IMPLEMENTATION PILOT PROJECT
FINAL EVALUATION REPORT

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HEALTHY HERITAGE MOVEMENT, INC.
BROKEN CRAYONS STILL COLOR PROJECT

HEALTHY
HERITAGE

Priority Population – African American

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Executive Summary

Background

Within the United States, the stigma associated with mental illness is highest among the African Americans (AA) community. African Americans are less likely than other groups to acknowledge the seriousness of a mental illness (Hamm, 2014). The ongoing disparities and perpetuated stigma among mental illness in the AA community has decreased the likelihood that AA's will actively reach out for treatment or counseling. The risk of being misdiagnosed or underdiagnosed due to a lack of culture and representation in health care is much higher for AA females (Alim et al., 2006). Facilitating and enhancing discussions regarding mental health issues is key to reducing stigma and increasing treatment for better mental health.

Low levels of trust of the medical community, socioeconomic disadvantages, stigma, and a lack of diverse professionals contribute to the undertreated mental health issues among the African American community (Boulware, Cooper, LaVeist, Powe, & Ratner, 2003). Additionally, misunderstanding of culture and background, and a lack of AA practitioners have prevented help-seeking behavior in the community. This leaves AA females, our target population, to suffer with mental health issues such as depression, post-traumatic stress disorder, anxiety and substance abuse, leading to long-term mental health impediments.

Outreach

The Broken Crayons Still Color Project (BCSCP) is focused on increasing the knowledge of core mental health issues, reducing disparities and stigma associated with mental health among AA women in the Inland Empire. The National Alliance on Mental Health (2018), suggests that within the AA community, family and spiritual beliefs are considered key supports and are used as primary treatment and coping methods. With this understanding, the collaboration between evidence-based programs and faith-based congregations can lead to a better understanding and education regarding awareness, resources, and stigma of mental health (NAMI, 2009).

The churches that partnered with BCSCP engaged in congregation-aimed education and outreach and the development of a mental health resource guide to help improve awareness of mental health resources. Three AA churches in Riverside County and two AA churches in San Bernardino County were selected to participate in the BCSCP. The churches have active health ministries or have community engaged congregations, allowing them to become a vessel for the connection of mental health prevention and early intervention activities among congregation members. The BCSCP curriculum was customized from the *Too Broken to be Fixed? A Spiritual Guide to Inner Healing* book by clinical psychologist, Dr. Gloria Morrow.

Goals and Evaluation Questions

One of the main goals of the BCSCP was to create a safe and welcoming environment where AA women could learn coping methods and experience self-healing processes. The BCSCP curriculum explores the stigma found within faith-based communities related to mental health illness, among other topics aimed to increase knowledge of mental health illness. Furthermore, the curriculum addresses the distrust of the health care system, lack of utilization of traditional mental health resources, and the development of healthy coping skills. The program also creates a space to guide active conversation in communities around mental health awareness.

Methods: Survey and Participants

A mixed method, non-experimental single group pre- and posttest design was utilized between January 2018 and April 2021. Thirty (30) churches were surveyed across the Riverside and San Bernardino County region. From this initial survey, five churches were selected. The five churches implemented nine, 8-week interventions of 2 ½ hours being held on weekday evenings or Saturday mornings. In October 2020 due to the COVID-19 pandemic, programs were transferred to a fully virtual program through the *Zoom* remote platform. Participants included AA adult females ages 18 and older.

For the duration of the program there were 205 program participants and 140 study participants, with 105 matched pairs. One hundred forty participants completed the pre-test; 105 completed the post-test. While evaluation attrition equaled 35 participants, the remaining 105 allowed for a matched pre-posttest sample, with no comparison group. Participants self-selected to the program allowing for higher attendance rates and engagement. Participants were consented and were required to sign a printed consent form or electronically acknowledge their consent using the remote platform.

Quantitative & Qualitative

Qualitative data were collected using a pre- and post- survey, a satisfaction survey, and weekly attendance rosters. The pre-survey (68 questions) was given at week 1 and the post-survey (64 questions) was given at week 8. Surveys are comprised of demographic, multiple choice, and Likert-style questions. The satisfaction surveys were given to program participants each week of the program. Attendance was captured by the program staff using attendance rosters and sign-in sheets. Nine programs were implemented during the data collection period. Focus groups for program 5 and program 7 were selected for transcription in advance of the facilitated discussions. The focus groups were used to collect beliefs and attitudes related to mental health issues. Common responses and most noticeable themes were noted.

Overview of Findings

The BCSCP had a completion rate of 75%, with 140 participants. The average age of participants was 54.8 years, with an age range of 20 to 93 years. Roughly eighty-five percent of the participants (85.1%) had some college education or higher; 44.3% reported their marital status as married or living together; household size ranged from one to 11 persons; and 47.7% reported a household income at or below $44,999.

There were six evaluation questions in this study. Findings for each question are listed below:

1. **What are the challenges with obtaining & maintaining church member participation in the program?** One in 5 program participants failed to complete the 8-week program. The highest attendance rate (86.5%) occurred during week 1 of the program and the lowest attendance rate (60.3%) occurred during week 7 of the program.
2. **Do participants show an increased knowledge of core mental health issues (depression, anxiety, substance abuse, and PTSD)?** By week 8 of the program, participants showed a statistically significant increase in knowledge of core mental health issues when answering questions that focused on definitions of terms.
3. **Is there improved comfortability in discussing mental illness and stigma?** A majority (52.2%) of focus group participants reported a positive change in comfortability in discussing mental illness and stigma during focus group discussions.
4. **Did participants report a decrease in perceived stigma associated with mental health illness and treatment?** There was a statistically significant decrease in respondents' self-reported perceptions of stigma associated with mental health illness and treatment. Additionally, focus group data showed participants most frequently stated their beliefs had positively changed.
5. **How do the Mind Your Health Advocates (MYHAs) impact the church and the broader community?** The Mind Your Health Advocates (MYHA) research question remained unanswered due to the program's inability to launch this component.
6. **Do participants and church community show increased awareness of mental health services and resources?** There was a significant increase in respondents' self-reported awareness of mental health services and resources.

Limitations

First, the absence of a comparison group makes it difficult to understand the cause of any

changes. Additionally, the study used a purposive sampling method, allowing for subjective and non-probability sampling, limiting representativeness and generalizability. This method increases the potential for selection bias and researcher bias, as the sample was created based on only five AA churches. Another limitation may be information bias as a result of the survey administrator's presence at data collection. Additionally, the length of the surveys could have contributed to survey fatigue.

Research Implications

This study evaluated outcomes of a faith-based mental health intervention program. This intervention was tailored to its target audience and included a culturally competent facilitator who shared the participants racial/ethnic identity. This study suggests that an intervention designed to be culturally competent can decrease perceived stigma among AA women in Riverside and San Bernardino Counties in a faith-based setting. Long term follow-up of participants would be an important way to measure the long-term impact of the program.

Introduction

Mental Illness Among African American Females

Mental illness is a condition that alters an individual's thoughts, feelings, and behaviors that may lead to depression, anxiety and other related core issues affecting the ability to function with others (Centers for Disease Control and Prevention [CDC], 2018). Improving knowledge of core mental health issues such as depression, post-traumatic stress disorder (PTSD), anxiety and substance abuse is critical in order to reduce the stigma associated with mental illness and increase the possibility of seeking professional help or treatment for better mental health.

Depression was found in 7.6% of the American population aged 12 and over in U.S. households from 2009-2012, and that is equivalent to about 30 million people suffering from depression (CDC, 2014). Research from a study published by the CDC (2010), suggest that 4% of women suffer from major depression. Likewise, African American women experience higher rates of depression (4%) than Whites (3.1%). Additionally, African American females receive lower rates of treatment and continue to remain the most undertreated group for depression in the United States of America (Hamm, 2014).

PTSD risk among African Americans is much higher than among Whites. This is associated with African Americans experiencing higher risk of child maltreatment and witnessing domestic violence (Roberts et al., 2011). Researchers also found that the data from the 2005 National Epidemiological Survey on Alcohol and Related Conditions (NESARC), showed that the rates of PTSD among African Americans were double the rates found among Whites due to traumatic events experienced (Roberts et al., 2011). African American women have historically been misdiagnosed or underdiagnosed with PTSD, most likely due to the lack of cultural understanding and the lack of adequate health professionals to meet the specific concerns of this population (Alim et al., 2006).

Anxiety is the most common mental illness in the United States, affecting 18.1% of the

population annually (Anxiety and Depression Association of America, 2016). Demographic information regarding anxiety disorder prevalence also showed that the combination of being a female and having lack of cost-effective resources puts females at greater risk for anxiety (National Institute of Mental Health, 2017).

Substance abuse occurs when there is recurring use or misuse of alcohol, tobacco, cannabis, stimulants, hallucinogens, and opioids, that lead to impairment and being unable to meet everyday responsibilities (Substance Abuse and Mental Health Services Administration [SAMHSA], 2015). Research has also shown that the abuse of alcohol consumption among African-American women between 40 to 49 years old had the highest prevalence in 2003. As for the use of illicit drugs, data from the Health and Human Services (2008) showed that 18 percent of substance-related admissions to hospitals/clinics were from African American women. Research suggests that the current rate of illicit substance abuse among African American is at a rate of 6.2%, one half percent greater than the national average at 5.7% (Stevens-Watkins et al., 2012).

The Stigma of Mental Illness

The stigma associated with mental illness is highest among the African American community, which is less likely than other groups to acknowledge the seriousness of a mental illness, due to labeling that has been known to be associated with mental illness, such as being called “crazy” (Hamm, 2014). The National Alliance on Medical Illness (2018a), states that African Americans are often socioeconomically disadvantaged when seeking mental health care. In a period of one year, the results from the National Survey on Drug Use and Health: Mental Health (2013) findings suggest that only 7.6% of African American females obtained treatment for depression in comparison to the general population at nearly 14%. The topic of mental illness, and the overall sensitivity around mental health, makes treatment and help-seeking challenging. As a result, mental illnesses are often undertreated because of the stigma associated with seeking help or treatment, including the titling, and

perceptions regarding what it means to have a mental illness. Stigma attached to mental illnesses and the lack of knowledge can result in many women suffering in silence, self-medicating, and in many cases, can lead to suicidal thoughts or suicide (National Alliance on Mental Illness, 2018b).

Research on African Americans has been limited due to lack of participation or involvement in science and medicine that arose from the historical perspective of unethical research (Scharff et al., 2010). One reason identified is due to exploitation and unethical treatment in past research, including the infamous Tuskegee Syphilis Study. Low levels of trust of the medical community, stigma, and a lack of diverse professionals are several known factors related to this problem (Boulware et al., 2003). The National Alliance on Mental Illness (2018a) suggests the cultural biases behind the low number of practicing African American health professionals and mental health professionals discourages African Americans from seeking care. Contributing factors to not seeking care include: misunderstanding of culture, inadequate knowledge of background, and the lack of African American practitioners.

Help-Seeking

A few studies have been able to effectively determine reasons why African American women do or do not have adequate access to mental health resources or why they do or do not seek mental health services and/or treatment. Some African American women view mental illness as an impairing stigma and as a result, refuse to seek treatment or simply ignore the problem (DHHS, 2001). Other reasons for not seeking treatment include low socioeconomic status, lack of health insurance, and the race/ethnicity of therapists. For many, using mental health services might not even be considered an option for betterment because of the presence of stigma associated with mental illness (Akabar et al., 2004).

Faith and spirituality are very important and can be a part of a great support system but should not be used as sole treatment for mental illness (Simon, 2018). According to the research available, religion is the preferred coping method for mental health illnesses among African Americans (Ward et

al., 2009). The National Alliance on Mental Health (2018), states that among the African American community, family and spiritual beliefs tend to be a good support system and tend to be used as a treatment, instead of seeking medical or professional help to overcome mental health concerns. Psychologist Angela Neal-Barnett (2003), strongly believes that religious institutions can influence an individual's thoughts. An individuals' thoughts can change when the idea of having a safe place and finding someone who understands the issue is available; this in turn can help reduce the shame an individual may feel in asking for help (Neal-Barnett, 2003). Simon (2018) argues that institutions like churches might not have the tools necessary to help address mental health concerns among its' congregation and can have a negative impact on mental illness help seeking behaviors. African American women are more likely to experience a mental illness like anxiety and use the Bible as a reference to their sanity (Simon, 2018). The use of churches with an evidence-based program can be beneficial and can help increase awareness, resources, and decrease stigma on mental health issues (NAMI, 2009).

CDEP Purpose and Description

CDEP Purpose, Description & Implementation

The focus of the Broken Crayons Still Color Project (*BCSCP*) is to reduce mental health disparities and stigma among African-American (AA) women in Riverside and San Bernardino counties, a region referred to as the Inland Empire. The project includes the development of mental health ministries in the participating AA churches in the Inland Empire. The participating churches engage in congregation-focused education and outreach, the development of a mental health resource guide, the implementation of an 8-week mental health intervention, and community outreach and advocacy.

BCSCP was implemented in five AA churches, three in Riverside County and two in San Bernardino County. The selected AA churches maintain active health ministries or have community engaged congregations. African-American churches remain the community hub for AA social connectedness. The church is a vehicle by which to deliver messages related to mental health and wellness and to improve mental health outcomes and social community services (Stanton-Tindall et al., 2013). According to recent research, there is a large percentage of AA women affiliated with faith-based congregations, which supports the selection of this targeted population (Labbé-DeBose, 2012).

The BCSCP project provides a continuum of culturally responsive faith-based mental health prevention, early intervention, and education developed and facilitated by AA women. The individuals delivering the *BCSCP* intervention are trained facilitators, with academic backgrounds in marriage and family therapy, social work, or clinical counseling, including professional counseling experience with mental illness and treatment. No additional services were provided outside of the BCSCP 8-week program during the data collection period.

Participants of the BCSCP 8-week intervention include AA adult women ages 18 and older.

The participants are residents of the Riverside or San Bernardino Counties, referred to as the Inland Empire region of Southern California. Women of faith are the specific subpopulation targeted. The intervention aims include increasing participant knowledge of core mental health issues affecting the AA community and reducing stigma associated with seeking mental health treatment. The BCSCP intervention utilizes a curriculum adapted and customized from the *Too Broken to be Fixed? A Spiritual Guide to Inner Healing* book by clinical psychologist, Dr. Gloria Morrow. The two program facilitators include Dr. Gloria Morrow and Dr. Candace Walters, both licensed clinical psychologists. The facilitators were selected based on their professional expertise and cultural relevance to the target audience; they are both AA women of faith. The book utilizes a multidisciplinary method drawing from personal experiences, spiritual guidance, and psychology. The participants learn coping methods and experience self-healing processes that can be used to help themselves and others. The program atmosphere creates a safe space for AA women to discuss their personal, family, cultural, social, sexual, emotional, and gender issues, which have been found to be associated with mental health risks.

The cultural values represented in the program are illustrated in the acknowledgment of the historical significance of the AA church and the community trust established. As a result of historical denial to participate in civil society functions and opportunities, African-American churches historically have provided a forum for individual and community participation (Tomlinson, 2011). The church offers AAs a place to develop positive self-identity and self-esteem and to rest from racism and discrimination (Thomas et al., 1994). Tomlinson (2011) emphasizes the crucial role AA churches play in AA communities by offering financial support, leading political advocacy, and participating in community building. Current research suggests churches are noted as a trusted source for information for AAs (Harmon et al., 2014). Delivering the BCSCP project within the AA church is a targeted strategy of utilizing cultural knowledge in the CDEP implementation.

The problems the BCSCP project addresses include the stigma found within faith-based

communities related to mental health illness. The issue of AA women suffering silently from mental health challenges is also addressed. Additionally, the project addresses distrust of the health care system, lack of utilization of traditional mental health resources, knowledge of mental health illness, and the development of healthy coping skills. In Riverside County, approximately 82% of AA women denied the need for mental health or alcohol related services (CHIS, 2015). The *2016 Community Health Needs Assessment* conducted by the City of Hope ranked mental health access for minorities as number two on the list of six for significant health needs. These findings, in conjunction with *We Ain't Crazy: African American Population Report* (Woods et al., 2012) and *California Reducing Disparities Project (CRDP) Statewide Strategic Plan* (2014) highlight the need for increasing awareness of mental illness in the AA community.

The expected outcomes for the faith-based communities of Riverside and San Bernardino are to increase the knowledge of core mental health issues, decrease the stigma associated with mental illness, and raise awareness of the availability of mental health services and resources. These outcomes can facilitate dialogue in the communities around mental health as a way to improve comfortability and reduce fear and stigma.

Evaluation Questions

To evaluate the BCSCP, there were 6 research questions included in the evaluation plan. These six questions were not refined or modified after the submission of the final evaluation plan. Please see the questions listed and described below.

Evaluation Question		Process/Outcome Indicators	Measurement/Instrument Items
1	What are the challenges with obtaining & maintaining church member participation in the program?	**Process:** Number of participants across sites and across sessions. Review of program recruitment methods and strategies. Review of effectiveness of incentives. Review of overall and differential attrition.	Document review of attendance rosters, SWG sessions, and satisfaction surveys.
2	Do participants show an increased knowledge of core mental health issues (depression, anxiety, substance abuse, and PTSD)?	**Outcome**: Improved scores on BCSCP survey questions measuring knowledge.	Likert Scale Questions: ▪ 8 Knowledge Questions.
3	Is there improved comfortability in discussing mental illness and stigma?	**Outcome**: Positive discussion producing salient points about participant understanding of mental illness and interaction with others in family and social circles that experience mental illness.	The Soul Circle (focus group) script with 4 focus group questions used to facilitate discussion. The Picturing Mental Health (photo voice) activity to promote group dialogue through scripted discussion prompts.
4	Did participants report a decrease in perceived stigma associated with mental health illness and treatment?	**Outcome**: Improved scores on the BCSCP survey and SWE core measures questions measuring stigma.	The Soul Circle (focus group) script with 4 focus group questions used developed to facilitate discussion. The Picturing Mental Health (photo voice) activity to promote group dialogue through scripted discussion prompts. Measurement of positive/negative feelings towards seeking mental health treatment.
5	How do the Mind Your Health Advocates	**Process & Outcome**: Responses to surveys inquiring about church and community member awareness of	BCSCP Church Survey administered following the completion of the two programs at the church site. Survey

	(MYHAs) impact the church and the broader community?	MYHA role.	included in church bulletin.
6	Do participants and church community show increased awareness of mental health services and resources?	**Outcome:** Improved scores on BCSCP questions measuring awareness of resources. Responses to surveys inquiring about church and community member awareness of mental health resources and services.	The BCSCP with seeking help for mental illness Likert Scale Questions: ▪ 8 Questions total. Measurement of cultural barriers to accessing mental health services BCSCP church survey.

Method

CDEP Implementation and Design

The Broken Crayons Still Color Project (BCSCP) used a mixed method, non-experimental single group pre- and posttest design. The BCSCP was implemented between January 2018 and April 2021. The BCSCP included a number of program activities with primary focus on the 8-week prevention and intervention program. Nine 8-week programs were implemented in five churches across the southern California counties of Riverside and San Bernardino. Each program refers to an unduplicated cohort. Each week during the program, participants came together for 2 ½ hours to engage in facilitated discussion led by a licensed clinical psychologist.

Program Modifications

The BCSCP was implemented with a few modifications to the original program plan and content which included:

1. The first scheduled program, initially scheduled for September 2017, fell outside of the CDEP-wide IRB approval by the Committee for the Protection of Human Subjects with the California Health and Human Services Agency. This resulted in a delay in the official CDEP start date from September 2017 to January 2018.
2. Recruitment and retention protocol was not followed directly as described in the CDEP. Upcoming programs were to be marketed by the church leadership. This was to include messaging from the church pulpit and announcements in the weekly bulletin.
3. Program 9, slated for April 2020, was canceled due to the COVID-19 pandemic. The program was rescheduled for October 2020 and implemented as a fully virtual program using the Zoom platform.

Program Participants

As a result of Healthy Heritage Movement's relationship with southern California

churches and church leadership, the CDEP was successful in reaching the priority population of AA females attending five churches in Riverside and San Bernardino counties. Churches were selected from a comprehensive list of 30 churches; fourteen churches were surveyed to determine if they met study criteria. Of the 14 churches surveyed, the six churches selected had an established partnership with the grantee, Healthy Heritage Movement. Although six churches were selected, the BCSCP was implemented in five churches due to COIVD-19 pandemic disruptions. These churches provided participants that would be representative of the CDEP participant universe. Fifty-one percent (51%) of the members of the CDEP universe were also study participants.

Between January 2018 and April 2021, there were 205 program participants, with 164 participants completing a pretest or posttest. One hundred forty (140) participants were included as a member of the study target population. A majority of participants (91.4%) were African American females 18 years of age and older. The median age of participants was 54 years and 83.5% had some college education or higher.

As demonstrated by the weekly attendance data, 49 participants did not complete the program, as measured by their attendance during the last weekly session. The attrition may have been associated with the length and duration of the program. Eight weeks may be a challenging commitment for program participants. Programs took place on weekday evenings or Saturdays. On weekday evenings many were coming from work. Lack of childcare was also a barrier for participation. Weekly sessions lasted 2 ½ hours, and often times lasted beyond the scheduled time frame.

Evaluation Study Participants and Recruitment

Study Target Population

The target audience was reached by partnering with African American churches throughout

Riverside and San Bernardino counties. Additional outreached was performed by leveraging access to potential participants through church health ministries, women's ministries, bible studies, church announcements, community festivals and events, health expos, and other events.

Participants in the study were members or regular attenders of five churches in Riverside or San Bernardino counties. To be eligible for inclusion, participants were required to be female, 18 years and older, and African American. Program recruitment elements included outreach to church leaders, advertisement of upcoming program sessions in weekly church bulletins, and church leadership offering messages of program support to their congregations. In most instances, recruitment for each program took place a few weeks before the program was scheduled at each church location. However, there were circumstances where recruitment efforts were delayed resulting in a smaller number of program participants.

Between January 2018 and April 2021, there were 140 study participants completing a pretest or posttest. All study participants were African American females 18 years of age and older. The median age of participants was 54.8 years and 85.1% had some college education or higher. There were 105 matched pairs with 140 completing pretests and 105 completing posttests. See Table 1 for the breakdown of demographic data across each program.

Sampling Strategy

For the purpose of the CDEP there were two sampling methods employed. First, a purposive sampling method was used to allow for the sampling of individuals who represented the difficult to reach target population. In this case, the sampling began with conducting a survey of 30 churches across the Riverside and San Bernardino County region.

The church leadership completed a survey providing information on demographic characteristics of the church membership and attendance. The information retrieved during this initial survey assisted in identifying the six selected churches. The sample population was derived from this

purposive method to ensure the information such as income, church location, percent of AA females, and age were considered, as a way to obtain a representative subset of the AA faith community. Program participants self-selected into the program, which may have improved attendance and overall attrition.

Sample Size

Based upon a priori analysis, to answer the study research questions at a moderate effect size, an alpha level of .05, and a power level of 80%, the minimum required sample size was 34 participants. To prepare for attrition, the program staff aimed for a sample size of 41 participants to ensure the study is sufficiently powered. The sample of 105 pre and post matched pairs was greater than the necessary sample size, therefore the minimum required sample size was met. Table 1. Includes sample size details for each of the nine programs.

Human Subjects

Research protocol was submitted to the Office of Human Research Protections with the California Health and Human Services Agency. The request for study determination was approved in October 2017.

The participants in this program were consented prior to their participation in any of the program elements and prior to the collection of participant data. The consent process included active written consent, whereby each participant had an opportunity to review information on the study purpose, details, and expectations. The consent instructions were read aloud by the program facilitator during the beginning of the first session of the 8-week program. Following the consent review, participants were required to sign the consent form, acknowledging the information provided. During the virtual program format, this consenting method was still applied; however, participants signed the consent form electronically using a link to the documentation in Qualtrics.

Measures and Data Collection Procedures

Quantitative Data

Data for this research was collected using a pre and post survey, satisfaction survey, and weekly attendance roster. Each survey was self-administered during the relevant program session. Pretest survey was given during the first week of each 8-week program, while the posttest survey was given to participants during the final week of each 8-week program. The pre (68 questions) and post (64 questions) surveys are comprised of demographic, multiple choice, and Likert style questions. Pre and post surveys included state mandated and program specific measures for knowledge, perceived stigma and mental health care access. Pre-COVID baseline and follow-up surveys were paper and pencil-based collected by members of the evaluation team for data entry. Post-COVID, pre and posttest surveys were distributed using a link to the online version of the survey using Qualtrics. For programs 2 through 8, baseline and follow-up surveys were self-administered in person during the first hour during week 1 and week 8 of the program. Programs 9 and 10 were implemented during the COVID pandemic and were conducted fully online with all data being collected using Qualtrics on their computers, cellphones, or other electronic devices. There were no incentives, financial or otherwise, offered for completion of the evaluation.

The satisfaction surveys were given to program participants each week of the program and reported out in aggregate. Weekly attendance was captured by the program staff using attendance rosters and sign-in sheets. These data were used to measure program attrition.

Qualitative Data

Qualitative data were collected during facilitated focus group and photo voice exercises conducted during week 5 of each program. The focus groups for program 5 and program 7 were selected for transcription in advance of the facilitated discussions. These churches were selected as representative the church samples for Riverside and San Bernardino counties. The goal of the focus group exercise was to elicit salient beliefs and attitudes related to stigma associated with mental

health issues. The goal of the photo voice exercise was to learn how photographs taken by participants reflect salient issues related to mental health and stigma.

Focus Groups

The focus groups for program 5 and program 7 were selected in advance for transcription. The sessions were audio recorded and a professional transcriptionist transcribed each session verbatim. Of the six churches, the churches that correspond with program 5 and program 7 were selected as representative of the church samples for Riverside and San Bernardino Counties. A total of nine focus groups were conducted (although only program 5 and program 7 were transcribed and analyzed).

Trained focus group moderators utilized a moderator's script during each focus group to provide continuity in administration between each group. Four questions were included in the focus group discussion. The moderator asked the questions one at a time with five minutes allotted for each question. When necessary, the moderator utilized scripted prompts to solicit additional discussion or to keep the conversation on track. The duration of the focus groups ranged between 21 and 49 minutes. A total of 142 participants were included in the nine focus groups.

Photo Voice

Photo voice exercises were initiated as a homework assignment during week 4 of the program. Participants were asked to look in their community for images that make them think of the stigma associated with discussing mental health and seeking mental health care. Participants were asked to do the following in advance of week 5 of the program:

1. Use your camera to take 3 -5 photos of images in your community that you feel reflect the issue of stigma. Please do not photograph humans.
2. Choose the one photo you consider the most significant

3. Write a brief reflection/summary where you describe or narrate what the (one most significant) photograph means to you. Please bring your written summary to class for the next class.
4. Print the photo and bring it to the next class.

Trained moderators utilized a moderator's script during each photo voice exercise to provide continuity in administration between each group. The photo voice exercises were not recorded or transcribed. First, participants were prompted one at a time to show their photograph and either read their written summary or explain, rather than read verbatim, the story behind the photograph. Second, participants were asked to identify common mental health stigma themes they heard throughout the sharing time.

The duration of the photo voice exercises ranged between 11 and 36 minutes. One hundred forty-two participants were included in the nine photo voice exercises. Photos and summaries were collected from each participant who completed the exercise. The photos and summaries were archived. Photo voice data were challenging to collect among this population due to factors such as lack of access to cameras, lack of printing resources, and inability to follow the exercise instructions step-by-step. As a result, these data were incomplete and therefore analyses could not be performed.

Fidelity and Flexibility

Each weekly program session was observed by a member of the evaluation team. Observational assessments included completion of an open-ended measure to document program components and changes across session content, intervention duration, delivery method, number of weekly sessions, length and order of sessions, materials used, the target population, and location of program. The results of the assessments were summarized using a fidelity tool. Protocols and measurement tools were utilized to document:

- Adherence: Following each weekly session, facilitators completed a session fidelity tool. The session observation and fidelity tool were used to measure any changes made to the program's implementation.
- Exposure/Dosage: Each participant's attendance was tracked and monitored for the duration of the 8-week program. This was used to measure frequency of program exposure as well as attrition.
- Quality of Delivery: Participant satisfaction surveys were administered at the end of each weekly session.
- Participant Responsiveness: This was measured as participant engagement during the session observations conducted by the evaluation team.
- Program Differentiation: Evaluators conducted session observations between weeks 2 and 7 of the 8-week program. These sessions were assessed using an instrument designed to capture the alignment of session activities with intervention goals/objectives.

Statistical Analyses

Quantitative Data

There were 6 research questions in this study. The first research question was answered using attendance and satisfaction data. Research questions 2, 4, and 6 were answered using paired/dependent samples t-tests to explore statistical differences between baseline and follow-up assessments.

Data used to answer research question 2 included knowledge pre and post scores produced from Likert type questions. The knowledge scores were generated for two sections: the first knowledge section included four questions measured using a scale ranging from 0-Completely false to 4-Completely True. The four questions were summed producing a score ranging from 0 to 16. The second knowledge section included 4 questions measured along a Likert scale ranging from 0-Strongly

Disagree to 4-Strongly Agree. The four questions were summed producing a score ranging from 0 to 16. A paired/dependent samples t-test was performed to explore the statistical differences between baseline and follow-up knowledge scores.

Research question 4 was answered using mental healthcare access (MHA) pre and post scores produced from Likert type questions. The MHA scores included eight questions measured using a scale ranging from 0-Strongly Disagree to 4-Strongly Agree. The summed score produced ranged from 0 to 32. A paired/dependent samples t-test was performed to explore the statistical differences between baseline and follow-up MHA scores.

Research question 5 remained unanswered due to the program's inability to launch the Mind Your Health Advocates (MYHA), an important program component.

Research question 6 was answered using perceived stigma pre and post scores produced from Likert type questions. The perceived stigma scores included six questions measured using a scale ranging from 0-Definitely Unwilling to 4-Defintely Willing. The summed score produced ranged from 0 to 24. A paired/dependent samples t-test was performed to explore the statistical differences between baseline and follow-up perceived stigma scores.

Descriptive statistics were performed on all data variables for pretests, posttests, and satisfaction surveys. This assisted in identifying data entry errors and outliers, and to describe program participants. Normality assumptions were met as demonstrated by the shape of the distribution, examination of skewness and kurtosis, as well as outcomes of Kolmogorov-Smirnov (KS) and Levene's tests.

Qualitative Data

Research question 3 was answered using the theming of focus group discussions. Two analysts reviewed the focus group transcripts. Each time a participant responded to the focus group prompt, the response was categorized as either *addressing the prompt* or *not addressing the prompt*. Common

themes were noted for each question and the number of responses within each theme were counted. The most frequently mentioned responses were identified as salient for each question. Counts were combined for both program 5 and program 7. The salient beliefs of the two programs (23 participants) were considered representative of the church samples for Riverside and San Bernardino Counties. Responses that were mentioned three or more times were considered salient.

Additionally, a photo voice exercise was utilized to provide an additional qualitative method of exploring participant beliefs regarding stigma. Participants were asked to photograph images in the community that they feel reflected mental health stigma. The activity was conducted with a guided dialogue and resulted in rich discussions that allowed for further exploration of the salient group beliefs about stigma. Although participant's photographs and written summaries were collected and archived for future program use, they were not included in the qualitative analysis.

Results

Major Findings

Between January 2018 and May 2021, there were nine (9) programs implemented and 205 program participants enrolled in the Broken Crayons Still Color Project. Of the participants, 140 completed the baseline survey and 105 completed the follow-up survey. This resulted in 105 matched pairs; a completion rate of 75%.

There were 140 African American (AA) participants in this study, with 105 completing the pretest measures and posttest measure. The demographic characteristics of the participants can be found in Table 1. During the pretest participants provided demographic information by answering six questions. An age range of 20 to 93 years. In the intervention (N =140) participants classified themselves as Black or African American. Additionally, most participants reported their marital status as married or living together (44.3%), followed by divorced or separated (26.4%). When asked to state their level of education most participants (84.0%) reported completing some college or more. The number of persons per household ranged from one to eleven, with a median of three persons per household. Of the participants sampled, 47.7% reported a household income at or below $44,999.

Evaluation Question 1: *What are the challenges with obtaining & maintaining church member participation in the program?*

As demonstrated by program attendance data, average weekly attendance hovered at 69.8%, with the highest attendance rate (86.5%) during week 1 of the program and the lowest attendance rate (60.3%) during week 7 of the program. Program attrition was measured by absence during final session held during week 8. The average overall attrition rate was 23.2%. The following factors were noted regarding program participation: 1) Participants often arrived late to program sessions or started the program during week 2, resulting in missed pretest surveys. 2) absence did not disenroll participants, therefore participants could miss program content and

data collection and still participate. 3) When participants missed week 8, they did not participate in posttest survey data collection. 4) The eight-week commitment may have been a challenge for participants. 5) The weekday evenings may have been a challenge for participants as many were arriving directly from work. 6) A lack of childcare may have been a barrier to program attendance. 7) The length of the program sessions may have been a barrier to program attendance as weekly sessions lasted 2 and a half hours and often extended beyond the scheduled time.

Evaluation Question 2: *Do participants show an increased knowledge of core mental health issues (depression, anxiety, substance abuse, and PTSD)?*

To answer this question, two sets of knowledge-based question sets were assessed for changes between pretest and posttest scores. For the first set of knowledge-based questions, the results from the pretest (M=11.02, SD=2.61) and posttest (M=10.54, SD=2.56) indicate that there was no significant increase in knowledge of core mental health issues ($t(94)=-1.645$), $p=.103$, n=95). For the second set of knowledge-based questions, there was a significant increase in knowledge of core mental health issues ($t(97)=3.648$), $p=.000$, n=98) at posttest (M=12.51, SD=2.36) compared to pretest (M=11.47, SD=2.57).

Evaluation Question 3: *Is there improved comfortability in discussing mental illness and stigma?*

Focus group data were utilized to answer this question. One hundred forty-two (142) participants were included in the focus groups. Twenty-three (23) participants were included in the two focus groups that were recorded, transcribed, and analyzed. To provide a foundation for the focus group discussion, participants were first asked a question to both gauge their understanding and create a group definition of the word *stigma*.

When prompted to provide a definition of *stigma,* focus group participants most frequently mentioned a stereotype (6 times) or a negative idea (4 times). Participants addressed the prompt using

the following statements:

- "I would relate it, I would say it's more like a stereotype, something like that along the same lines of a belief that may not be true."
- "Well to me stigma is, well what I read but it's like a, a negative um idea about a group of people. Whether that idea is true or not true about that group."
- "I believe stigma is how we classify people and set them in certain groups according to how I . . . we feel regarding that race or creed or gender or whatever."

Additionally, when asked how their level of comfort with discussing mental illness and stigma has changed, participants most frequently (12 times) noted their level of comfort changed since beginning the program. No participants stated that their level of comfort did not change. Participants stated the following regarding their change in comfortability:

- "Um it seems for me I've gotten more open with it now. I can um talk more openly about it to whoever."
- ". . . I think my growth has been more awareness um awareness and like my sister here more empowerment to be bold enough to approach people with um the subject of mental illness and phobias. It's been awesome."
- "I'm more comfortable now because I can speak what's uh on my mind to a person that listens . . .".

A summary of the results of the focus group data is provided in Table 2.

Evaluation Question 4: *Did participants report a decrease in perceived stigma associated with mental health illness and treatment?*

There was a statistically significant decrease in respondents' self-reported perceptions of stigma associated with mental health illness and treatment ($t(96)=-3.689$), $p=.000$, n=97) at

posttest (M=18.10, SD=4.69) compared to pretest (M=16.65, SD=3.67).

Additionally, focus group data were used to assess a change in participant beliefs related to seeking help for mental health issues. When asked how their beliefs have changed about seeking help for mental health issues since taking part in the program, participants most frequently stated their beliefs had changed (10 times). Although a majority of participants indicated their beliefs changed, three participants indicated their beliefs had not changed. The following are statements participants made regarding their change or lack of change in beliefs:

- "I think I have changed my mind as far as where the mental health needs to be, I , I think that it mental health should be one of our priorities because if we're okay mentally then that it's gonna flow in, in your health, um and I think that definitely this class has really, really helped me to, to learn about certain priorities."
- "This has helped, this class has helped me to have more empathy for people that you come in contact who may have a problem and you can't, a lot of times you can't solve their problems but after taking this class, I know where to send them now."
- "So for me, my beliefs haven't changed but I think they've been clarified."

A link between help-seeking and perceived stigma has been found consistently throughout the literature (Masuda et al., 2012; Schomerus & Angermeyer, 2008). To further explore a decrease in perceived stigma, participants were asked to describe the role stigma plays in help-seeking behaviors.

When asked what role does stigma play in help-seeking behaviors, participants most frequently stated that stigma hinders help-seeking (8 times), stigma has a negative implication towards help-seeking (5 times), and stigma creates or fosters fear (4 times). Participants made the following statements regarding the role of stigma in seeking help for mental health issues:

- "Some of them just scared to go period cause they, they don't want people to think that they are crazy or look at them as being crazy. So if I be honest and say I think I need a counselor or

I think I need a therapist, first thing somebody gone say oh she crazy cause she gotta go see a therapist or a counselor. So that's one of the reasons why they may not even wanna go at all."

- "It sounds like it's more of a negative thing um for me to not to get myself involved with it because everybody's gonna label you as such and such. You're this or you're that or you're the other."
- "It would definitely be a barrier um because it is, it has a negative you know implication so it would be a barrier to seeking help."

Evaluation Question 5: *How do the Mind Your Health Advocates (MYHAs) impact the church and the broader community?*

This evaluation question remained unanswered due to lack of timely implementation of this element and the required training components. According to the program workplan, the MYHA component was to begin at the start of the overall program implementation in 2017, and to wrap up in 2021. The MYHA pieces were never fully implemented during the proposed timeline. The COVID-19 pandemic certainly impacted the ability to move forward the MYHA components during the 2020 and 2021 year; however, based upon the program's written plan, the MYHA components should have begun before the pandemic. At this time, two MYHA trainings are planned to be held before the end of the 2021 calendar year, using BCSCP graduates. Future MYHA community activities are planned in partnership with California Department of Public Health, Riverside Behavioral Health, and other community-based agencies.

Evaluation Question 6: *Do participants and church community show increased awareness of mental health services and resources?*

There was a significant increase in respondents' self-reported awareness of mental health services and resources (t(94)=-7.736), p=.000, n=95) at posttest (M=24.25, SD=3.32) compared

to pretest (M=21.16, SD=3.61).

Program Fidelity

Over the course of the 4-year implementation period (2018-2021), there have been several instances where programmatic changes were implemented. According to Durlak (1998) and Botvin et al (1995), most changes are adaptations or innovations. At times, adaptations to the BCSCP were implemented to enhance program success and better align with participant needs. However, there were also instances where changes were implemented due to needs by program facilitators or program staff. For instance, there were occasions where material from two or more weeks was condensed into one week. In other instances, access to program materials, including presentation slides and textbooks, were delayed.

Overall, adherence to program elements as planned and described, as well as the amount of content received by participants are areas of fidelity that were impacted by programmatic changes. The table below highlights the major instances in which unplanned program changes were implemented. These changes may have impacted participant knowledge of concepts by reducing the duration and exposure to program information or techniques.

Future recommendations include better adherence to program services as written. This includes particular focus on program recruitment and retention strategies. Consistent application of planned elements may improve participation attendance and reduce attrition. Ensuring that program implementors understand the core program components and dosage that are necessary for success is a serious challenge to program developers and disseminators (Mihalic, 2002).

Program	Implemented Change	Program Impact
Church Program #2	Modules 2-4 were combined into one session.	The combination meant rushing through content and failing to provide the detailed homework instructions to prepare participants for the focus group and photo voice activities.
Church Program #3	During “Panel Week” a guest speaker that differed from previous “Panel Week” presenters led the discussion for the week 7 session.	No major impact was identified.
Church Program #4	Session 3 was cancelled and session 4 was combined with session 3 and done entirely remote via Skype.	Content was abridged from two sessions to one session reducing the ability to thoroughly cover program content.
Church Program #6	PowerPoint slides were not made available for participants during the first 2 sessions, as is typically provided.	No major impact was identified.
Church Program #9	Due to the COVID-19 pandemic, all program sessions were conducted virtually via Zoom	No major impact was identified.

Discussion

Major Findings

The purpose of the Broken Crayons Still Color Project was to reduce mental health disparities and stigma among African American women in Riverside and San Bernardino counties through congregation focused outreach and the implementation of an 8-week mental health intervention. Implemented in five churches, the BCSCP evaluation aimed to provide African American females in the Inland Empire region of southern California with culturally responsive and linguistically appropriate mental health prevention and early intervention education. To explore the efficacy of the BCSCP five evaluation questions were answered. Discussion of the findings can be found below.

Program Participation Challenges

Evaluation Question 1: *What are the challenges with obtaining & maintaining church member participation in the program?*

More than two-thirds of program participants attended each weekly session. One in 5 program participants failed to complete the 8-week program. Although there is no documented standard for attrition outside of academic education programming, 30 percent weekly absence and 20 percent pretest to posttest attrition can be negatively impactful on evaluation findings. When applying matched-pair designs such as this, missing data resulting from attrition is not uncommon (Fukumoto, 2015; Ruel et al., 2016).

The COVID-19 pandemic led to a pause in spring and fall 2020 program implementation followed by a change in the program and evaluation implementation strategies during the 2021 year. When comparing attendance and attrition across each of the nine programs, the peaks and valleys in the rate of matched-pair attrition did not appear to change as a result of the pandemic. However, there were deductions in program attendance did appear with average missed sessions doubling from 3 between the years 2018-2019 and reaching 6 for the two programs implemented

during the 2021 year. The fluctuation and movement of these measures also appeared to be related to the volatility in recruitment and retention practices.

To better assess the impact of attrition on this study population's change from baseline or its representativeness, capturing more detailed demographic data at posttest would been supportive. This would allow for better determination of the potential impact of attrition on outcome measures (Ruel et al., 2016).

Knowledge of core mental health issues

Evaluation Question 2: *Do participants show an increased knowledge of core mental health issues (depression, anxiety, substance abuse, and PTSD)?*

The first set of knowledge-based questions focused on addressing knowledge by understanding differences between facts and myths. There was no significant increase in knowledge of core mental health issues. This is not surprising, given the ongoing challenge with knowledge and beliefs about causes of mental health disorders (Jorm, 2000). Mental health literacy is important; and good mental health literacy can lead to better outcomes by early identification of mental health concerns or facilitating help seeking (Kelly et al., 2007). The types of questions may have contributed to the absence of change from pretest to posttest; however, there were notable responses. For instance, at pretest 52.6% responded in agreement that there were enough trained mental health professionals. This changed to 34.8% at posttest. Additionally, at pretest 12.6% responded in agreement with the statement *mental illness is curable*, while at posttest this was nearly cut in half to 7.1%. Although not significant, these subtle changes are promising. One area of concern is the fact that there was no change from pretest to posttest in the respondents' agreement with the statement, *mental illness is only passed down in families,* (76.6% and 73.7%, respectively).

The second set of knowledge-based questions focused on the actual definitions of terms, which

at baseline may have been unfamiliar to participants, as demonstrated by pretest sum scores. However, at posttest, knowledge was improved. At pretest, the average correct responses to the four knowledge questions were 68.5%. At posttest, these scores improved to 80%.

Comfortability in discussing mental illness

Evaluation Question 3: *Is there improved comfortability in discussing mental illness and stigma?*

Focus group participants demonstrated their understanding of terms used when discussing stigma and mental health by accurately defining *stigma* and providing examples of what *stigma* means. This exhibition of knowledge created a foundation at the beginning of the focus groups and ensured participants were ready to address the focus group prompts, all of which required a solid understanding of stigma.

A majority (52.2%) of focus group participants reported a change in comfortability in discussing mental illness and stigma during focus group discussions. Of the participants who responded to the prompt, 12 noted a change in their level of comfort since beginning the BCSCP program. There were no participants who responded that they experienced no change in level of comfort. Of those that reported a change in their level of comfort, the change experienced was one of improved comfortability in discussing mental illness and stigma.

Perceived stigma of mental health illness

Evaluation Question 4: *Did participants report a decrease in perceived stigma associated with mental health illness and treatment?*

There was a significant decrease in respondents' self-reported perceptions of stigma associated with mental health illness and treatment. Based upon participants' self-report, it is evident that after the intervention, the program participants were more willing to socialize, live, and work with someone who has a mental health illness. During the intervention there was quite a bit of discussion about mental illness and what mental illness looks like in the community. What's

noteworthy about this change is the drop in participants who report being *unwilling* to engage at various levels with those experiencing mental illness. For instance, those who report being *unwilling* dropped from an average of 12.2% at pretest to 5.6% at posttest, with the greatest change in unwillingness to live next door to someone with a mental illness (19.1% and 7.1%, respectively). Additionally, self-reported unwillingness to have someone with mental illness marry into one's family dropped nearly in half, from 21.2% at pretest to 11.0% at posttest. This change speaks volumes to the role that mental health education interventions play in destigmatizing mental illness.

Focus group data supports the quantitative findings related to decrease in perceived stigma and their beliefs towards seeking help. Of the participants who responded to the prompt, 10 noted that their beliefs toward seeking help had changed since beginning the BCSCP program. There were three participants that indicated their belief had not changed. Of those that reported a change in their beliefs toward seeking help, the change experienced was one of being more open to seeking help for mental health issues. Further, for those that reported no change in attitudes towards seeking help, their beliefs were already positive, and therefore remained as such. Focus groups participants also acknowledged that stigma can hinder help seeking, has negative implication towards help seeking, and creates or fosters fear. This finding acknowledges that participants recognize the importance of decreasing stigma to foster greater use of mental health treatment.

According to the literature, African American females view mental illness as an impairing stigma and thus they may refuse to seek treatment or simply ignore the problem (DHHS, 2001). Other reasons for not seeking treatment include low socioeconomic status, lack of health insurance, and the race/ethnicity of the therapist. Using mental health services might not even be a consideration due to the presence of stigma associated with mental illness (Akabar et al., 2004).

Literature suggests when growing up and going to an African American church, women wouldn't refer to anxiety by its medical term, but would call it a case of "nerves" or "bad nerves."

Mental illness often goes untreated in African American women because they have been taught that asking for help is a sign of weakness. Nearly 90 percent (87.1%) reported seeking help in the past year for an emotional or substance abuse problem. Among program participants that reported no longer seeking treatment, 54.4% thought they could handle the problem on their own. Nonetheless, self-treating has been seen to do more harm than good, because when women take matters into their own hands the outcomes may not always be beneficial or positive (Neal-Barnett, 2003).

The National Alliance on Mental Health (2018) argues that among the African American community, family and spiritual beliefs tend to be a good support system and tend to be used as a treatment instead of seeking medical or professional help to overcome mental health concerns. Ward et al. (2013) found that African Americans do see the need for treatment when there is a problem related to mental health; they just do not see the need for outside treatment or help. This is supported by BCSCP participant survey responses where about 23 percent reported they had seen a therapist/counselor/psychologist in the past 12 months. About 18 percent also reported seeing a religious/spiritual leader during the past 12 months.

Religious institutions can influence an individual's thoughts. An individual's thoughts can change when the idea of having a safe place and finding someone who understands the issue is available, and this in return can help the individual feel no shame when asking for help from fellow church members (Neal-Barnett, 2003). The church and pastoral support can influence a person's decision to seek mental health care. This particularly important in the Black church, where congregants are more likely lean on the church for support before seeking professional help (Black et al., 2002; Taylor et al., 2000; Allen, et al., 2010).

Awareness of mental health services and resources

Evaluation Question 6: *Do participants and church community show increased awareness of mental health services and resources?*

There was a significant increase in respondents' self-reported awareness of mental health services and resources. At pretest, 60.3% reported being confident in knowing where to seek information about mental illness, while 90.8% reporting the same at posttest. Though this increase is promising, awareness and/or knowledge does not necessarily translate to action or the intention to act (Ajzen, 2006). At pretest, only 1 in 5 reported feeling that mental health professionals understood their cultural experience and background. At posttest, this changed to 1 in 4. This change could have been associated with the experience of working directly with African American psychologists when participating in the BCSCP intervention. During focus group discussions, many participants reported that being able to speak with someone that looked like them and shared their life experience was important to them. For example, one focus group participant, when prompted to discuss stigma, stated, "And a lot of times even if you are at that point where you want to seek help if you're not seeking it from someone um that looks like you or that has gone through what you've been through, you, you're, you're definitely not gonna go cause like she said what good is it. You know they don't understand my plate. How can they know." Nearly 33 percent (32.8%) responded that they would only seek care from a mental health professional that shared their cultural experience and background. At posttest, this increased slightly to 37.3%.

Stigma around seeking care for mental health concerns remains prevalent. Among participants, at pretest 65.5% reported that if they had a mental illness they would not tell anyone. This increased to 78.8% at posttest. Nearly 83 percent (82.5%) reported that seeing a mental health professional means "you are not strong enough" to manage one's own difficulties. This response

remained relatively stable at posttest (79%). At pretest, 82.2% reported that if they had a mental illness they would not seek help from a mental health professional. At posttest, 96% of participants reported the same. Mental health services are largely underutilized by African Americans women, despite this population having a higher risk of persistence and disability from mental health disorders compared to their white counterparts (Perry et al., 2013). Existing literature noted that among African American women, stigma is a major barrier in seeking mental health services (Woods-Giscombe et al., 2016; Ward et al., 2013). Furthermore, stigma about mental health disorders can result in treatment avoidance and delay seeking mental health services (Ward et al., 2009).

Limitations

This study has several notable limitations. First, this study employed a one-group pre-test/post-test quasi-experimental design. This design is methodologically a weaker design as it lacks a comparison group (Shadish et al., 2002). Changes observed among the participants may have been natural changes in knowledge that could be seen in the general population. Absence of a comparison group makes it difficult to discern the true cause or contributions to the changes and differences between pretest and posttest measures.

Additionally, the study used a purposive sampling method. Typically, this method can be considered a good way to focus on a population, but there remain limitations (Fitzpatrick et al., 2011). The limitations associated with purposive sampling method includes the subjective and non-probability nature of the sample, limiting representativeness and generalizability. Additionally, this method increases the potential for selection bias and researcher bias, as the sample was created based upon the researcher's interpretation of the initial church survey results. The intervention was not offered to every church-based organization in Riverside and San Bernardino Counties, and only five African American churches were selected to participate in the intervention. Therefore, the results of this study cannot be generalized to the overall population within these two counties.

Another limitation may have been the manner in which the survey was administered. The survey administrators were present at the time surveys were disseminated, which may have resulted in self-reporting bias. Because the intervention took place in a church setting, participants may have felt pressure to answer the self-administered survey in a way that they interpreted as their clergy or their fellow church goers' would have desired. Additionally, the survey was relatively lengthy, with average participant consenting and survey completion reaching 60 minutes. This may have resulted in survey fatigue.

Research Implications

This study evaluated outcomes of a faith-based mental health intervention program. Literature reveals that faith and religion frequently play a significant role in the beliefs, practices, experiences, and daily activities among African American communities (Debnam et al, 2011). In addition, the use of informal support (such as family, friends, and ministries) for mental disorders is common among African Americans (Chatters et al., 2011). This intervention was tailored to its target audience and included a culturally competent facilitator who shared the racial/ethnic identity of its program participants. This component was particularly important in establishing comfortability and ensuring cultural and linguistic appropriateness of the program.

This study indicates that an intervention designed to be culturally competent can decrease perceived stigma among African American women in Riverside and San Bernardino Counties in a faith-based setting. However, stigma is pervasive and continues to permeate the perceptions of the participants. Long term follow-up of participants would be an important way to measure the long term impact of the program.

African American clergy have a long tradition of providing care for community members who encounter emotional distress (Williams et al., 2014). Introducing public and behavioral health practices to such clergy members can help build a strong foundation to create competent and effective

interventions designed to increase mental health service use among African Americans. To reverse the historical mistrust and cultural incompetence in healthcare experienced by African Americans, interventions that are acceptable and appropriate must be developed for the target population (Debnam et al, 2011). It will take collaborative efforts from clinicians, public health, and faith-based entities to educate the African American community about mental health and decrease disparities in mental health outcomes.

Literature has shown that many factors play a role in mental health among African Americans. More specifically, mental health issues are rooted in factors such as racism, poverty, culture, and discrimination. One sole factor contributing towards stigmatizing help-seeking behaviors has not been identified (Sareen at al., 2007). Continued capacity development in community and faith-based organizations to do this important work in needed. If nothing else, this community defined evidence practice (CDEP) highlighted the need for these community led programs and resources and highlighted the success of such a program. Investing in programs such as these should happen on a much greater scale and for the long-term. These changes can begin by leveraging funding at the state and federal level to support this work as well as training more culturally competent professionals in an effort to avoid stigmatizing patients and ensuring that there is equal treatment regardless of color, socioeconomic status, or any other barrier that plays a role in help-seeking (Noonan et al., 2011).

Conclusion

The purpose of this research was to evaluate the Broken Crayons Still Color Project, a congregation centered outreach program with a focus on prevention and early intervention. Initially, there were six evaluation questions to be answered, but due to program delays and the COVID-19 pandemic, an important program component was not launched resulting in the inability to answer one of the six questions. To describe the impact of the BCSCP, five program evaluation questions were answered.

First, there were a few challenges with participant attendance and attrition, with weekly attendance reaching an average of 75%. Next, knowledge of core mental health issues was found to increase in some instances but remained unchanged in others. Among program participants there was improved comfortability in discussing mental illness and stigma as well as a decrease in perceived stigma associated with mental health illness and treatment. Lastly, participants also showed an increase in awareness of mental health services and resources.

There are a number of important implications gleaned from this program and its evaluation. Culturally competent programming led by a facilitator who shares the racial/ethnic identity of its program participants is encouraging and can support the success community-based mental health interventions. This cultural component was particularly important in establishing comfortability and ensuring cultural and linguistic appropriateness of the program.

Interventions designed to be culturally competent can decrease perceived stigma among African American women in a faith-based setting. Although there were positive gains reported in the reduction of stigma towards mental health, stigma remains pervasive and problematic in the African American church community. The church is a critical and promising forum for this

important work and funding should be leveraged to better support and invest in long-term engagement from the faith-based community.

References

Ajzen, I. (2006). Behavioral interventions based on the theory of planned behavior. Retrieved from http://people.umass.edu/aizen/pdf/tpb.intervention.pdf

Akbar, M., Bazile, A., & Thompson-Sanders, VL. (2004). African Americans' perceptions of psychotherapy and psychotherapists. *Professional Psychology: Research and Practice*. Retrieved April 27, 2018, from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.515.2135&rep=rep1&type=pdf

Alim, T. N., Graves, E., Mellman, T. A., Aigbogun, N., Gray, E., Lawson, W., & Charney, D. S. (2006). Trauma exposure, posttraumatic stress disorder and depression in an African-American primary care population. *Journal of the National Medical Association*, 98(10), 1630–1636.

Allen, A.J., Davey, M.P., Davey, A. (2010). Being examples to the flock: The role of church leaders and African American families seeking mental health care services. *Contemporary Family Therapy, 32, 117-134.*

Anxiety and Depression Association of America. (2016). Facts and statistics: Anxiety. Retrieved February 12, 2018, from https://adaa.org/about-adaa/press-room/facts-statistics

Blank, M.B., Mahmood, M., Fox, J.C., & Guterbock, T. (2002). Alternative mental health services: The role of the black church in the south. *American Journal of Public Health*, 92, 1668-1672. https://doi.org/10.2105/AJPH.92.10.1668

Botvin, G.J., Baker, E., Dusenbury, L., Botvin, E.M., & Diaz, T. (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *Journal of the American Medical Association*, 273, 1106-1112.

Boulware, L. E., Cooper, L. A., Ratner, L. E., LaVeist, T. A., & Powe, N. R. (2003). Race and trust in the health care system. *Public Health Reports*, *118*(4), 358–365.

California Health Interview Survey. (2015). Ask CHIS. UCLA Center for Health Policy Research.

https://healthpolicy.ucla.edu/chis/Pages/default.aspx

Centers for Disease Control and Prevention. (2010). Current depression among adults—United States, 2006 and 2008. Retrieved February 11, 2018, from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5938a2.htm

Centers for Disease Control and Prevention. (2014). Depression in the U.S. household population, 2009-2012. Retrieved February 11, 2018 ,from https://www.cdc.gov/nchs/data/databriefs/db172.htm

Centers for Disease Control and Prevention. (2018). Learn about mental health. Retrieved February 10, 2018, from https://www.cdc.gov/mentalhealth/learn/index.htm

Chatters, L. M., Mattis, J. S., Woodward, A. T., Taylor, R. J., Neighbors, H. W., & Grayman, N. A. (2011). Use of ministers for a serious personal problem among African Americans: Findings from the national survey of American life. *The American Journal of Orthopsychiatry*, 81(1), 118–127. https://doi.org/10.1111/j.1939-0025.2010.01079.x

Debnam, K., Holt, C. L., Clark, E. M., Roth, D. L., & Southward, P. (2011). Relationship between religious social support and general social support with health behaviors in a national sample of African Americans. *Journal of Behavioral Medicine*, 35(2), 179-189. doi:10.1007/s10865-011-9338-4

Department of Health and Human Services. (2001). Mental health: Culture, race, and ethnicity. Retrieved August 9, 2018, from https://www.ncbi.nlm.nih.gov/books/NBK44243/pdf/Bookshelf_NBK44243.pdf

Durlak, J.A. (1998). Why program implementation is important. *Journal of Prevention & Intervention in the Community,* 17(2), 5-18.

Fitzpatrick, J.L., Sanders, J.R., & Worthen, B.R. (2011). Program evaluation: Alternative approaches and practical guidelines, 4th Ed. *Pearson.* Boston

Fukumoto, K. (2015). Missing data under the matched-pair design. 32nd Annual summer meeting of society for political methodology. http://www.sas.rochester.edu/psc/polmeth/papers/Fuku mot o_2015_Polmeth.pdf

Hamm, N. (2014, September 25). *High Rates of Depression Among African-American Women, Low Rates of Treatment*. Huffington Post. Retrieved from https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/ref erence_list_other_print_sources.html.

Harmon, B.E., Kim, S., Blake, C.E., Hebert, J.R. (2014). Health care information in African American churches. J*ournal of Health Care for the Poor and Underserved.* 25(1):242-56. doi:10.1353/hpu.2004.0047

Kelly, C.M., Jorm, A.F., Wright, A (2007). Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *The Medical Journal of Australia.* https://onlinelibrary.wiley.com/doi/abs/10.5694/j.1326-5377.2007.tb01332.x

Labbé-DeBose, T. (2012). Black women are among country's most religious groups. The Washington Post. Retrieved from https://www.washingtonpost.com/local/black-women-are-among-countrys-most-religious-groups/2012/07/06/gJQA0BksSW_story.html

Jorm, A. (2000). Mental health literacy: Public knowledge and beliefs about mental disorders. *British Journal of Psychiatry, 177*(5), 396-401. doi:10.1192/bjp.177.5.396

Masuda, A., Anderson, P.L., & Edmonds, J. (2012). Help-Seeking Attitudes, Mental Health Stigma, and Self-Concealment Among African American College Students. *Journal of Black Studies, 43(7), 773-786.*

Mihalic, S. (2002). The importance of implementation fidelity. University of Colorado at Boulder. *Center for the Study and Prevention of Violence*. https://www.incredibleyears.com/wp-

content/uploads/fidelity-importance.pdf

National Alliance on Mental Illness. (2018a). African American mental health. Retrieved February 12, 2018 from https://www.nami.org/Find-Support/Diverse-Communities/African-Americans

National Alliance on Mental Illness. (2018b). Personal stories: Suffering in silence. Retrieved February 10, 2018, from https://www.nami.org/Personal-Stories/Suffering-in-Silence#

National Institute of Mental Health. (2017). Any anxiety disorder. Retrieved February 12, 2018, from https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder.shtml

National Survey on Drug Use and Health. (2013). Need for and receipt of substance use treatment among Blacks. Retrieved February 12, 2018, from https://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf

Neal-Barnett, A. M. (2003). Sooth your nerves: The Black woman's guide to understanding and overcoming anxiety, panic, and fear. New York: Simon & Schuster.

Noonan, A., Velasco, H.E., Primm, A., Dobson, S.K., Amen-Ra, N., & Gomez, M., et al. (2011). Access to effective behavioral health services for insured minority populations: What works? Retrieved August 6, 2018 from http://com.tu.edu/_resources/docs/curriculum/MORGAN-FullReport-FINAL.pdf

Perry, B. L., Harp, K. L., & Oser, C. B. (2013). Racial and gender discrimination in the stress process: Implications for African American women's health and well-being. *Sociological Perspectives :SP: Official Publication of the Pacific Sociological Association*, 56(1), 25–48.

Roberts, A. L., Gilman, S. E., Breslau, J., Breslau, N., & Koenen, K. C. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine*, *41*(1), 71–83. http://doi.org/10.1017/S0033291710000401

Ruel, E., Wagner, W.E., & Gillespie, B.J. (2016). The practice of survey research: Theory and applications. Sage Publishers, Los Angeles.

Sareen, J., Belik, S., Clara, I., Cox, B., Graaf, R., Have, M., Jagdeo, A. & Stein, M. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. Retrieved August 6, 2018, from https://ps.psychiatryonline.org/doi/abs/10.1176/ps.2007.58.3.357

Scharff, D. P., Mathews, K. J., Jackson, P., Hoffsuemmer, J., Martin, E., & Edwards, D. (2010). More than Tuskegee: understanding mistrust about research participation. *Journal of Health Care for the Poor and Underserved*, *21*(3), 879–897. Retrieved July 20, 2018, from http://doi.org/10.1353/hpu.0.0323

Schomerus, G., Angermeyer, M. (2008). Stigma and its impact on help-seeking for mental disorders: What do we know? *Epidemiologia E Psichiatria Sociale, 17*(1), 31-37. doi:10.1017/S1121189X00002669

Shadish, W.R., Cook, T.D., & Campbell, D.T. (2002). Experimental and quasi-experimental designs for generalized causal inference, 2nd Ed. *Cengage*.

Simon, M. D. (2018). A look at how anxiety affects African-Americans. Retrieved February 12, 2018, from https://www.nbcnews.com/news/nbcblk/look-how-anxiety-affects-african-americansn83915 1

Staton-Tindall, M., Duvall, J., Stevens-Watkins, D., & Oser, C. B. (2013). The roles of spirituality in the relationship between traumatic life events, mental health, and drug use among African American women. *Substance Use and Misuse*, *48*(12), 1–21.

Stevens-Watkins, D., Perry, B., Harp, K. L., & Oser, C. B. (2012). Racism and illicit drug use among African American women: The protective effects of ethnic identity, affirmation, and behavior. *The Journal of Black Psychology*, *38*(4), 471–496. http://doi.org/10.1177/0095798

412438395

Substance Abuse and Mental Health Services Administration. (2015). Substance use disorders. Retrieved February 12, 2018, from https://www.samhsa.gov/disorders/substance-use

Taylor, R.J., Ellison, C.G., Chatters, L.M., Levin, J.S. & Lincoln, K.D. (2000). The Role of Clergy in Black Churches seeking mental health care services. *Social Work*, 45(1), 73-87. https://doi.org/10.1093/sw/45.1.73

Thomas, S. B., Quinn, S. C., Billingsley, A., & Caldwell, C. H. (1994). The characteristics of northern Black churches with community health outreach programs. *American Journal of Public Health, 84*(4), 575–579. https://doi.org/10.2105/AJPH.84.4.575

Tomlinson, S. (2011). Evidence to support church-based health promotion programmes for African Canadians at risk for cardiovascular disease. *Journal of immigrant and minority health / Center for Minority Public Health.* DOI 10.1007/s1090-011-9502-5

United States Department of Health and Human Services. (2001). Mental health: Culture, race, and ethnicity: A supplement to mental health: A report of the Surgeon General. Retrieved April 27, 2018, from http://amongourkin.org/2001%20mental%20health.pdf

Ward, E., Clark, L., & Heidrich, S. (2009). African American women's beliefs, coping behaviors, and barriers to seeking mental health services. *Qualitative Health Research*. Retrieved April 27, 2018, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2854663/

Ward, E. C., Wiltshire, J. C., Detry, M. A., & Brown, R. L. (2013). African American men and women's attitude toward mental illness, perceptions of stigma, and preferred coping behaviors. *Nursing Research,* 62(3), 185-94. doi:10.1097/NNR.0b013e31827bf53

Williams L, Gorman R, Hankerson S. (2014). Implementing a Mental Health Ministry Committee in Faith-Based Organizations: The Promoting Emotional Wellness and Spirituality Program. *Social Work in Health Care.* 2014;53(4):414–434. doi:

10.1080/00981389.2014.880391.

Woods, D.V., King, N.J., Hanna, S.M., & Murray, C. (2012). CRDP African American Population Report – "We ain't crazy! Just coping with a crazy system" Pathways into the Black populations for eliminating mental health disparities. *California Department of Mental Health*. https://lhc.ca.gov/sites/lhc.ca.gov/files/Reports/225/ReportsSubmitted/CRDPAfricanAmericanPopulationReport.pdf

Woods-Giscombe, C., Robinson, M. N., Carthon, D., Devane-Johnson, S., & Corbie-Smith, G. (2016). Superwoman schema, stigma, spirituality, and culturally sensitive providers: Factors influencing African American women's use of mental health services. *Journal of Best Practices in Health Professions Diversity: Education, Research & Policy,* 9(1), 1124–1144

Appendices

Table 1.

Demographic Details for Program Participants (n = 140)

		n	*Paired*	*%*	*M*	*SD*
Gender						
	Female	140	105	75.0		
Program Participants						
	Program 2	18	14	77.7		
	Program 3	12	11	91.2		
	Program 4	6	4	66.7		
	Program 5	6	4	66.7		
	Program 6	22	11	50.0		
	Program 7	18	16	88.9		
	Program 8	22	13	59.1		
	Program 9	23	19	82.6		
	Program 10	13	13	100		
Education						
	9-11th grade	2		2.1		
	High School graduate or GED	18		12.8		
	Some College or AA Degree	63		47.5		
	College Graduate or Above	50		37.6		
Ethnicity						
	Black or African American	148		100		
Marital Status						
	Married or Living Together	67		45.3		
	Widowed	12		8.1		
	Divorced or Separated	37		25.0		
	Never Married	32		21.6		
# of Persons in Household					3.2	2.03
Age					54.8	15.14
Household Income						
	$0 - $44,999	61		47.7		
	Not in U.S. Federal Poverty	67		52.3		

Note: due to missing data totals may not equal sample size.
n = sample size; % = percentage; *M* = mean; and SD = standard deviation.

Table 2.

Salient beliefs regarding what stigma is, the role of stigma in help seeking, and changes in help seeking attitudes and comfortability with discussing mental health issues.

Focus Group Question	Salient Responses	Frequency
Q1. What is Stigma?	A stereotype	6
	A negative idea	5
	Stigma hinders help-seeking	8
Q2. What role does stigma play in seeking help or not seeking help for mental health issues?	Stigma has a negative implication towards help-seeking	5
	Stigma creates or fosters fear	4
Q3. How have your beliefs changed about seeking help for mental health issues?	Beliefs did not change	3
	Beliefs changed	10
Q4. How has your comfortability with discussing mental illness and stigma changed?	Level of comfort did not change	0
	Level of comfort changed	12

Table 3.

Outcome Measures Data Table

Measure name	Modified Y/N	Pre Mean **score**	**Pre score** SD	Pre N	Post Mean **score**	**Post score** SD	Post N	Correlation between Pre and Post Mean scores (r)	Cohort	Age group (child/adol/adult)
Knowledge1 Construct	N	11.02	2.617	95	10.53	2.563	95	.387	2-10	Adult
Knowledge2 Construct	N	11.47	2.57	98	12.51	2.36	98	.361	2-10	Adult
Perceived Stigma Construct	N	16.64	3.67	97	18.10	4.69	97	.594	2-10	Adult
MH Services Awareness Construct	N	21.16	3.61	95	24.25	3.32	95	.375	2-10	Adult