

# [Quantitative critique](https://assignbuster.com/quantitative-critique-quantitative-research-samples/)

Quantitative Critique Miles, M. S., Holditch-Davis, D., Eron, J., Black, B. P., Pedersen, C. & Harris, D. A. (2003). An HIV Self-Care Symptom ManagementIntervention for African American Mothers. Nursing
Research, 52(6): 350-60.
In this study, Miles et al. (2003) sought to determine the efficacy of an HIV self-care symptom management intervention in reducing emotional distress and improving health among low-income African American mothers with HIV. The study was based on the Maternal HIV Self-Care Symptom Management framework previously done by Miles, Holditch-Davis, & Black (2001). Critical to the quantitative analysis of this research was their methodology. They gathered African American mothers who were assigned randomly to either the HIV self-care management intervention or usual care in a two-group intervention design. Then, they randomized them into the self-care symptom management intervention groups received six home visits over 3 months by a registered nurse, with follow-up telephone calls. A baseline pretest (T1) and two posttests at 1 month (T2) and 6 months (T3) were conducted after the experimental intervention or usual care.
To measure the emotional distress among African American mothers, they used the Center for Epidemiologic Studies Depression (CESD) scale. This 20-item scale assesses the frequency of feelings or behaviors such as the blues, loneliness, thinking one's life is a failure, and difficulty concentrating. Items are rated on a 4-point rating scale ranging from 0 (rarely) to 3 (frequently). Another test was used to assess mood or general affective state. This was the Profile of Mood States (POMS), a 65-item rating scale where respondents rate the frequency with which they experience these feelings using a 5-point rating scale ranging from 0 (not at all) to 4 (extremely). Stigma was measured using the Demi HIV Stigma Scale, where content validity of the 3-item scale was supported through steps used in its development. This included literature on stigma associated with chronic illness and HIV to identify items as well as revisions based on focus group data from African American women with HIV who examined the items. Lastly, Miles et al. (2003) innovated an HIV Worry Scale, which was designed to assess the mothers' distress related to worry regarding HIV. The items were based on the literature related to HIV and other chronic illnesses. Because it is a new instrument, there are limited data about other aspects of validity. The 9-item HIV Worry Scale was based on analysis of interviews with African American women.
To measure the aspects of health quality of life including perception of health, physical function, energy, health distress, and role function, this research revised the Medical Outcomes Survey-HIV (MOS-HIV). In their study, five subscales were used. The 5-item General Health Perception subscale measured overall perception of health rated on a scale ranging from 1 to 5. Cronbach alphas ranged from 0. 71 to 0. 84. The 6-item Physical Function scale was used to measure whether the women perceived any limitations in areas such as vigorous activities, walking, and activities of daily living. Items were rated a scale ranging from 1 (yes, a lot of limitations ) to 3 (no limitations).
In their data analysis, they proved that the mean CESD score for depressive symptoms generally is high, above or near the cut-off of score of 16 suggested as an indication of risk for depression. Many POMS subscale scores are more than 1. 5 standard deviations above (or below in the case of vigor) the standardized mean for adult women suggested as a cutoff for clinical problems. However, the health-related quality-of-life scores generally are near the midpoint of the scale score ranges and these scores have no determined use for this research because they obtained unclear results because there are no norms.
With their tests, Miles et al. (2003) confirmed that three of the 10 hypotheses related to the Maternal Self-Care Symptom Management Intervention were supported. In the area of emotional distress, the mothers in the intervention group reported fewer feelings of stigma 6 months after the intervention ended than the mothers in the control group. Regarding health, the mothers in the intervention group reported higher physical function scores 6 months after the intervention ended than the control mothers. Other aspects of health-related quality of life such as perception of health, health distress, energy/fatigue, and role function did not improve.
Although some tests were deemed not necessary or useful, the study of Miles et al. (2003) intertwined their measurements to validate the hypotheses in their study. Drawing from the previously made tests, they adjusted their tests to connect it with their goals of helping mothers cope with their emotional responses to the diagnosis of HIV, and by reframing their understanding of HIV from that of an immediate life-threatening illness to that of a chronic disease, their emotional distress and health would improve.