

mHealth for Mental Health: Culturally-tailored Interventions for Managing Anxiety and Depression in African American Adults

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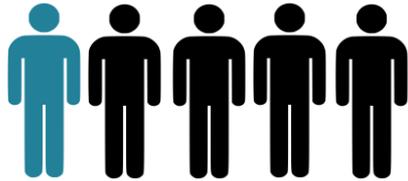


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Work Experience



Mental health, anxiety, and depression in the U.S.



In 2017, an estimated 46.6 million adults in the U.S. experienced mental illness in the past year¹

Approximately 1 in 5!

26.7 million U.S. adults who have mental illness did not receive mental health services in the last year¹

Anxiety

- 19.1% of adults had an anxiety disorder in the past year²
- 31.2% experienced an anxiety disorder in their lifetime²
- 9.3% of non-Hispanic Black adults reported having received a diagnosis of anxiety in their lifetime³

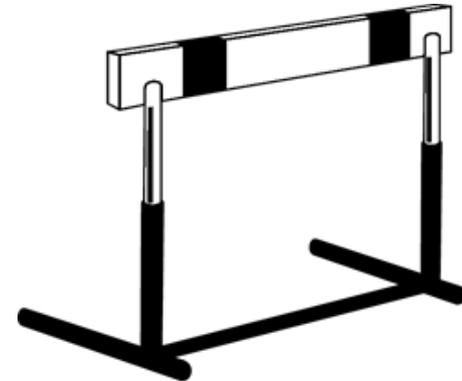
Depression

- 16.1% of adults reported receiving a diagnosis of depression in their lifetime³
- 6.8% of adults currently suffer from depression³
 - Prevalence of current depression was 9.7% for African Americans



Barriers to Receiving Care^{5,6}

- Higher levels of stigma in the Black community
- Less access to treatment
- No or inadequate health insurance coverage
- Mistrust of providers
- Low health literacy



Sources: ⁵Thompson-Sanders et al, 2004;
⁶NAMI, 2018



mHealth

“The delivery of healthcare services via mobile communication devices”

-Foundation for the National Institutes of Health (FNIH)



Telemental health

- Evidence from previous studies showed that telehealth interventions for anxiety⁷⁻¹⁴ and depression^{8,10-21} are effective
 - Most of the studies were conducted with predominantly white sample
- Intersection of race, mental health, and the use of technology to provide services is complex
 - ↑ access ↓ disparity → improve mental health outcomes



Systematic Review

Survey peer-reviewed literature for studies that used telehealth interventions, specifically tailored for African American adults, to reduce anxiety or depression, and determine their effectiveness



Results & Discussion

- Only 3 studies found
- Results showed significant reduction of depressive symptoms post-intervention (all $p < .05$)
 - Telehealth intervention satisfaction and retention was high among participants ($> 75\%$)
 - Effectiveness of telehealth intervention compared to face-to-face was not determined
- Findings are consistent with literature on the use of telehealth interventions to manage depression in other populations
- Many studies published on anxiety and depression among African Americans
 - **Study of the effects of using telehealth for treatment of anxiety or depression in this population has lagged behind compared to whites**



Discussion *continued*

Concerns and Considerations

- Privacy, confidentiality, and connectivity for successful implementation
- Cost issues for the patients, providers, and clinics
- Screening to determine if use of telehealth modality is appropriate for treatment
- Patients' ethnicity, language, and gender preferences for their provider
- Cultural factors that influence help-seeking behavior (e.g., familial support)
- Clinician bias



Conclusion

- Great potential to use telehealth to deliver mental health services to African American adults
- 75% of African American adults own a smartphone²⁸
- To increase the likelihood of adoption, telehealth interventions should be culturally-tailored
 - A “one-size-fits-all” approach to designing telehealth interventions for anxiety or depression may lead to more options but continued disparity in receiving care



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Sources: ²⁸Pew Research Center, 2018

Question

“What are the attitudes and perceptions of African American women toward using mobile technologies to receive mental health services to manage anxiety and depression?”



Attitudes Toward Seeking Mental Health Services and Use of Mobile Technology Survey

Purpose- Gauge attitudes and perceptions toward:

- Using mental health services
- Use of mobile technology to manage anxiety and depression

Participants- Black American women (≥ 18 years old)

Methods- self-administered web-based questionnaire (53 questions)

- Convenience/ Snowball sampling
- Email invite
- Social media post



Descriptive Statistics

Table 1– Characteristics of Study Participants

Participant characteristics	(N=102)
Age in years, mean (SD)	38.8 (13.1)
Age group in years, n (%)	
Under 50	81 (79.4)
50 and older	21 (20.6)
Race, n (%)	
Black or African American	100 (98.0)
Biracial ^a	2 (2.0)
Ethnicity, n (%)	
Hispanic	2 (2.0)
Non-Hispanic	100 (98.0)
Education, n (%)	
< Bachelor's degree	15 (14.7)
Bachelor's degree	24 (23.5)
Graduate degree	63 (61.8)
Mobile phone video call capability, n (%)	
Yes	98 (96.1)
No	4 (3.9)
Frequency of video call use ^b , n (%)	
Never	12 (11.8)
Less than 1 time per week	46 (45.1)
1-6 times per week	29 (28.4)
1-3 times per day	9 (8.8)
4 or more times per day	2 (2.0)

^aBiracial defined as identifying as Black or African American and another race.

^bParticipants that indicated that their phone did not have video call capability (n=4) were not presented for the frequency of use question.



Results

Video Calls

- High acceptance of the use of video calls to communicate with a professional to receive help to manage anxiety and depression (> 70% endorsed).
- Statistically significant associations were found between age and agreement with the use of video calls, with younger women (< 50 years) more likely to indicate acceptance (p 's < .05).

Text Messaging

- Low acceptance of the use of text messaging to communicate with a professional to receive help to manage anxiety and depression (< 50% endorsed).
- Over 50% of respondents indicated having concerns about using text messaging to communicate with a professional.
- No statistically significant associations were found between age and agreement with the use of text messaging (all p > .05).



Results continued

Table 4. Top five concerns about using text messaging to communicate with a professional (n = 73 of 78 [94%]).

Themes	n (%)	Examples
Privacy and confidentiality	25 (34%)	<p><i>'There are a risks with sending sensitive information in text messages such as being mistakenly sent to the wrong person, someone other than the professional seeing/reading my messages, and someone other than the professional sending them in response to my messages.'</i> [Participant age 34]</p> <p><i>'Confidentiality, especially if my phone or the health care professional's phone is misplaced or stolen.'</i> [Participant age 34]</p> <p><i>'Lack of privacy. The government has been known to search the cell phones of law abiding individuals for ridiculous reasons.'</i> [Participant age 58]</p>
Impersonal feel	17 (23%)	<p><i>'Lack of intimacy with counselor. How can healing take place without a relationship?'</i> [Participant age 29]</p> <p><i>'Too impersonal - and tone is too difficult to determine and you cannot read compassion.'</i> [Participant age 48]</p> <p><i>'Not personal enough.'</i> [Participant age 62]</p>
Miscommunication	16 (22%)	<p><i>'I believe body language is really important in communication. Text messaging doesn't allow for the counselor to observe body language. Writing can also sometimes be misunderstood by the reader.'</i> [Participant age 29]</p> <p><i>'It's hard to convey emotions via text message'</i> [Participant age 34]</p> <p><i>'Words are just 35% of communication.'</i> [Participant age 65]</p>
Security	8 (11%)	<p><i>'Text messages are a permanent record of what was discussed. I would be concerned about those getting out.'</i> [Participant age 33]</p> <p><i>'Security of the content of the text messages'</i> [Participant age 31]</p> <p><i>'Security of information'</i> [Participant age 60]</p>



Next Steps

- I. Attitudes Toward Seeking Mental Health Services and Use of Mobile Technology Survey
- II. Focus groups and development of mobile app prototype
- III. Usability testing of mobile app prototype
- IV. Pilot testing of mobile app prototype





People of color, particularly African Americans, feel the stigma more keenly. In a race-conscious society, some don't want to be perceived as having yet another deficit.

— *Bebe Moore Campbell* —

AZ QUOTES



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