Level by Third Grade
						Graduating from High School Ready for College and Career
						Completing Postsecondary Education or Training
						Successfully Entering the Workforce
						Keeping Kids on Track and Giving Them Second Chances
						Successfully Entering the Workforce

APPENDIX E

TABLE 6: DESCRIPTION OF GREY LITERATURE SOURCES (POLICIES)

POLICY NAME	STAGE OF POLICY- MAKING PROCESS STAGE	YEAR IMPLEMENTED	BRIEF OVERVIEW
Work Opportunity Tax Credit	Policy Implementation	2014	A federal tax credit ranging from \$1200 to \$9600 is awarded to employers that hire individuals from target groups including veterans and ex-offenders.
Patient Protection and Affordable Care Act	Policy Implementation	2010	<p>Section 4201 of the ACA creates the Community Transformation Grant program. This grant provides funds at the state and local level for programs that promote individual and community health by supporting projects focusing on chronic disease rates, health disparities, smoking cessation, and physical activity. All projects funded through the program must use evidence-based interventions.</p> <p>Section 5313 of the Affordable Care Act seeks to provide greater access to preventive resources by creating Community Health Workers. As defined in this section, a community health worker is an individual who promotes health or nutrition in the community. This section would provide grants to public or nonprofit entities to educate, guide and provide outreach to medically underserved communities regarding strategies to promote healthy behaviors and discourage risky health behaviors. Grant priority is given to areas that have high rates of uninsurance or underinsurance or high rates of residents with chronic diseases areas that include many rural places in the nation. No funding is authorized for this program.</p> <p>Section 3502 of the Affordable Care Act also establishes a program to support primary care practices in several areas, including patient education and prevention services. This section would provide grants to establish Community Health Teams to support primary care practices within a hospital service area. Grants would go to states or tribes and would require entities receiving grants to 1) submit a plan to ensure the teams are interdisciplinary and involve interprofessional teams of health care providers, and 2) incorporate prevention and patient education into their delivery of health services. Community Health Teams must also integrate their services with community-based prevention and treatment resources. No funding is authorized for this program</p>
Enhancing Access to Community Preventive Services	Policy Implementation	2010	Enhancing Access to Community Preventive Services The Affordable Care Act recognizes the need to enhance access to health education and preventive services in medically underserved communities, which includes many rural areas. Section 4101 allows the Secretary of Health and Human Services to establish a grant program to operate school-based health centers. Preference is given to entities that serve a large population of children eligible for medical assistance. Since rural areas have higher participation rates in Medicaid and the state Children's Health Insurance programs, this would seemingly encourage collaborations among rural school districts to increase chances of receiving grants. For this provision, \$50 million is authorized each year through 2013. (http://files.cfra.org/pdf/prevention-and-public-health.pdf)
National School Lunch Program	Policy Implementation	1999	The child nutrition services program shall participate in the national school lunch program, school breakfast program, and receive commodities donated by the United States Department of Agriculture; and it shall accept responsibility for providing free meals and reduced-price meals to eligible children in the schools. Application forms for free and reduced-price meals, along with any explanatory materials, shall be sent to all students' homes by the school principal during the first week of school. Additional copies shall be made available in the principal's office at each school. The information provided on each application is confidential, and may be used only for the purpose of determining eligibility for free or reduced-price meals. Applications may be submitted at any time during the school year. In certain cases, foster children may also be eligible for these benefits. If a family has foster children living with the family and wishes to apply for meals, the family should be directed to contact the school principal.
Safe and Drug Free Schools and Communities	Policy Implementation	1994	The purpose of this part is to support programs that prevent violence in and around schools; that prevent the illegal use of alcohol, tobacco, and drugs; that involve parents and communities; and that are coordinated with related Federal, State, school, and community efforts and resources to foster a safe and drug-free learning environment that supports student academic achievement, through the provision of Federal assistance to States for grants to local educational agencies and consortia of such agencies to establish, operate, and improve local programs of school drug and violence prevention and early intervention; States for grants to, and contracts with, community-based organizations and public and private entities for programs of drug and violence prevention and early intervention, including community-wide drug and violence prevention planning and organizing activities; States for development, training, technical assistance, and coordination activities; and public and private entities to provide technical assistance; conduct training, demonstrations, and evaluation; and to provide supplementary services and community-wide drug and violence prevention planning and organizing activities for the prevention of drug use and violence among students and youth.

Masculinities Matter: The Role of Masculinities in Depression, Suicide, and Substance Abuse
Among African American, Hispanic/Latino, and Alaska Native/American Indian Boys and Men

POLICY NAME	STAGE OF POLICY- MAKING PROCESS STAGE	YEAR IMPLEMENTED	BRIEF OVERVIEW
Race to the Top Program	Policy and program evaluation	2010	The Race to the Top program is authorized under sections 14005 and 14006 of the American Recovery and Reinvestment Act of 2009 (ARRA). Race to the Top is a competitive grant program to encourage and reward States that are implementing significant reforms in the four education areas described in the ARRA: enhancing standards and assessments, improving the collection and use of data, increasing teacher effectiveness and achieving equity in teacher distribution, and turning around struggling schools. The U.S. Department of Education (Department) will make awards in two phases, with Phase 1 funding awarded in spring 2010 and Phase 2 funding awarded by September 30, 2010.

RISE is a joint initiative co-led by Equal Measure and
Penn GSE Center for the Study of Race and Equity in Education.

RESearch **I**NTegration **S**TRATEGIES **E**VALUATION

RISE for Boys and Men of Color

www.risebmoc.org