Parents Just Don't Understand? Parental Social Support as a Mediator of Stress and Quality of Life in HIV+ Adults

Sam Deacon
Thomas DeSena M.A.
Mark Vosvick Ph. D.
Department of Psychology

Center for Psychosocial Health Research

UNIVERSITY OF NORTH TEXAS

Introduction

- Diamond and colleagues (2010) showed HIV+ individuals have a lower quality of life (QOL) than individuals with Non-Hodgkin lymphoma.

- HIV+ individuals who undertake stress management interventions significantly improve their mental health and QOL (Scott-Sheldon et. al, 2008).

- Social support is associated with lower levels of stress (Cohen & Wills, 1985) and improved QOL in individuals with HIV (Scott-Sheldon et al, 2008).

- One area of social support that displays mixed results is parental social support. Some studies show no significant difference (Kimberly and Serovich,1996) while other studies show parental social support to be significantly associated with QOL (Haas, 2002).

Theory:
The Buffering Hypothesis (Cohen et al., 1984)

Stressor → Stress → Social Support (Parental Social Support) → Perceived Stress → QOL
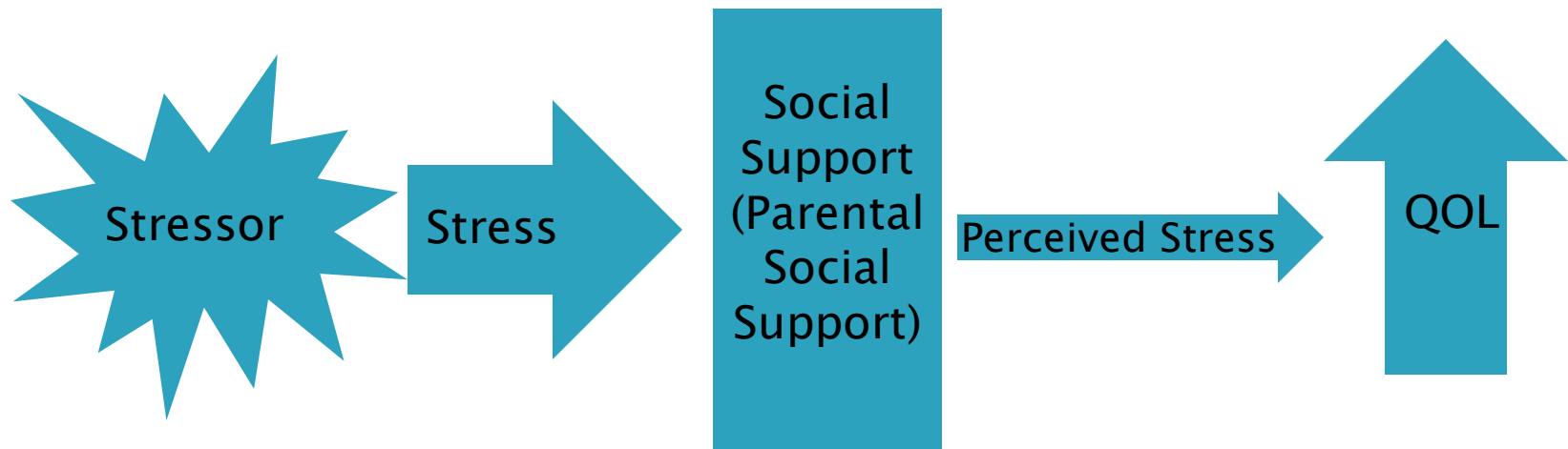
Hypotheses

▸ An inverse relationship exists between Perceived Stress and QOL.

▸ A positive relationship exists between Parental Social Support and QOL.

▸ Parental Social Support and Perceived Stress explains a significant portion of the variance in QOL.

▸ Parental Social Support mediates the relationship between Perceived Stress and QOL.

Method

- Participants were recruited for Project Voices, a survey-based research project that examined health issues in HIV+ individuals.
- IRB approval was obtained for Project Voices.
- Project Voices recruited participants from AIDS Service Organizations in the Dallas - Fort Worth metroplex area.
- Participants received a $15 incentive to complete the survey.

Measures

▸ <u>UCLA Social Support Inventory</u> – the Sources of Support subscale was used to measure parental social support.

◦ Cronbach's α = .88 (Dunkel-Schetter et al., 1986)
◦ Discriminant and construct validity (Chriss et al., 2004)
◦ 70 item inventory with a 5 point likert-type scale (1= never, 5= very often)
◦ Higher scores indicate greater social support
◦ Example: "How often did your parent provide major assistance within the past three months?"

Measures

▸ <u>Perceived Stress Scale</u> – used to measure perceived stress.

- Cronbach's α = .85 (Cohen et al., 1983)
- Predictive Validity (Cohen et al., 1983)
- 14 item scale with a 5 point likert-type scale (0= never, 4= very often)
- Higher scores indicate greater perceived stress
- Example: "in the last month, how often have you felt nervous and 'stressed'?"

Measures

- MOS HIV Survey – the quality of life subscale was used to measure Quality of Life
  - The entire survey's Cronbach's α = .78 (Wu et al., 1991).
  - Good Discriminant Validity (Revicki et al., 1998)
  - This is a single item scale with a 5 point likert-type scale (1= very well, 5= very bad)
  - This item is reverse scored and multiplied by 20
  - Higher scores indicate better Quality of Life
  - Example: "How has the quality of life been during the past 4 weeks?"

Sample Demographics

n= 288

*Note: 1 individual did not report gender & ethnicity. 5 did not report sexual orientation.

Gender		
Male	142(49.5%)	
Female	140(48.6%)	
Transgender	5 (1.7%)	
Orientation		
Heterosexual	158 (54.9%)	
Gay	81(28.1%)	
Bisexual	43(14.9%)	
Ethnicity		
African-American	156 (54.2%)	
European-American	85 (29.5%)	
Latino/a	32 (11.1%)	
Other	14 (4.9%)	
	Mean (SD)	Range
Age (in years)	41.6 (8.4)	19–68
Education (in years)	12.1 (2.6)	1–22
Years HIV+	7.7 (5.3)	.1–23

Results

Univariate

	Mean (SD)	Possible Range	Actual Range	α
1.QOL	44.4 (20.9)	20–100	20–100	–
2.Parent Support	2.7 (.9)	1–5	1–5	.88
3.Perceived Stress	19.5 (6.3)	0–40	1–40	.81

Bivariate

	1	2	3	4	5	6	7	8
1. Age	–							
2. African–American	.13*	–						
3. Education	.21**	.03	–					
4. Female	.12*	–.03	.22**	–				
5. Years with HIV	.23**	.03	.03	.09	–			
6. Parent Support	–.10	.00	–.11	–.16**	–.03	–		
7. Perceived Stress	–.19**	.07	–.12	–.19**	–.03	–.37	–	
8. QOL	.03	.05	.01	.02	.07	.31**	–.09	–
							* p<.05, ** p<.01	

Results

Multivariate

Dependent variable: QOL	β	t	p	Tolerance	VIF
Females	.03	.52	.60	.93	1.08
Transsexuals	.07	1.29	.20	.93	1.07
Years HIV+	.05	.84	.40	.97	1.03
African–American	−.01	−.09	.93	.76	1.32
Latino/a	−.03	−.52	.60	.81	1.24
Other Races	−.12	−2.07	.04	.90	1.12
Parent Support	.32	6.03	<.01	.96	1.04
Perceived Stress	−.34	−6.38	<.01	.97	1.03

adj. $r^2 = .23$ (F(8, 279) = 10.34, $p < .01$

A Baron and Kenny Mediation (1986) was run but the results failed to show significance.

UNIVERSITY OF NORTH TEXAS

Conclusion

▸ <u>Hypothesis 1</u> was supported. The results indicated there is an inverse relationship between Perceived Stress and QOL.

▸ <u>Hypothesis 2</u> was supported. The results indicated a positive relationship between Parental Social Support and QOL.

▸ <u>Hypothesis 3</u> was supported. The results showed that Parental Social Support and Perceived Stress explained a significant amount of the variance of QOL.

▸ <u>Hypothesis 4</u>was not supported. The results of this study failed to show that Parental Social Support mediated the relationship between Perceived Stress and QOL.

UNIVERSITY OF NORTH TEXAS

Discussion

▸ Our study confirmed earlier findings that perceived stress is associated with QOL (Scott-Sheldon et al. 2008) and social support (Cohen & Wills, 1985).

▸ A positive relationship was found between Parental Social Support and QOL but failed to show a mediation between Perceived Stress and QOL.

Discussion

- Clinical Implications: based upon the relationship between Parental Social Support and QOL clinicians should develop intervention programs to strengthen these relationships.
- Future Research should continue to examine the influences of Parental Social Support on health outcomes in HIV-positive populations.
- Limitation: there is a lack of generalizability, an inability to determine causality, and self-reports were used to collect data which could have resulted in response bias.

UNIVERSITY OF NORTH TEXAS

Acknowledgments

- Center for Psychosocial Health Research
  - Faculty and Members
- The people at The Dallas Resource Center
- The people at Samaritan House in Fort Worth
- HIV Community

References

Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173–1182

Chriss, P., Sheposh, J., Carlson, B., Riegel, B. (2004). Predictors of successful heart failure self-care maintenance in the first three months after hospitalization. Heart & Lung. 33(6), 345 – 353

Cohen, S., & McKay, G. (1984). Social support, stress and the buffering hypothesis: A theoretical analysis. In A. Baum, J. E. Singer, & S. E. Taylor (Eds.), Handbook of psychology and health, 4, 253–267

Cohen, S., & Wills, T. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98(2), 310–357

Cohen, S., Kamarck, T., & Mermelstein, R. (1983) A Global Measure of Perceived Stress. Journal of Health and Social Behavior, 24, 385–396

Diamond, C., Taylor, T. H., & Anton-Culver, H. (2010). Quality of life, characteristics and survival of patients with HIV and lymphoma. Quality of Life Research, 19(2), 149 – 155.

Dunkel-Schetter, C., Feinstein, L., & Call, J. (1986). UCLA Social Support Inventory.

Haas, Stephen M.. Social Support as Relationship Maintenance in gay male couples coping with HIV or AIDS. Journal of Social and Personal Relationships 19.1 (2002): 87–111

Kimberly, J. A., & Serovich, J. M. (1996). Perceived social support among people living with HIV/AIDS. The American Journal of Family Therapy, 24, 41–53.

Revicki, D. A., Sorensen, S., & Wu, A. W. (1998). Reliability and Validity of Physical and Mental Health Summary Scores from the Medical Outcomes Study HIV Health Survey. Medical Care, 36(2), 126–137.

Scott-Sheldon, L. A., Kalichman, S. C., Carey, M. P., & Fielder, R. L. (2008). Stress Management Interventions for HIV+ Adults: A Meta-Analysis of Randomized Controlled Trials, 1989 to 2006. Health Psychology, 27(2), 129–139

Wu, A. W., Rubin, H. R. Mathews, W. C. Ware Jr., J. E., Brysk, L. T., Hardy, W. D., Bozzette, S. A., Spector, S. A., Richman, D. D. (1991). A Health Status Questionnaire Using 30 Items from the Medical Outcomes Study. Medical Care, 29(8), 786 – 798