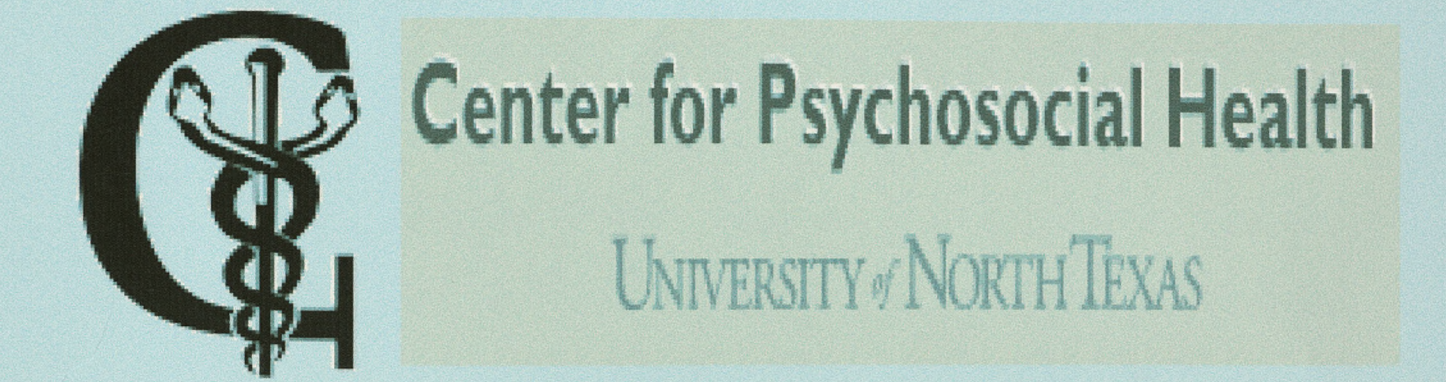


Stigma, Coping, Pessimism, and Symptom Load: Covariates of Depression in Men and Women with HIV/AIDS

Melissa B. Ranucci, B.S. and Mark Vosvick, Ph.D.
University of North Texas

author contact: mbr0008@unt.edu

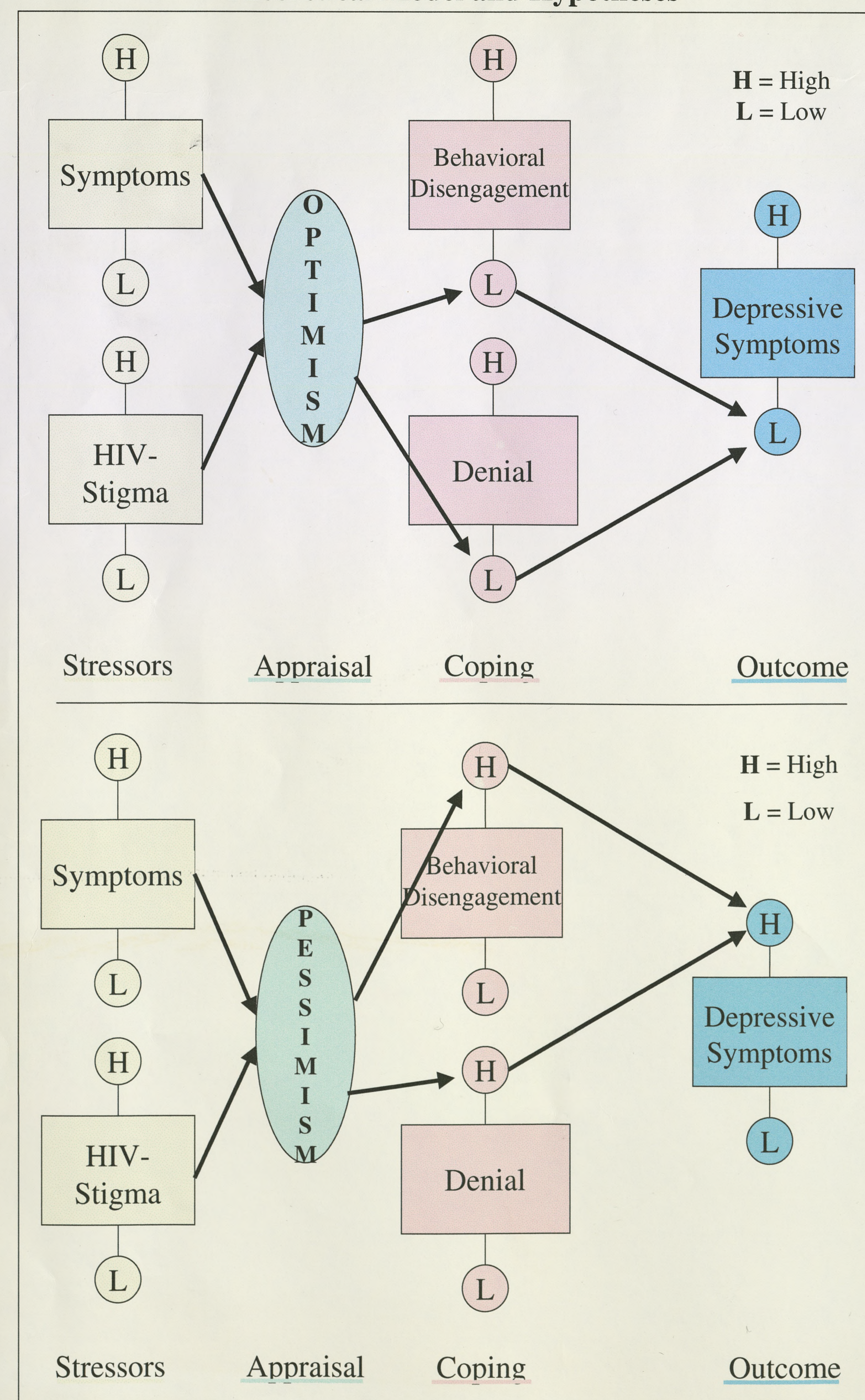


Background

People living with HIV/AIDS (PLH) struggle with depression. Recent research suggests that depression affects medical regimen adherence, disease progression, and risky sexual behaviors (Catz et al., 2000; Holzemer et al., 1999; Ironson et al., 1994; Leserman et al., 2000; Lesserman, 2003; Parsons et al., 2003). Although research has focused on the role depression plays in PLH, a dearth of material exists on predictors of depression. The Folkman and Lazarus (1984) deficit model of stress and coping is used to understand the components of the coping process in PLH. This model of coping suggests that individuals often do not have the resources available to deal with their current stressors (Lazarus & Folkman, 1984). Therefore, individuals must compensate for this lack of resources by adopting coping mechanisms to reduce the impact of stressors, with the goal of increasing quality of life (Lazarus & Folkman, 1984). Unfortunately, while some of the utilized strategies (e.g. denial) decrease stress in the immediate future, these methods have negative long-term consequences (Carver, 1989; Vosvick et al., 2002).

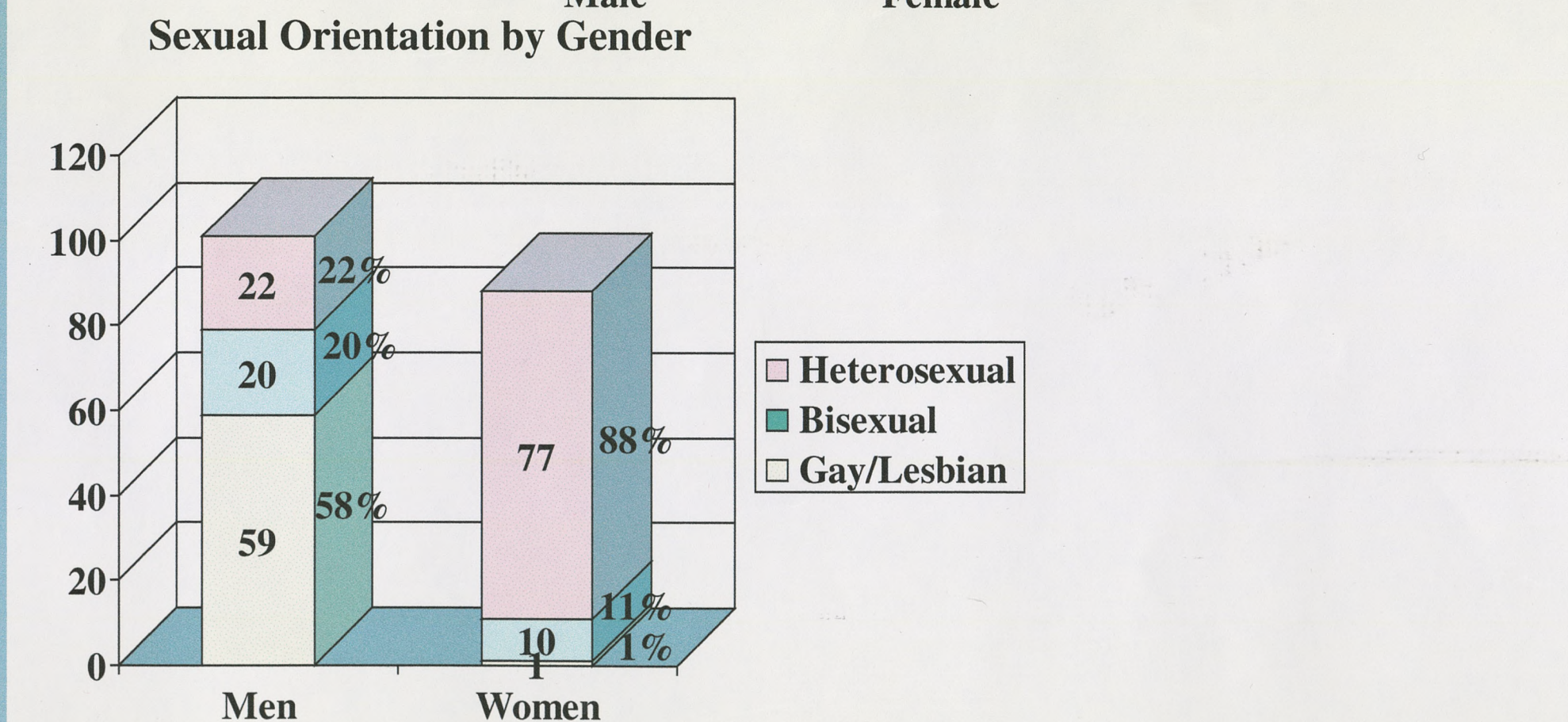
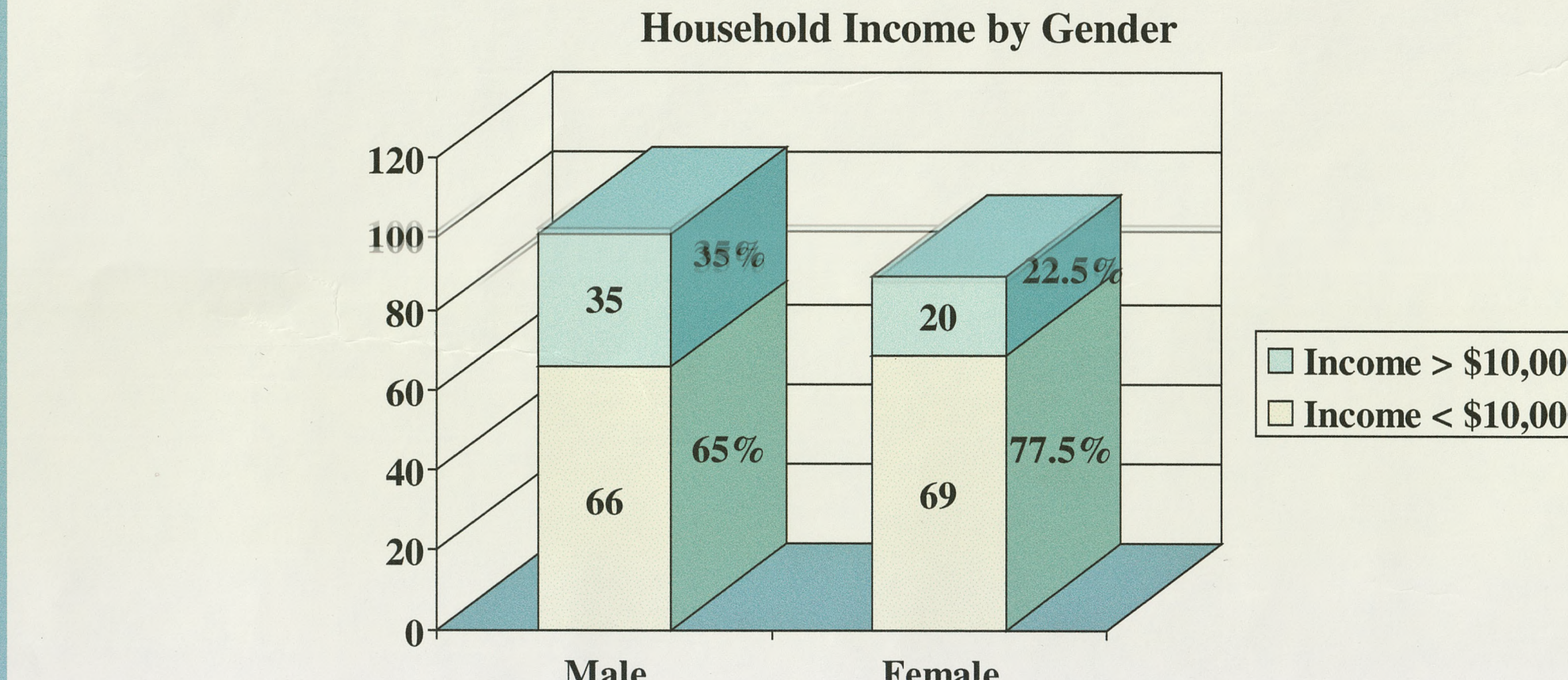
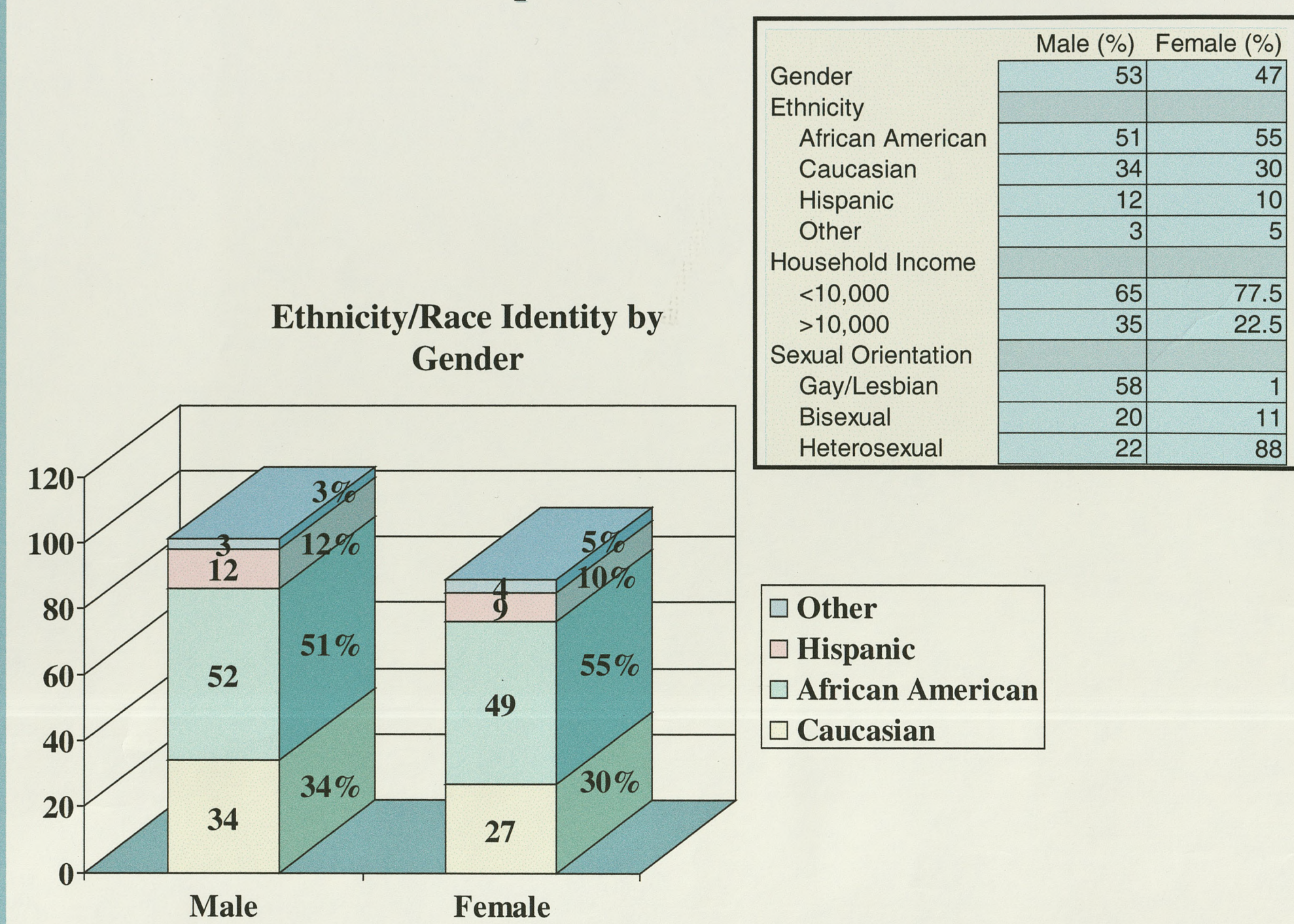
The current study uses a diverse gender-balanced sample to investigate variables that are associated with depression in PLH. HIV-related self-stigma and prevalence of symptoms are explored as stressors for PLH. The stigma surrounding HIV distinguishes HIV from other terminal/chronic illnesses. The notion of perceived controllability in the acquisition of HIV is associated with feelings of shame and guilt for many PLH. Self-stigma may be exacerbated when symptoms increase because PLH may feel more pressure to disclose their illness. Both stigma and symptoms are salient stressors in PLH (Kalichman & Catz, 2000). Tendency toward optimism or pessimism in appraising stressors is investigated. Optimism may buffer individuals against the effects of existing stressors by influencing the perceived controllability of the current stressor, resulting in less maladaptive coping mechanisms. Contrary to this, pessimism may exacerbate the effects of the stressors leading to the belief that the stressors are beyond control and maladaptive coping strategies may result. Taylor et al. (1992) identify optimism as a potential factor in reducing demoralization in PLH, suggesting it may play a role in adaptive coping with HIV-related stigma.

Theoretical Model and Hypotheses



Method

Participant Characteristics



Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1. Sex															
2. African American	ns														
3. Hispanic	ns	-.38**													
4. Other Ethnicity	ns	-.21**	ns												
5. Income	ns	ns	ns	ns											
6. Duration HIV (years)	ns	ns	ns	ns	ns										
7. Medications	ns	-.15*	.20**	-.22**	ns	ns									
8. Symptom Load	ns	ns	ns	ns	ns	ns	ns								
9. Denial	ns	ns	ns	ns	ns	ns	ns	-.21**	-.16*						
10. Behavioral Disengagement	ns	ns	ns	ns	ns	ns	ns	-.15*	.24**	.58**					
11. Depressive Symptoms	ns	ns	ns	ns	ns	ns	ns	-.16*	.460**	.48**	.57**				
12. Optimism	ns	ns	ns	ns	ns	ns	ns	ns	ns	-.24**	-.28**				
13. Pessimism	ns	ns	ns	ns	ns	ns	ns	ns	ns	.15*	.36**	.47**	.47**	ns	
14. Stigma	ns	ns	ns	ns	ns	ns	ns	ns	ns	-.20**	-.15*	.20**	.35**	.37**	.44**

** Correlation is significant at the .01 level (2-tailed)
* Correlation is significant at the .05 level (2-tailed)

Data Analyses

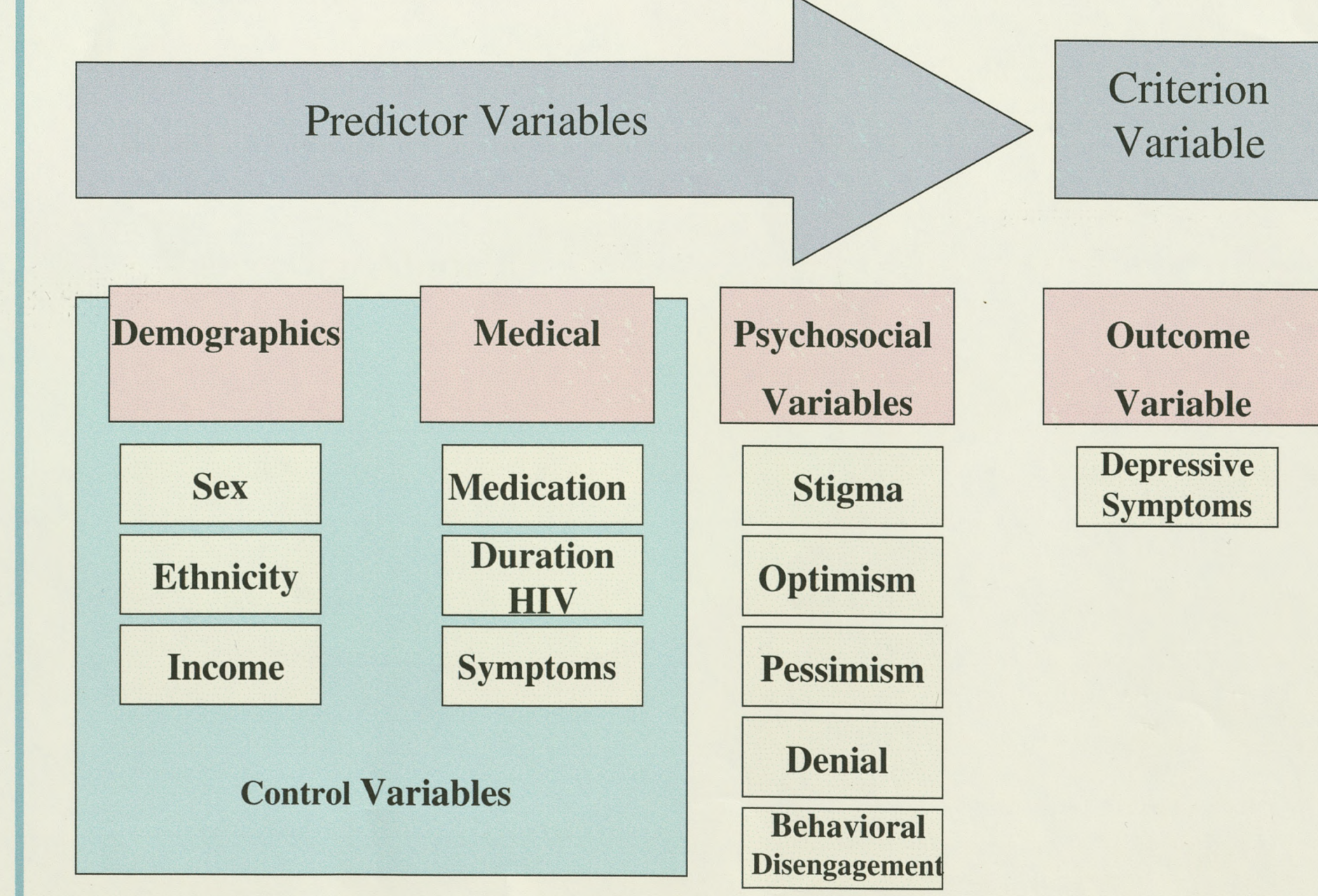
- All data were entered twice to control for data entry errors and inconsistencies were rectified.
- All data were analyzed using SPSS version 11.0 (SPSS, Inc., Chicago, IL).
- Standard procedures for assuring normality and describing the population were performed.
- Univariate descriptive analyses were performed on demographic and HIV-related variables.
- The correlation matrix was examined to identify correlations between predictor variables and the criterion variable and the correlation matrix was assessed for collinearity.
- PCA were performed on all instruments to confirm that our data fit the psychometric parameters reported for the original instruments.
- The full CES-D as well as the Cognitive-Affective subscale (Kalichman et al., 2000) were analyzed and both yielded similar results → full CES-D is presented here.
- An exploratory hierarchical multiple regression analysis was performed to examine the relationship between demographic variables, medical variables, HIV-related negative self-image, optimism/pessimism, coping, and depressive symptoms.
- Attrition analyses were performed to test for systematic error.

Means, Standard Deviations, & Ranges

Symptoms	Mean	SD	Range	Example Item
HIV Symptom Checklist (MACS Study, n.d.)	7.5	5.8	0 - 20	"Frequent headaches" 0=Not Present, 1=Present
Negative Self Image				
HIV Stigma Scale (Berger et al., 2001)	29.88	9.19	13 - 52	"I feel guilty because I have HIV." 1=Strongly Disagree, 4=Strongly Agree
Optimism/Pessimism				
Optimism - ELOT (Chang et al., 1997)	22.21	4.93	6 - 30	"I always look on the bright side of things." 1=Strongly Disagree, 5=Strongly Agree
Pessimism - ELOT (Chang et al., 1997)	25.17	8.11	9 - 45	"If something can go wrong for me, it will." 1=Strongly Disagree, 5=Strongly Agree
Coping Styles				
Behavioral Disengagement - Brief Cope (Carver, 1997)	3.67	1.67	2 - 8	"I've been giving up trying to deal with it." 1=I have not done this at all, 4=I have been doing this a lot
Denial - Brief Cope (Carver, 1997)	3.56	1.84	2 - 8	"I've been saying to myself, this isn't real." 1=I have not done this at all, 4=I have been doing this a lot
Depressive Symptoms				
CES-D (Radloff, 1977)	23.14	12.97	0 - 60	"I had crying spells." 0=Rarely, 3=Most of the time

(Reliability coefficients for all scales were > .80)

Regression Model



Results

Multiple Regression Results (N=190)

Significant Predictor Variables	Criterion Variable		
	β	t	p
Symptom Load	.32	6.10	.000
Stigma-Negative Self-Image	.16	3.00	.004
Optimism	-.18	-3.42	.001
Pessimism	.23	3.99	.000
Behavioral Disengagement	.16	2.40	.018
Denial	.17	2.70	.008

Adj R² = .55
F (13,176) = 7.30, p < .01

Conclusions

- Symptom load and depressive symptoms are positively correlated.
- Negative self-image (self-stigma) and depressive symptoms are positively correlated.
- Optimism and depressive symptoms are negatively correlated.
- Pessimism and depressive symptoms are positively correlated.
- Behavioral Disengagement and depressive symptoms are positively correlated.
- Denial and depressive symptoms are positive correlated.
- Symptom load, negative-self image, optimism/pessimism, behavioral disengagement, and denial account for 55% of the variance in depressive symptoms.

Clinical Implications

- Clinicians should focus on the associations between salient stressors (e.g. symptom load, HIV-related stigma), optimism/pessimism, and coping mechanisms when conceptualizing patient distress.
- Strategies with a focus on positive reframing of unattainable goals, acceptance of uncontrollable events, and continued active coping should be emphasized.

Limitations

- Self-report measures were used.
- Interpretations are limited due to the cross-sectional correlational design.
- Limited generalizability since a convenience sample was used and is not likely to be representative of all persons living with HIV and AIDS.

Future Research

- Comprehensive intervention programs are needed to address each component of the coping process: appraisal of stressors, coping, and reappraisal (Folkman, 1997).
- Specifically, interventions are needed that incorporate symptom management, improvement of self-image and reduction of self-stigmatizing thoughts/behaviors, increased optimism/decreased pessimism, and promotion of adaptive coping strategies.
- Data collection methods other than self-report are needed.
- Longitudinal studies that identify directionality of relationships between variables of interest in this study.
- Further investigations into the relationship between the physical symptoms of illness and somatic symptoms of depression.

Select References

Berger, B. E., Ferrans, C. E., & Lashley, F. R. (2001). Measuring stigma in people with HIV: Psychometric assessment of the HIV stigma scale. *Research in Nursing & Health, 24*, 518-529.

Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief cope. *International Journal of Behavioral Medicine, 41*, 92-100.

Carver, C. S., & Scheier, M. F. (2003). *Optimism*. In C. Snyder & S. Lopez (Eds.), *Handbook of positive psychology*. London: Oxford University Press.

Catz, S. L., Kelly, J. A., Bogart, L. M., Benetsch, E. G., & McAulliffe, T. L. (2000). Patterns, correlates, and barriers to medication adherence among persons prescribed new treatments for HIV disease. *Health Psychology, 19*, 124-133.

Chang, E. C., Maydeu-Olivares, A., & D'Zurilla, T. J. (1997). Optimism and pessimism as partially independent constructs: Relationship to positive and negative affectivity and psychological well-being. *Personality and Individual Differences, 23*, 433-440.

Folkman, S. (1997). Positive psychological states and coping with severe stress. *Social Science and Medicine, 45*, 1207-1221.

Holzemer, W. L., Corless, I. B., Nokes, K. M., Turner, J. G., Brown, M. A., Powell-Cope, G. M., Inouye, J., Henry, S. B., Nicholas, P. K., & Portillo, C. J. (1999). Predictors of self-reported adherence in persons living with HIV disease. *AIDS Patient Care and STDs, 13*, 185-197.

Ironson, G., Friedman, A., Klimas, N., Antoni, M., Fletcher, A., LaPerriere, A., Simoneau, J., & Schneiderman, N. (1994). Distress, denial, and low adherence to behavioral interventions predict faster disease progression in gay men infected with human immunodeficiency virus. *International Journal of Behavioral Medicine, 1*, 90-105.

Johns Hopkins University Department of Epidemiology. (n.d.). Retrieved October 6, 2003 from Johns Hopkins University, The Multicenter AIDS Cohort Study (MACS) web site.

Kalichman, S. C., & Catz, S. L. (2000). Stressors in HIV infection. In K. Nott & K. Vedhara (Eds.), *Psychosocial and biomedical interactions in HIV infection: Biobehavioral perspectives on health and disease prevention*. Amsterdam: Harwood Academic Publishers.

Kalichman, S. C., Romps, D., & Cope, M. (2000). Distinguishing between overlapping somatic symptoms of depression and HIV disease in people living with HIV. *AIDS, Journal of Nervous and Mental Disease, 188*, 662-670.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Leserman, J. (2003). HIV disease progression: Depression, stress, and possible mechanisms. *Biological Psychiatry, 54*, 295-306.

Parsons, J. T., Halkitis, P. N., Wolitski, R. J., & Gomez, C. A. (2003). Correlates of sexual risk behaviors among HIV-positive men who have sex with men. *AIDS, Education and Prevention, 15*, 383-400.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.

SPSS Inc. (1999). *SPSS Base 10.0 for Windows User's Guide*. SPSS Inc., Chicago, IL.

Taylor, S. E., Kemeny, M. E., Aspinwall, G. G., Schneider, S. G., Rodriguez, R., & Herbert, M. (1992). Optimism, coping, psychological distress, and high-risk sexual behavior among men at risk for acquired immunodeficiency syndrome (AIDS). *Journal of Personality and Social Psychology, 63*, 460-473.

Vosvick, M., Gore-Felton, C., Koopman, C., Thoresen, C., Krumboltz, J., & Spiegel, D. (2002). Maladaptive coping strategies in relation to quality of life among HIV+ adults. *AIDS and Behavior, 6*, 97-105.

Acknowledgements

We would like to thank AIDS Outreach Center, Catholic Charities of Fort Worth, Tarrant County AIDS Interfaith Network, Dallas Resource Center, AIDS Services of North Texas, Center for Psychosocial Health members: Julie Ballinger, Ana Luz Chiana-Scifres, Diana Dolan, Nancy Fruge, Maggie Gutowski, Robert S. Hilborn, Matthew Lamb Amber Lasater, Nikko Maharaj, LaDonna Saxon, Andrew Scherbarth, and Elaine Stephen for their contribution to data collection and data compilation efforts. Funding for this research was provided by a UNT faculty research grant.