

Resilience in Context: A Culturally-Informed Resilience Index Predicts Depression in Older Kenyan Adults

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INTRODUCTION

Stress is a well-established risk factor for depression and other adverse health outcomes. However, not all individuals exposed to high levels of life stress develop depression, suggesting that protective factors such as resiliency play a critical buffering role.

This study is grounded in implementation science and a **community-based participatory research (CBPR) framework**, which emphasizes equitable partnership between researchers and community members. While much global health research has historically emphasized health challenges in Africa, it is equally important to recognize the resilience of communities and to study how protective factors shape health outcomes.

Ethnographic interviews conducted by the Medical Anthropology team identified key resiliency constructs in Kenya, such as social and spiritual support, that are not well captured in Western scales such as the Connor-Davidson Resiliency Scale (CDRS-10). Building on these findings, we sought to develop a **Kenya Resiliency Index (KRI)** that incorporates culturally relevant indicators and to examine its role as a stress buffer in mental health.

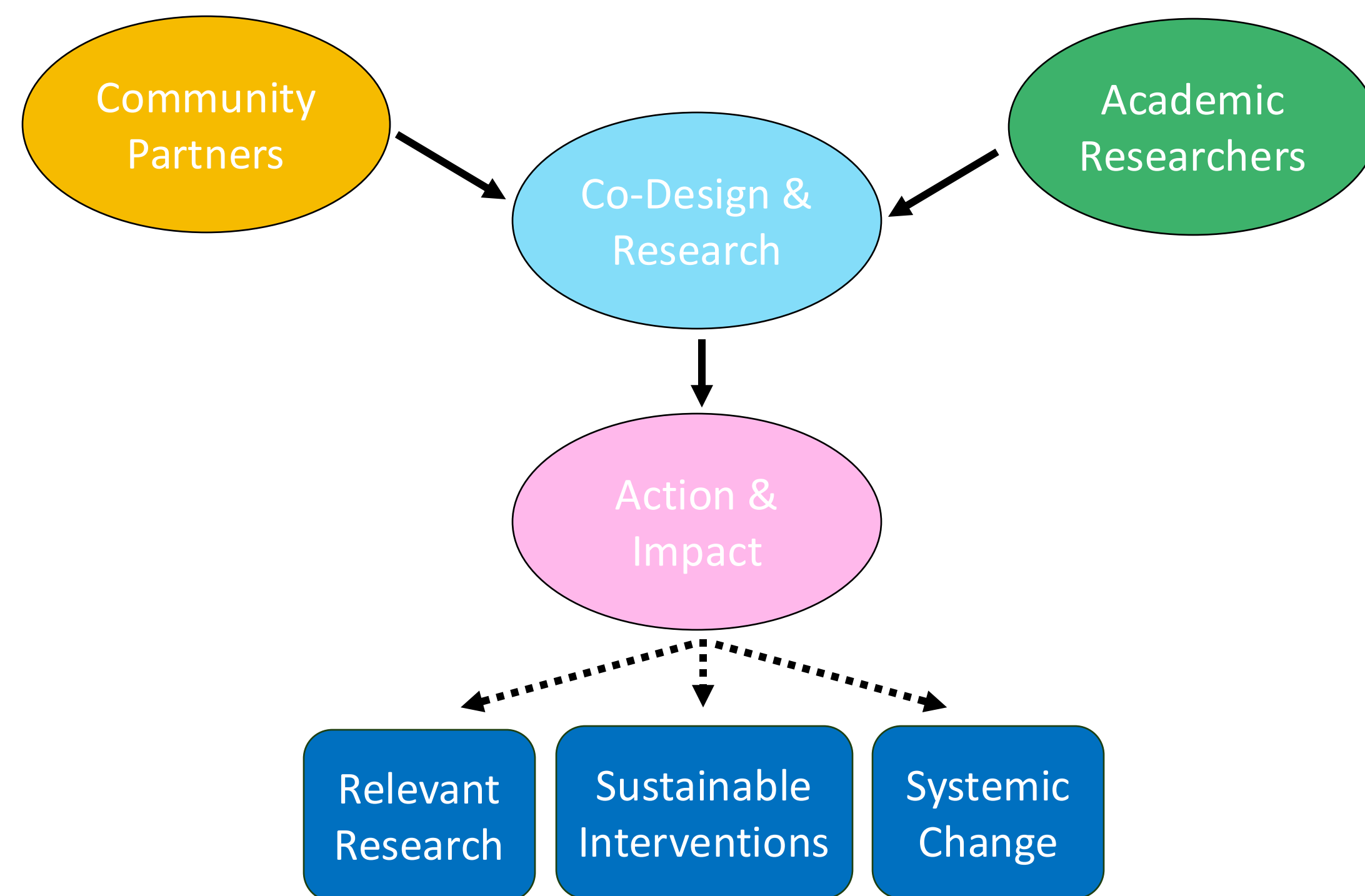


Figure 1. CBPR framework guiding development of the Kenya Resiliency Index.

Research Question

How can we capture resiliency constructs central to mental health in the Global South that are not represented in standard resiliency scales?



METHODS

- Design: Quantitative analysis within a mixed-methods framework, informed by ethnographic interviews and vignettes.
- Population: 206 participants, ages 35–81 (M = 50.4). Sample: 56% female, 43% male, 0.5% intersex.
- Measures:
 - Life stress: **Life Events List (LEL)**.
 - Depression: **PHQ-9**.
 - Resiliency:
 - **CDRS-10** (gold standard).
 - **KRI** (constructed from marital status, religiosity, loneliness, WHOQOL social items).
- Analysis:
 - Linear regression models tested whether resiliency moderates the relationship between life stress and depressive symptoms (PHQ-9), comparing a novel "Kenya Resiliency Index" against the "gold standard" Connor-Davidson Resiliency Index.



RESULTS

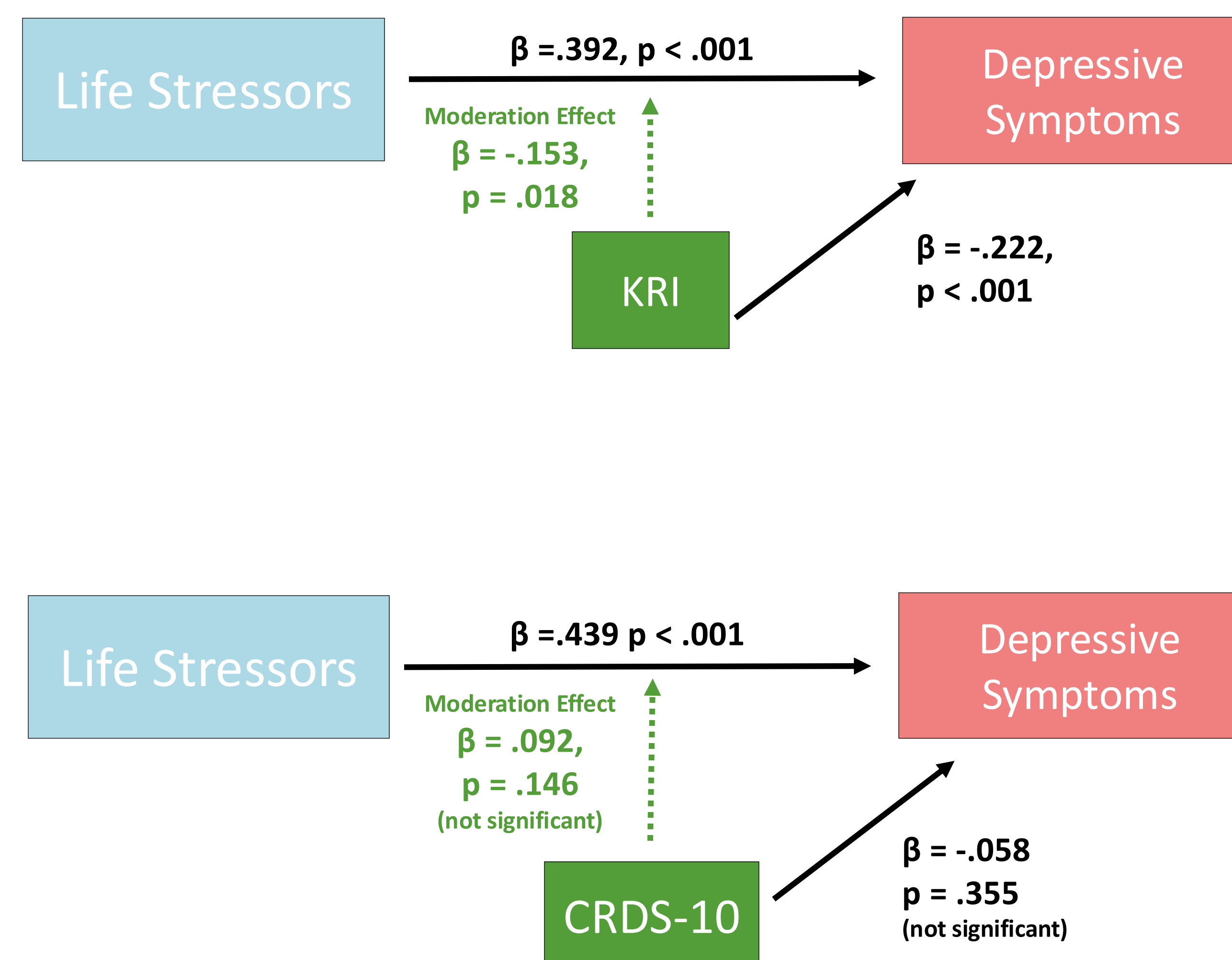
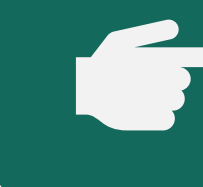


Figure 2. Comparison of moderation models testing whether resilience measures alter the stress-depression relationship.



DISCUSSION

- **A culturally-adapted resilience index significantly outperformed the CDRS-10:** The Kenya Resiliency Index showed both significant direct protective effects ($\beta = -.222, p < .001$) and stress-buffering effects ($\beta = -.153, p = .018$), while the Connor-Davidson scale showed neither ($\beta = -.058, p = .355; \beta = .092, p = .146$).
- **Critical gap in global mental health research:** Psychological constructs cannot be assumed to translate across cultures.
- **Resilience exerts dual protective effects:** The Kenya Resiliency Index directly reduced depressive symptoms and buffered life stress effects, demonstrating resilience as a crucial determinant of mental health outcomes.
- **Western scales miss culturally-central factors:** Standard measures fail to capture protective factors such as social support networks, spiritual practices, and community connectedness identified through ethnographic work.

Project Limitations

- **Index construction:** The Kenya Resiliency Index was created post-hoc from available survey items; further validation is needed.
- **Measurement limitations:** Reliance on self-report measures (PHQ-9, WHOQOL, etc.) may introduce reporting bias.
- **Generalizability:** Findings are from a specific cohort in Kenya and may not fully extend to other populations or cultural contexts.

Future Directions

- **Scale validation:** Psychometrically validate the Kenya Resiliency Index across different Kenyan cohorts and in other Sub-Saharan African settings.
- **Expand analyses beyond control group:** Test stress-buffer effects in cancer patient group and and caregiver group.

CONCLUSIONS

This study demonstrates that culturally-adapted resilience measures are essential for accurate mental health assessment in global contexts. The Kenya Resiliency Index significantly outperformed the established Connor-Davidson scale, highlighting the importance of incorporating locally-meaningful protective factors such as social support networks, spiritual practices, and community connectedness. These findings underscore the importance of culturally adapted psychological measures to ensure effective and equitable mental health research and practice worldwide.