

BACKGROUND

OVERVIEW

- Transactional sex (TS), or the exchange of sex for financial or material gain, has been well documented as a contributor to the HIV epidemic in sub-Saharan Africa.¹
- Studies conducted among young women in South Africa have found that approximately 20% of participants report having had sex in exchange for material goods or money.^{2,3}
- While much of the research related to transactional sex focuses on those who identify as sex workers, transactional sex among the general population is common and remains largely unexplored.
- Previous research has yet to identify psychosocial factors that make young women vulnerable to engaging the transactional sex in the South African context.
- Self-esteem, a construct defined as an individual's evaluation of one's global self-worth,⁴ has been associated with the adoption of risk behaviors among adolescents, including sexual risk behavior.^{5,6}
- The identification of psychosocial factors that contribute to transactional sex among young women in this context may have important implications for designing effective intervention programs.

OBJECTIVE

- The objective of this analysis was to determine if self-esteem is associated with TS among young women in South Africa.

METHODS

STUDY POPULATION (HPTN 068)

- Data from HPTN 068, a Phase III randomized controlled trial aimed at assessing the impact of a conditional cash transfer on HIV incidence, was utilized for this analysis.⁷
- HPTN 068 enrolled 2533 young women aged 13-20 years who were in high school, not married or pregnant, and resided in the Medical Research Council (MRC) / Wits University Agincourt Health and Socio-Demographic Surveillance System (AHDSS) study site, a rural area of Mpumalanga Province in South Africa characterized by high HIV prevalence, poverty, migration, between March 2011 and December 2012 and followed them for 3 years. More information on HPTN 068 study methods are detailed elsewhere.^{8,9}

STUDY SAMPLE

- In 2015-2017, a post-study cross-sectional survey was offered to all young women from the main trial who had not died or been withdrawn in attempts to assess the durability of the effect of the conditional cash transfer intervention. The current analysis included the 1,942 young women who completed the post-study survey.

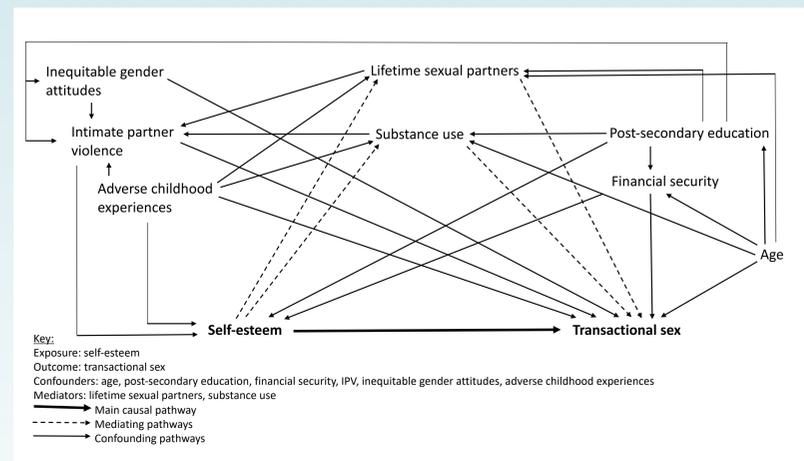
MEASURES

- The exposure of interest, self-esteem, was derived from the 10-item Rosenberg self-esteem scale⁴ with possible scores ranging from 10-40. Among the sample, scores ranged from 17-37. Self-esteem was dichotomized at the median for ease of substantive interpretation, with young women who scored less than or equal to 27 categorized as having "low self-esteem" and young women who scored over 27 categorized as having "high self-esteem".
- The outcome of interest, transactional sex, was derived from 8-yes/no questions that inquired if a participant had exchanged sex for food, money, material goods, or social status since their last visit in the main study. The last visit of the main study was conducted 2-3 years prior to the administration of the post-study survey, depending on when the participant exited the main study. If a participant responded "yes" to one or more questions related to transactional sex they were categorized as having the outcome.

ANALYSIS

- Log-binomial regression was used to compute a prevalence ratio measure of association. Additional covariates, including age, education, financial security, intimate partner violence, gender attitudes, and adverse childhood experiences, were theorized a priori in a directed acyclic graph (DAG) based on a review of the literature and biologic plausibility. All theorized covariates were included in a full multivariable model in attempts to minimize confounding bias.

DIRECTED ACYCLIC GRAPH (DAG)



RESULTS

TABLE 1. Participant Characteristics

Variable	Range	Mean (SD) or n (%) [*]	Skew / Kurtosis	Missing values n (%) ^{**}
Total		N=1,942		
Self-esteem				49 (2.52)
Low (score ≤ 27)		965 (50.98)		
High (score > 27)		928 (49.02)		
Transactional sex				285 (14.68)
No		1413 (85.27)		
Yes		244 (14.73)		
Age	17-26	20 (1.41)	0.45 / 0.29	0 (0)
Education				1 (0.05)
<Gr12		529 (27.25)		
Gr12/equivalent		817 (42.09)		
>Gr12		595 (30.65)		
Financial security/discretionary funds				37 (1.91)
Never		730 (38.32)		
Sometimes or always		1175 (61.68)		
Intimate partner violence				24 (1.24)
No		1707 (89.00)		
Yes		211 (11.00)		
Gender attitudes				24 (1.24)
Inequitable		440 (22.94)		
Equitable		1,478 (77.06)		
Adverse childhood experiences				22 (1.13)
None		744 (38.75)		
Few		501 (26.09)		
Many		675 (35.16)		

SUMMARY OF FINDINGS

- Participants were 1,942 young women, 17-26 years of age (M=20 years).
- Approximately half of young women were categorized as having high self-esteem and 15% reported having exchanged sex for food, money, material goods, or social status in the 2-3-year period since their last study visit.
- The prevalence of TS among those with low self-esteem (23.79%) was 5.05 times the prevalence of TS among those with high self-esteem (4.71%), 95% CI: 3.61-7.08, p<0.001.
- The effect remained significant after adjusting for age, education, financial security, intimate partner violence, gender attitudes, and adverse childhood experiences (PR=4.10, 95% CI: 2.91-5.78, p<0.001).

TABLE 2. Log-binomial Regression Analysis (N=1,631)

	No transactional sex (n=1,393)	Transactional sex (n=238)	Total	Prevalence	Prevalence Ratio	Adjusted Prevalence Ratio
Low self-esteem (score ≤ 27)	644	201	845	23.79	5.05	4.10
High self-esteem (score > 27)	749	37	786	4.71		

DISCUSSION

- Findings provide support for self-esteem as an indicator of prevalent TS. Young women with high self-esteem reported a lower prevalence of TS since their last study visit compared to young women with low self-esteem.
- This investigation provides insight into a psychosocial indicator of transactional sex, which has not yet been explored. Psychosocial factors, including self-esteem, should be considered when designing intervention programs.
- Future research should examine self-esteem and incident TS in a longitudinal cohort to establish temporality.

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