Coping Strategies, Depression and Perceived Stress in HIV+ Individuals

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Introduction

- Research suggests that psychosocial factors, such as depression, stressful life events, and coping affect disease progression in individuals living with HIV (i.e. Leserman, 2000; Leserman et al., 2000; Leserman et al., 1999; Ironson et al., 2005).
- Lazarus and Folkman (1984) describe coping as having two functions: managing problems with the environment that cause distress, and regulating the emotional response to the problem.
- How HIV+ individuals cope with stress and depression greatly affects physiological (Antoni et al., 1990; Mulder et al., 1995) and psychological functioning (Schneiderman et al., 2001).
- A complex view of coping can facilitate understanding of how patients adapt to the disease and help guide researchers in the development of interventions that fit the specific disease course.

Hypotheses

- Maladaptive coping mechanisms such as escape fantasy, self-isolation, negative rumination, anger, and distancing will be positively associated with higher levels of perceived stress and depression.
- Adaptive coping mechanisms such as optimistic planning, HIV community, social-emotional support, and spirituality will be negatively associated with perceived stress and depression.

Methods

- A convenience sample was used to collect self-reported data using a cross-sectional, correlational design. Participants ($n = 193$) were recruited from AIDS service organizations (ASOs) in the Dallas-Fort Worth Metroplex.
- In addition to demographic and medical questionnaires, measures of interest included:

Center for Epidemiological Studies–
Depression Scale (CES-D)
Radloff, 1977
20 Likert-type items
Responses: 1 (*Rarely or None of the time-
less than one day*) to 4 (*Most of the time- 5-
7 days*)
Sample Question: “I thought my life had
been a failure.”
 $\alpha = 0.63$ to 0.93 across samples

Perceived Stress Scale (PSS)
Cohen et al., 1983
14 Likert-type items
Responses: 0 (*never*) to 4 (*very
often*)
Sample Question: “In the last
month, how often have you felt
confident about your ability to
handle your personal problems.”
 $\alpha = 0.84$ to 0.86 across samples

Coping with HIV Scale (CHIV)
Jenkins & Guarnaccia, 2003
37 Likert-type items
Responses: 1 (*Not at all likely*) to 5 (*Extremely likely*)
Sample Question: “Tell myself things that help me feel better”
 $\alpha = 0.57$ to 0.82

Demographic and Medical Variables

	Mean (SD)	Range
Age	41.7 (8.36)	19 - 68
Duration of HIV (years)	7.6 (5.2)	0.08 - 23.01
Percentages		
Gender:		
Male	54%	Female 46%
Sexual Orientation:		
Heterosexual	53%	Homosexual 32% Bisexual 15%
Medication Use:		
Taking Meds	75%	Not Taking Meds 25%
Ethnicity:		
Af. Am.	49%	Euro. Am. 33% Latino(a) 12% Other 5%

Results

Univariate Statistics

Coping	Mean (SD)	Possible Range
Adaptive Coping		
Optimistic Planning	17.5 (6.4)	7 - 35
HIV Community	8.9 (4.3)	4 - 20
Social Support	6.6 (3.2)	3 - 15
Spirituality	10.5 (4.1)	4 - 20
Maladaptive Coping		
Escape Fantasy	7.07 (3.1)	3 - 15
Self-Isolation	11.06 (4.0)	5 - 25
Negative Rumination	8.06 (4.0)	4 - 20
Anger	3.12 (2.4)	2 - 10
Distance	10.30 (4.4)	5 - 25
Dependent Variables		
Depression	24.0 (12.8)	0 - 60
Stress	20.0 (6.4)	0 - 40

Bivariate Statistics

Significant Correlations Among Demographic, Medical and Dependent and Independent Variables

	Stress	Depression
Demographic and Medical		
Gender	.18**	
Age	-.14*	
HIV Symptom Load		.12*
Adaptive Coping		
Optimistic Planning		-.23**
HIV Community		-.23**
Social Support		
Spirituality		
Maladaptive Coping		
Escape Fantasy	.34***	.49***
Self Isolation	.23**	.42***
Negative Rumination	.30***	.44***
Anger	.20**	.39***
Distancing	.15*	.37***

* $p < .05$; ** $p < .01$; *** $p < .001$

Exploratory Hierarchical Regression Analyses ($n = 193$)

Regression Model for Depression

	β	t
Adaptive Coping		
Optimistic planning	-.44	-5.54***
Maladaptive Coping		
Escape fantasies	.30	3.71***
Self-isolation	.16	2.26*
Anger	.52	2.27*
Distancing	.18	2.00*

Demographics =
Entered, Block 1

Medical Variables =
Entered, Block 2

Coping Subscales =
Stepwise, Block 3

$F(14, 178) = 8.89***$, Adjusted $R^2 = .37$

Regression Model for Stress

	β	t
Demographic Variables		
“Other” Race	-0.15	-2.07*
Gender	0.15	2.18*
Maladaptive Coping		
Escape fantasies	0.33	4.62***

Demographics =
Entered, Block 1

Medical Variables =
Entered, Block 2

Coping Subscales =
Stepwise, Block 3

$F(10, 182) = 4.02***$, Adjusted $R^2 = .14$

* $p < .05$; ** $p < .01$; *** $p < .001$

Conclusions

- The results of this study indicate that a significant relationship exists between HIV-related coping and depression and stress.

Strengths / Limitations

- Our sample was gender balanced and ethnically diverse.
- We used a coping measure specifically designed for an HIV+ population, as well as psychological measures demonstrated to be reliable and valid in an HIV+ population.
- Our study used a cross-sectional, correlational design, which does not allow us to infer causality.
- Because our data was collected using a convenience sample, our results may not generalize to the entire HIV+ population.

Clinical Applications

- Understanding the complex relationship among HIV-related coping and psychological outcomes is key in improving quality of life in this population.
- Interventions designed to address specific styles of coping demonstrate effective outcomes in intervention research (i.e. Smith et al., 2006).
- How adaptive and maladaptive coping mechanisms relate to psychological outcomes is necessary to improve interventions aimed at decreasing stress and depression in this population.

References

Please see handout