

## Introduction

- Women living with HIV/AIDS (WLHA) are a vulnerable population and many face unique challenges in managing their disease
- Given the growing number of women who are HIV-infected, it is important to understand what self-management strategies they use, which strategies are effective, and how those strategies can be enhanced
- Previously, there were no validated scales which measured self-management among either women or people living with HIV. This study aimed to fill this gap by developing an instrument which measured the day-to-day ways WLHA manage their illness.

## Materials and methods

Instrument development was conducted in three distinct phases:

- 1) 12 semi-structured focus groups (n=48) were conducted to explore ways WLHA manage their illness and qualitative description was used to identify themes and possible scale items.
- 2) Expert review (n=14) with WLHA, HIV experts, and self-management experts of the 40 items identified by the focus groups were narrowed to 27 instrument items.
- 3) 260 WLHA in San Francisco and Northeast Ohio took the survey and these results were analyzed for psychometric evaluation.

## Results

Figure 1: Development of HIV Self-Management Scale

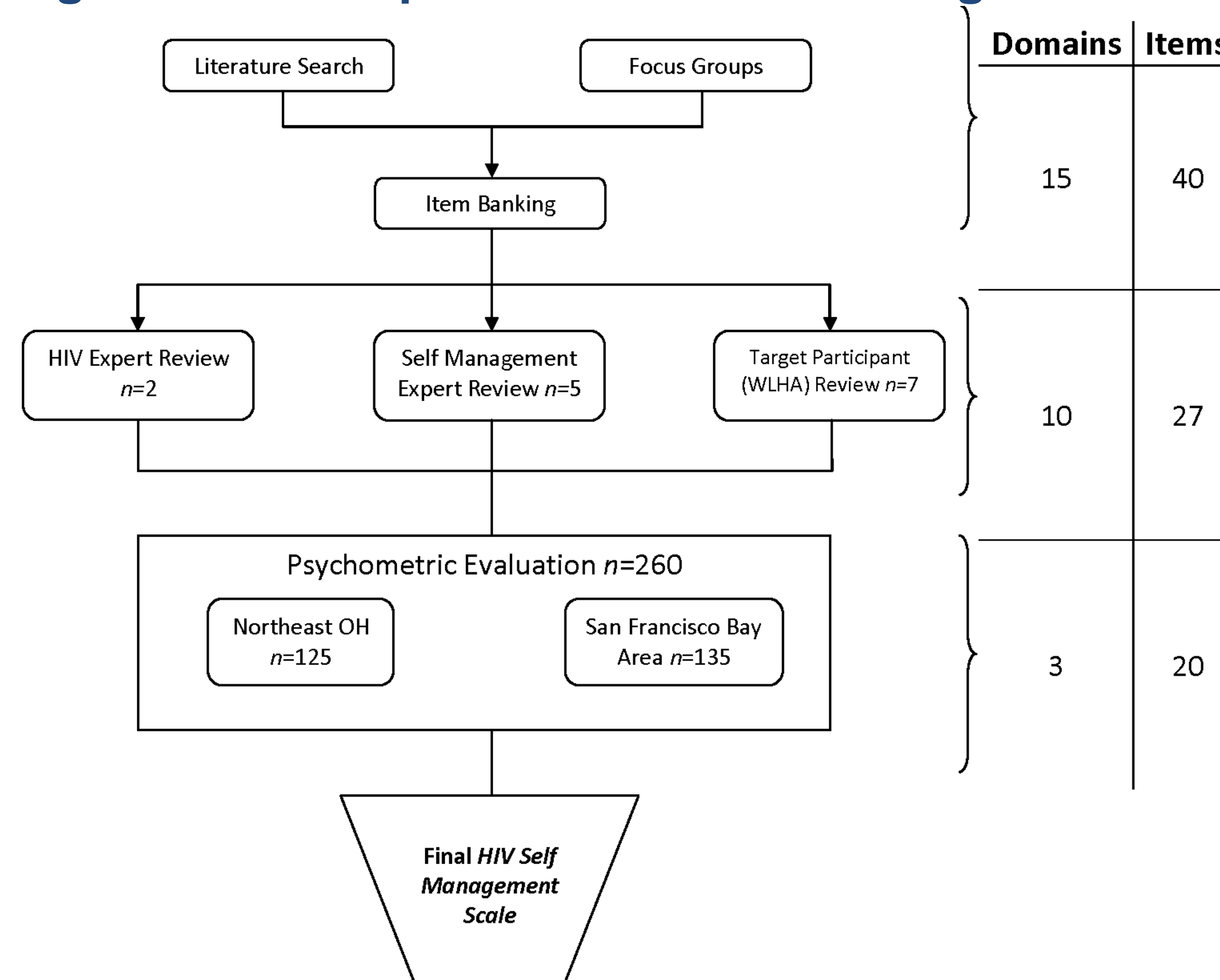


Table 1: Demographics of Participants in Phase 3

	Northeast Ohio (n=125)	San Francisco Bay Area CA (n=135)	Total (n=260)
	Frequency (%)	Frequency (%)	Frequency (%)
Mean Age (+/-SD), years	45 (9.4)	48 (8.9)	46 (9.3)
Race			
African American	91 (73)	78 (58)	169 (65)
White/Angelo	24 (19)	22 (16)	46 (18)
Other	14 (11)	29 (21)	43 (17)
Marital Status			
Single	67 (54)	85 (63)	152 (59)
Married	21 (17)	16 (12)	37 (14)
Other	36 (29)	26 (20)	62 (25)
Education Level			
11th grade or less	52 (42)	37 (27)	89 (34)
High School Diploma or Higher	76 (59)	89 (71)	165 (61)
Mean Annual Income (+/-SD)	\$10,253 (12,423)	\$14,620 (16,733)	\$12,576 (15,001)
Has Health Insurance <sup>3</sup>	118 (94)	132 (98)	250 (96)

Table 2 : Medical Information of Participants in Phase 3

	Northeast Ohio (n=125)	San Francisco Bay Area, CA (n=135)	Total (n=260)
	Frequency (%)	Frequency (%)	Frequency (%)
Prescribed Anti-Retroviral Therapy (ART)	102 (86)	96 (74)	198 (80)
Undetectable HIV Viral Load	51 (52)	54 (49)	105 (50)
Mean HIV Viral Load for those with detectable values/mL (+/-SD)	17,778 (39,378)	16,668 (32917)	17,189 (35,712)
Mean CD4 cells/ $\mu$ 1 (+/-SD)	501.2 (363.2)	574.8 (377.8)	533.5 (375.1)

Figure 2 : Model of Dimensions of HIV Self Management

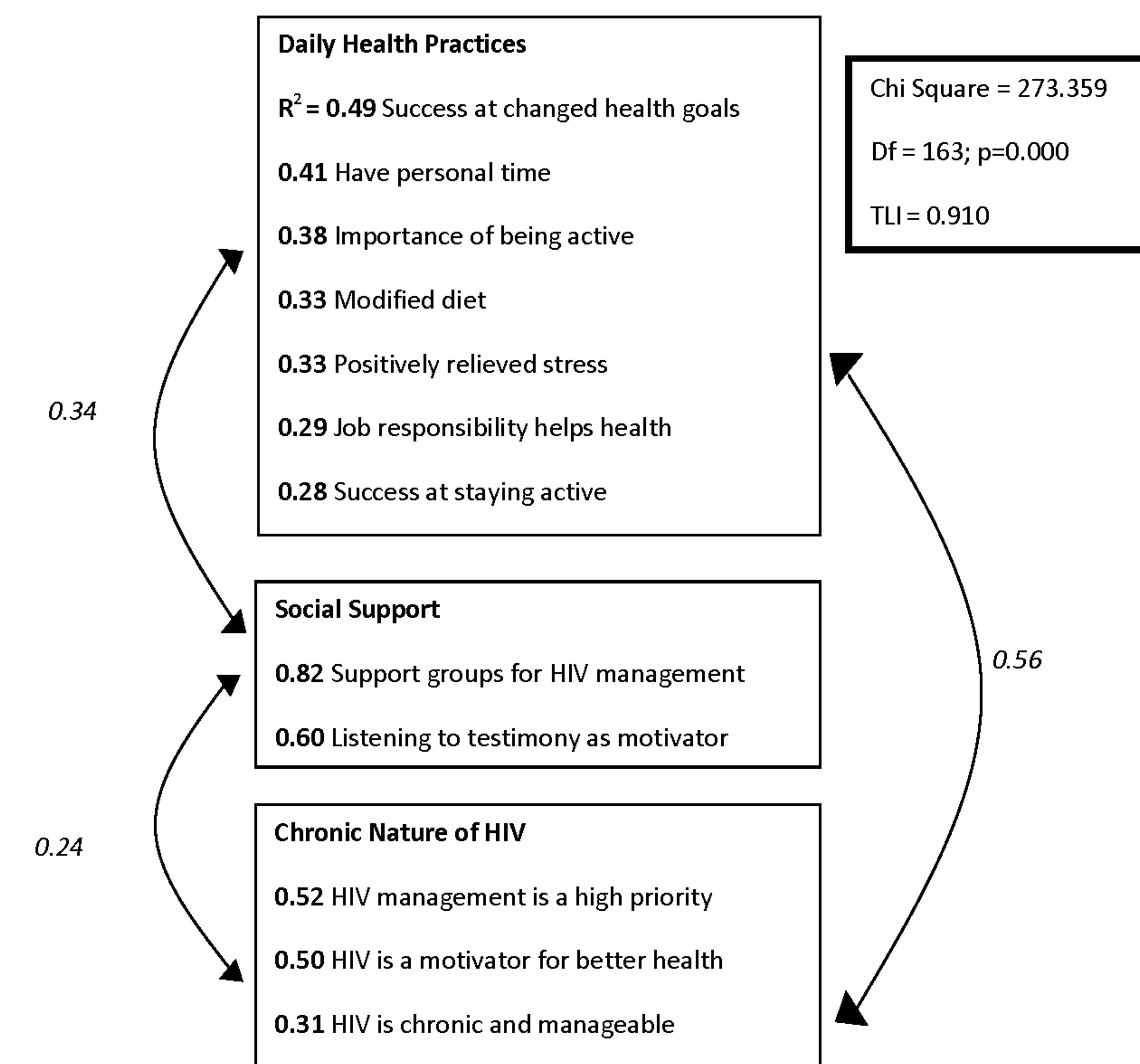


Table 3: Factor Analysis Using Principle Axis Extraction

Domain	Number of Items	Item Mean Range	Rotated Eigenvalue	% Explained Variance	Cronbach's Alpha, Baseline	Cronbach's Alpha, Follow-up (n=108)
Domain 1: Daily Self-Management Health Practices	12	1.7-2.42	5.64	28.22	0.84	0.85
Domain 2: Social Support and HIV Self-Management	3	1.90-2.13	2.24	11.22	0.86	0.83
Domain 3: Chronic Nature of HIV Self-Management	5	2.55-2.77	1.82	9.11	0.72	0.61

The resulting scale contained three domains and a total of 20 items. These factors explained **48.6%** of the total variance of the scale.

## Conclusions

- Our study created a valid instrument to measure social capital among WLHA in Cleveland, OH and the San Francisco, CA
- This scale will allow future researchers to integrate aspects of HIV self-management in a variety of samples and settings in hopes of improving the lives of WLHA through self-management



Figure 2: Model of the Dimensions of HIV Self-Management in Women Living with HIV/AIDS

