

SUPPLEMENTARY MATERIALS

Supplementary Table 1. Loneliness Item Results by HIV Status

Loneliness Scale Item	HIV+ Mean (SD)	HIV- Mean (SD)	Wilcoxon Statistic	Two-Sided p-Value
I experience a general sense of emptiness	2.2768362 (1.0374658)	2.2031250 (0.9574129)	33361.0000	0.5107
I miss having people around	2.6779661 (1.1043408)	2.7083333 (1.0626123)	32427.5000	0.7441
I feel like I don't have enough friends	2.4915254 (1.1337721)	2.3906250 (1.0122370)	33406.0000	0.4867
I often feel abandoned	2.2881356 (1.0721291)	2.1250000 (0.8891434)	33900.0000	0.2084
I miss having a really good friend	2.8305085 (1.2498074)	2.4895833 (1.0780513)	35197.0000	0.0115

Supplementary Table 2. Loneliness Item Results by Race among HIV Positive

Loneliness Scale Item	Black Mean (SD)	White Mean (SD)	Wilcoxon Statistic	Two-Sided p-Value
I experience a general sense of emptiness	2.2903226 (1.0262743)	2.2452830 (1.0724820)	4599.5000	0.6866
I miss having people around	2.6048387 (1.1029786)	2.8490566 (1.0988845)	5130.0000	0.1667
I feel like I don't have enough friends	2.3467742 (1.0823368)	2.8301887 (1.1886620)	5487.5000	0.0098
I often feel abandoned	2.1935484 (1.0175486)	2.5094340 (1.1705134)	5207.0000	0.0927
I miss having a really good friend	2.7741935 (1.2804897)	2.9622642 (1.1760799)	5027.0000	0.2992

Supplementary Table 3. Loneliness Item Results by Race among HIV Negative

Loneliness Scale Item	Black Mean (SD)	White Mean (SD)	Wilcoxon Statistic	Two-Sided p-Value
I experience a general sense of emptiness	2.2213740 (0.9550681)	2.1639344 (0.9691977)	5756.0000	0.6867
I miss having people around	2.5648855 (1.0160197)	3.0163934 (1.1029023)	6839.0000	0.0054
I feel like I don't have enough friends	2.2213740	2.7540984	6942.0000	0.0014

	(0.9054542)	(1.1351320)		
I often feel abandoned	2.1450382 (0.8954770)	2.0819672 (0.8811939)	5740.5000	0.6354
I miss having a really good friend	2.3664122 (1.0243655)	2.7540984 (1.1497208)	6634.0000	0.0262

Supplementary Table 4. Cronbach Coefficient Alpha with Deleted Variable for Loneliness Measure

Cronbach Coefficient Alpha with Deleted Variable				
Deleted Variable	Raw Variables		Standardized Variables	
	Correlation with Total	Alpha	Correlation with Total	Alpha
Item 1	0.468377	0.720682	0.473182	0.721337
Item 2	0.457602	0.725446	0.456231	0.727366
Item 3	0.539615	0.695135	0.535642	0.698635
Item 4	0.562663	0.688886	0.564355	0.687941
Item 5	0.548997	0.691953	0.548053	0.694033

Item 1: I experience a general sense of emptiness. Item 2: I miss having people around. Item 3: I feel like I don't have enough friends. Item 4: I often feel abandoned. Item 5: I miss having a really good friend.

Supplementary Table 5. Pearson Correlation Coefficients for Loneliness Measure Items

r statistic (p-value)	Item 1	Item 2	Item 3	Item 4	Item 5
Item 1	-	0.32786 (<0.0001)	0.29873 (<0.0001)	0.45542 (<0.0001)	0.31485 (<0.0001)
Item 2		-	0.36475 (<0.0001)	0.30403 (<0.0001)	0.35687 (<0.0001)
Item 3			-	0.42043 (<0.0001)	0.46879 (<0.0001)
Item 4				-	0.44244 (<0.0001)
Item 5					-

Supplementary Table 6. Predictors of loneliness among participants without HIV (N=193)

Variable	Model 1	Model 2
Adjusted R ²	0.0657	0.0743
	<i>B</i> (SE, p-value)	
Age	-0.0130 (0.0086, 0.1326)	-0.0110 (0.0087, 0.2092)
Male Sex	0.2455 (0.1183, 0.0393)	0.2233 (0.1187, 0.0615)
Education	0.0025 (0.0191, 0.8965)	-0.0087 (0.0208, 0.6772)
Black Race	-0.4217 (0.1245, 0.0009)	-0.4652 (0.1265, 0.0003)
Global Cognition	-0.1835 (0.0980, 0.0629)	-0.2155 (0.0993, 0.0314)
Income		0.0122 (0.0220, 0.5789)

Supplementary Table 7. Associations of loneliness with global cognition, 193 participants without HIV

Factor	Model 1	Model 2	Model 3
Adjusted R ²	0.1346	0.1518	0.1823
	<i>B</i> (SE, p-value)		
Age	-0.0018 (0.0065, 0.7849)	-0.0030 (0.0065, 0.6404)	0.0013 (0.0068, 0.8426)
Male Sex	-0.1400 (0.0880, 0.1131)	-0.1102 (0.0882, 0.2128)	-0.1299 (0.0949, 0.1727)
Education	0.0561 (0.0149, 0.0002)	0.0536 (0.0148, 0.0004)	0.0504 (0.0161, 0.0020)
Income	-0.0276 (0.0163, 0.0916)	-0.0254 (0.0161, 0.1165)	-0.0199 (0.0185, 0.2815)
Black Race	-0.2457 (0.0926, 0.0087)	-0.2942 (0.0944, 0.0021)	-0.2949 (0.1080, 0.0069)
Loneliness		-0.1176 (0.0542,	-0.1554 (0.1493,

		0.0314)	0.2995)
Loneliness by age			-0.0253 (0.0097, 0.0101)
Loneliness by sex			0.1935 (0.1241, 0.1206)
Loneliness by education			0.0130 (0.0169, 0.4437)
Loneliness by income			-0.0136 (0.0182, 0.4541)
Loneliness by race			-0.1421 (0.1318, 0.2823)

Supplementary Table 8. Characteristics of the HIV positive CEDHA participants

Factor	Black (N=124)	White (N=53)	<i>t</i> or X^2	<i>p</i> -value
Social Networks	4.1240 (3.8526)	4.7925 (4.4866)	1.00	0.3183
Number of Medical Conditions	2.9435 (1.6094)	2.8491 (1.4331)	-0.37	0.7124

Supplementary Table 9. Predictors of loneliness among participants with HIV (N=177)

Variable	Model 1	Model 2
Adjusted R ²	0.0349	0.0386
	<i>B</i> (SE, <i>p</i>-value)	
Age	-0.0165 (0.0108, 0.1266)	-0.0173 (0.0108, 0.1102)
Male Sex	-0.1465 (0.1349, 0.2790)	-0.1289 (0.1353, 0.3419)

Black Race	-0.3305 (0.1402, 0.0195)	-0.3283 (0.1399, 0.0201)
Global Cognition	-0.2154 (0.1198, 0.0739)	-0.2295 (0.1201, 0.0576)

Supplementary Table 10. Associations of loneliness with global cognition, 177 participants with HIV

Factor	Model 1	Model 2	Model 3
Adjusted R ²	0.1854	0.1959	0.2206
	<i>B (SE, p-value)</i>		
Age	-0.0054 (0.0068, 0.4342)	-0.0067 (0.0068, 0.3294)	-0.0117 (0.0080, 0.1463)
Male Sex	0.0515 (0.0857, 0.5490)	0.0379 (0.0855, 0.6582)	-0.0568 (0.1138, 0.6186)
Black Race	-0.5022 (0.0806, <0.0001)	-0.5213 (0.0808, <0.0001)	-0.3456 (0.1022, 0.0009)
Loneliness		-0.0861 (0.0479, 0.0739)	0.0024 (0.1490, 0.9872)
Loneliness by age			0.0025 (0.0087, 0.7713)
Loneliness by sex			0.1120 (0.1312, 0.3945)
Loneliness by race			-0.2664 (0.1062, 0.0130)

Supplementary Table 11. Associations of Race, Loneliness, HIV Status with Global Cognition

Factor	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Adjusted R ²	0.1318	0.1491	0.1589	0.1479	0.1539	0.1519	0.1633
	<i>B (SE, p-value)</i>						
Age	-0.0044 (0.0045, 0.3304)	-0.0058 (0.0045, 0.1961)	-0.0062 (0.0045, 0.1709)	-0.0057 (0.0045, 0.2059)	-0.0034 (0.0047, 0.4774)	-0.0034 (0.0047, 0.4743)	-0.0047 (0.0047, 0.3239)

Male Sex	-0.0611 (0.0627, 0.3303)	-0.0539 (0.0621, 0.3859)	-0.0591 (0.0618, 0.3394)	-0.0485 (0.0626, 0.4396)	-0.0613 (0.0621, 0.3236)	-0.0578 (0.0627, 0.3578)	-0.0702 (0.0627, 0.2634)
Black Race	-0.4004 (0.0597, 0.0000)	-0.4305 (0.0601, 0.0000)	-0.3383 (0.0721, 0.0000)	-0.4312 (0.0601, 0.0000)	-0.3226 (0.0862, 0.0002)	-0.3273 (0.0870, 0.0002)	-0.3078 (0.0997, 0.0022)
Loneliness		-0.1057 (0.0366, 0.0041)	0.0108 (0.0626, 0.8631)	-0.1314 (0.0521, 0.0121)	-0.1029 (0.0365, 0.0051)	-0.1186 (0.0526, 0.0247)	-0.0834 (0.0856, 0.3307)
HIV positive	0.2044 (0.0544, 0.0002)	0.2177 (0.0540, 0.0001)	0.2186 (0.0537, 0.0001)	0.1951 (0.0631, 0.0021)	0.3653 (0.1004, 0.0003)	0.3458 (0.1110, 0.0020)	0.2263 (0.1285, 0.0790)
Race*Loneliness			-0.1747 (0.0764, 0.0229)				-0.0554 (0.1072, 0.6053)
HIV*Loneliness				0.0502 (0.0724, 0.4882)		0.0304 (0.0732, 0.6787)	0.1922 (0.1257, 0.1272)
Race*HIV					-0.2133 (0.1224, 0.0823)	-0.2048 (0.1243, 0.1002)	-0.0507 (0.1505, 0.7365)
Race*Loneliness*HIV							-0.2289 (0.1546, 0.1396)