BACKGROUND

- Depression and anxiety account for a significant amount of disease burden and disability within the United States population.
- Health professions providers and students are disproportionately affected by these mental health disorders.
- Health professions students often fail to seek care for mental health disorders.
- The increased disease burden and lack of treatment have prompted investigation into the barriers to seeking care.
- Accelerated medical education programs, such as physician assistant (PA) training, have unique barriers to accessing care compared to other health professions trainees.
- No validated tool currently exists that examines barriers to accessing mental health services for PA students.

OBJECTIVE

To determine the reliability and validity of the Barriers to Use of Mental Health Services for Depression and Anxiety in PA Students (BMHS-PA) Survey at BCM.

METHODS

- The 30-item BMHS-PA Survey was administered to didactic year BCM PA students in the graduating classes of 2020 and 2021.
- A four-point Likert scale was used to assess student attitudes towards mental health services and barriers to seeking care, which included questions about stigma, confidentiality, efficacy of services, access to care, self-awareness, management preference, and BCM specific reasons.
- Instrument and subscale validity were determined through exploratory factor analysis using Eigenvalues ≥ 1.0 and a 0.4 suppression coefficient (See Figure 1).
- Instrument reliability was determined through Cronbach’s alpha.

RESULTS

- Fifty respondents completed the BMHS-PA Survey of which 86% were female, aged 20-29 years old (76%), and white (76%).
- Seven questions (18, 19, 21-25) were omitted from the analysis as they contained 87% of the “not applicable” responses.
- Exploratory factor analysis showed variances and covariances among the survey items that were collapsed into seven factors with all items exhibiting loading weights of > 0.40 (Table 1).
- Six factors accounted for 69.34% of the variance in the BMHS-PA Survey: Personal Consequences (28.78%); Individual Perceptions (12.08%); Approach to Care (9.41%); Potential Repercussions (7.36%); Stigma (6.06%) and Contextual Barriers (5.65%).
- Overall Cronbach’s alpha of all 23 survey items was 0.869, which revealed very good internal consistency and reliability.
- Cronbach’s alpha of Factors I through V was > 0.70, which demonstrated good internal consistency and reliability. Cronbach’s alpha of Factor VI was low at 0.547, and subsequent exclusion tests found no one explanatory item (Table 2).

DISCUSSION

- Instrument validation enables investigators to establish confidence in a measure and draw appropriate conclusions about data. The survey validation process consists of calculating validity through exploratory factor analysis and reliability through Cronbach’s alpha.
- Factor analysis of the BMHS-PA exhibited loading weights above 0.40, three or more items per factor, and the overall factor variance of almost 70%, which demonstrated strong instrument validity.
- Cronbach’s alpha of the overall scale as well as each individual factor established good instrument reliability.
- In this pilot study, the BMHS-PA was validated and found to be reliable.
- The factors identified by this study were not entirely consistent with factors initially defined by the survey producers, which highlights the strength of data-driven approaches like factor analysis.

CONCLUSION

- The BMHS-PA is the first validated instrument that looks at barriers to mental health services in PA students.
- The BMHS-PA can be administered to BCM didactic PA years classes to identify and act upon the most significant barriers to seeking mental health care.
- Revision of the “N/A” response would allow for more questions to be analyzed within factor analysis.
- Confirmatory factor analysis can be completed on a new student sample to verify the factor structure of the BMHS-PA.