Investigating the Impact of Resilience, Social Support, and Healthcare Empowerment on HIV Care Engagement among Young Black Sexual Minority Men with HIV in the US South:

Overcoming Social and Structural Barriers.

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Background

Currently, young Black sexual minority men (YBSMM) are the most disproportionately impacted by HIV, particularly in the US South.

HIV transmissibility is heightened by less engagement in the HIV care continuum and lower viral suppression among YBSMM living with HIV.

Informed by Minority Stress Theory and Syndemic Theory, we conducted exploratory analysis of data from a community cohort of (N=224) YBSMM+ recruited from Dallas and Houston Texas to better understand the correlates of HIV care continuum engagement.

Specific Aims

1) Examine the associations of multiple latent predictor variables known to be related to HIV outcomes such as socioeconomic distress, intimate partner violence, depression, resilience, and HIV related social support with HIV care engagement among .

2) Test whether **healthcare empowerment*** mediates the impact of these latent predictor variables have HIV care engagement.

*the informed, committed, collaborative, engaged subscales from Health Care Empowerment Inventory (Johnson et al., 2012)

Measures

Socioeconomic distress: three items (1) running out of money for basic necessities, (2) borrowing money from a friend or a relative to get by financially, and (3) exchanging sex with someone in exchange for money, drugs, or housing

Intimate partner violence: We used the Gay and Bisexual Men Scale (IPV-GBM; Stephenson & Finneran, 2013).

Depressive symptoms: We used the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977).

Resilience. We used a 14-item resilience scale (Wagnild & Young, 1993) to assess "the capacity to withstand life stressors, and to thrive and make meaning from challenges"

HIV-related social support: We used seven-items adapted from the Perceived Social Support from Friends and Family (Procidano and Heller, 1993) to measure the extent which participants could rely on their friends or family for emotional, information, material, and other support related to living with HIV.

Healthcare empowerment: We used the Informed, Committed, Collaborative, Engaged subscale of the Healthcare Empowerment Inventory (Johnson, Rose, Dilworth, & Neilands, 2012) to measure the extent to which YBSMM felt engaged and empowered in their healthcare.

Engagement in HIV care: We used the United States government guidelines for HIV care engagement, in the following stages of the HIV care continuum of care: being on antiretroviral treatment, being retention in HIV care, and being virally suppressed (HIV.gov, 2021).

Participant Characteristics and Descriptive Statistics at Baseline (N=224)

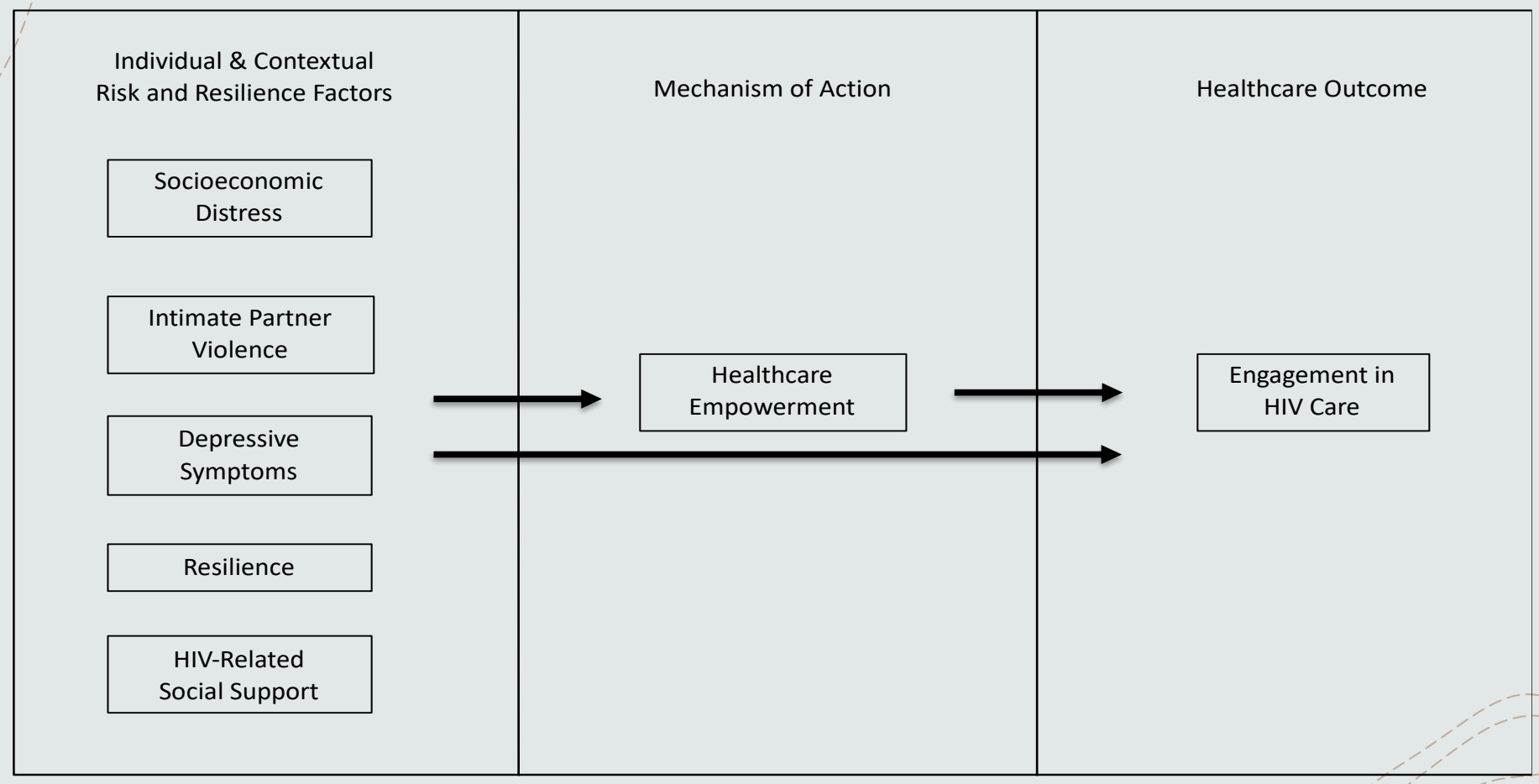
Variable		Descriptive Statistics	
Participant Characteristics at Baseline			
		Mean (SD)	Range
Age in years		24.33 (2.66)	18-29
			n (%)
Highest level of education completed			
	Less than high school diploma or GED		1 (0.5)
	High School Diploma or GED		91 (40.6)
	Some college		108 (48.2)
	College degree or more		14 (6.3)
Personal income last year			
	Less than $10,000		57 (25.5)
	$10,000 - $19,999		48 (21.4)
	$20,000 - $39,999		61 (27.2)
	$40,000 - $59,999		19 (8.5)
	$60,000 or more		15 (5.4)
Employment status			
	Employed full time		103 (46.0)
	Employed part time		40 (17.9)
	Unemployed		68 (30.4)
	On disability		7 (3.1)

Methods

We first conducted bivariate analyses which established associations of each of the latent predictor variables of interest and the latent outcome variable HIV care continuum engagement defined as: **being on antiretroviral therapy, being retained in care, and having an undetectable viral load.**

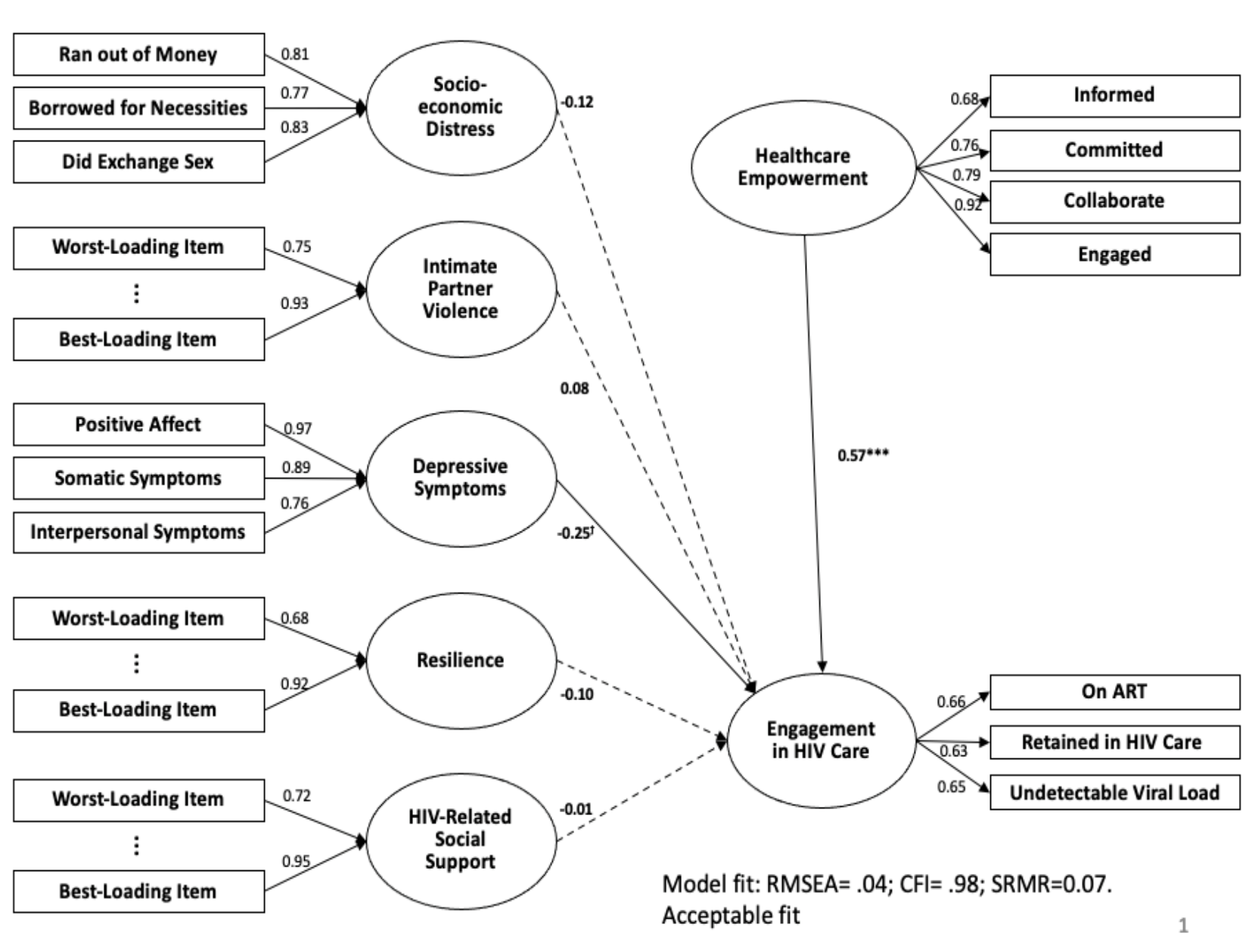
We then used Mplus to construct a structural equation model (SEM) predicting HIV care continuum engagement and assessed for the potential mediating effect of healthcare empowerment.

Hypothesized Conceptual Model of healthcare empowerment as a mechanism for YBSMM+ engaging in HIV Care



Results:

Correlates of Engagement in HIV Care

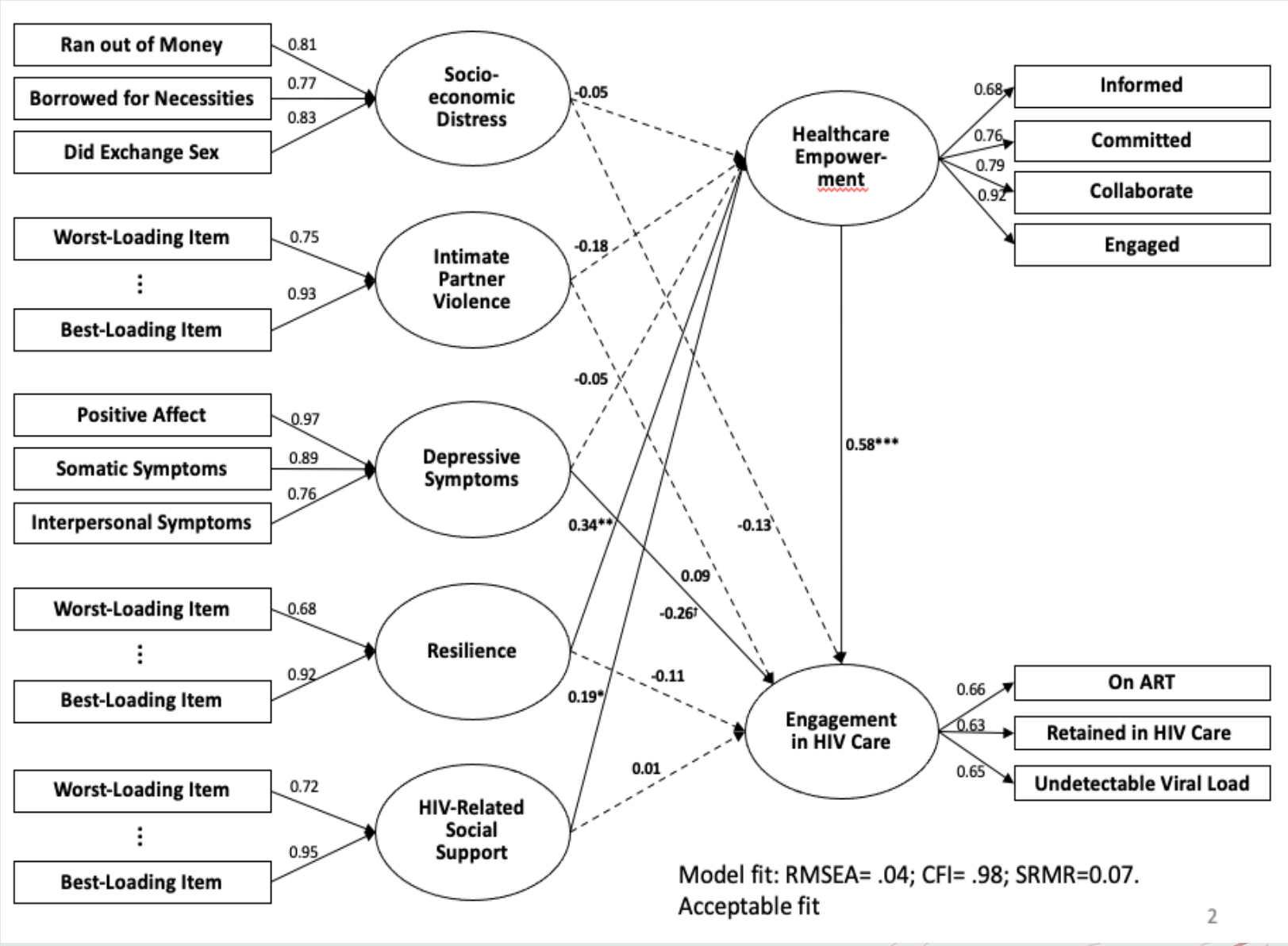


Results

- YBSMM+ who reported higher levels of socioeconomic distress, intimate partner violence, and depressive symptoms reported less engagement in HIV care
- YBSMM+ who endorsed higher levels of resilience and healthcare empowerment reported greater engagement in HIV care
- YBSMM+ who reported higher levels of resilience endorsed higher levels of healthcare empowerment than YBSMM who reported lower levels of resilience.
- YBSMM+ who reported higher levels of HIV-related social support indicated higher levels of healthcare empowerment than YBSMM who endorsed lower levels of HIV-related social support.

Results:

The Mediating Role of Healthcare Empowerment in Associations with Engagement in HIV care



Mediation Results

- **Healthcare empowerment mediated** the association between resilience and engagement in HIV care and the association between HIV-related social support and engagement in HIV care.
- YBSMM+ who reported higher levels of resilience endorsed higher levels of engagement in HIV care, and this association was accounted for by higher reported levels of healthcare empowerment
- YBSMM+ who reported higher levels of HIV-related social support endorsed higher levels of engagement in HIV care, and this association was also accounted for by greater reported levels of healthcare empowerment
- In the mediation model, both resilience and HIV-related social support were associated with the mediator, healthcare empowerment, but socioeconomic distress, intimate partner violence, and depressive symptoms were not associated with healthcare empowerment.
- However, socioeconomic distress, intimate partner violence, and depressive symptoms, were not significantly associated with the mediator, healthcare empowerment.

Discussion

- Findings suggest that while all of the predictor variables were independently associated with HIV care engagement, healthcare empowerment and depression may be the most predictive.
- Future intervention efforts should target improving healthcare empowerment both directly and indirectly by aiming to also bolster resilience and social support.
- Mental health needs to be additional target given robust negative association of depression with HIV care engagement.
- Although healthcare empowerment was a robust correlate and mechanism of engaging in HIV care, **we should be cautious about placing a disproportionate onus on YBSMM+ to navigate challenging healthcare systems that might be dismissive or negligent—non-affirming at best and hostile at worst.**
- Interventions need to focus on improving access to affirming healthcare, connecting YBSMM to it, and empowering continued engagement.

Future Directions

- Develop and test a home-based HIV care men's network and virtual workshop run by YBSMM+ that engages YBSMM+ to critically engage with topics including resilience, masculinity, sexuality, mental health, and social relationships and empower healthcare engagement.
- Workshop would utilize an empowerment perspective that develops and promotes YBMSM+ skills for critically engaging with norms and sources of oppression in the broader social/structural environment.
- Peer-led interventions could focus on increasing social agency and self-advocacy and promoting linkage and access to social services to help address upstream structural determinants of health.
- Peers could help navigate and encourage participants to connect to and engage in home-based HIV care including ongoing HIV viral load testing and medication adherence or long-acting injectable treatment from home with virtual connection to community providers.

Limitations:

+ Our latent variables inherently cannot be observed, and instead consist of proxy indicators of the underlying latent construct.
+ Other observed or unobserved indicators may be more robust indicators of the underlying constructs.
+ Participants were recruited from two cities in Texas, and from a variety of pre-specified venues.
+ Finally, data were self-reported and subject to social desirability bias.

Thank You!!

Descriptive Statistics of Primary Study Variables		
	Mean (SD)	Range
Socioeconomic distress	7.28 (2.10)	3-12
Intimate partner violence by a male partner in the past year	3.28 (6.12)	0-36
Depressive symptomology		
Negative affect symptoms	6.55 (35.42)	0-21
Somatic symptoms	7.33 (26.95)	0-21
Interpersonal symptoms	1.65 (3.52)	0-6
Resilience	72.9 (12.8)	19-84
HIV-related social support	31.1 (9.8)	7-42
Healthcare empowerment	17.23 (3.01)	4-20
Engagement in HIV care (%)		
		n (%)
On antiretroviral therapy		184 (83.3)
Retained in HIV care		187 (85.4)
Undetectable viral load (virally suppressed)		173 (78.6)

Note. Frequencies may not sum to 224 and percentages may not sum to 100 due to missing data or rounding.