Trauma, Dispositional Forgiveness, and Depression in People Living with HIV/AIDS

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Abstract

Depression in people with HIV/AIDS (PLH) is common and detrimental—they suffer functional impairment, decreased motivation, and poor health. PLH report at least twice as much depression as does the general population. High rates of traumatic experiences (e.g., diagnosis with terminal illness, HIV-related symptoms) are also common among PLH; consequently, PLH have high rates of traumatic symptoms, such as nightmares, hypervigilance, and emotional numbing. Current research ties traumatic events and subsequent PTSD symptoms to depression. By contrast, dispositional forgiveness is a personality trait that can be seen as a coping mechanism. Forgiveness helps people cope with hurtful experiences via the release of negative thoughts, feelings, and destructive behaviors that ensue. Furthermore, forgiveness has been associated with lower rates of depression. Despite these findings, no studies to date have examined whether forgiveness attenuates either trauma symptoms, depression, or the relationship between trauma and depression among PLH. This study's sample is diverse (n = 213, 44% female, 56% African-American, 35% European American, 9% Latino, 72% low income, ages 19-68). We hypothesized that (a) more trauma symptoms and less dispositional forgiveness are associated with more cognitive-affective depression symptoms; (b) in the event that trauma symptoms does not predict depression, then this finding is because dispositional forgiveness acts as a mediator between trauma symptoms and depression. After controlling for demographic and AIDS-related medical factors, an exploratory hierarchical linear regression analysis (*Adjusted* R^2 = .43 [$F(9, 203) = 19.01$, $p < .001$]) suggests that more HIV-related symptoms ($t = 2.68$, $p = .01$), trauma-related symptoms ($t = 5.90$, $p < .001$), and less dispositional forgiveness ($t = -7.74$, $p < .001$) were independently associated with a greater cognitive-affective depression scores. The implication of our study is that therapeutic interventions to identify and address symptoms of trauma, as well as to promote forgiveness of unpleasant experiences, would be associated with lower rates of depression in PLH.

Background

Depression: common in PLH (Cohen et al., 2002; Drebing et al., 1994; Kalichman, Rompa, & Cage, 2000)

Mood disorders are associated with:

- poorer med adherence (Catz et al., 2000; Holzemer et al., 1999) may →med failure (Liu et al., 2001)
- HIV-related symptoms (Cohen et al., 2002; Griffin & Rabkin, 1997; Kalichman & Catz, 2000)
- faster disease progression (Ickovics et al., 2002; Ironson et al., 1994)

Stressors for PLH that are associated with depression

Trauma-related symptoms: child/adult abuse, HIV diagnosis, sexual assault (Kalichman, Sikkema, DiFonzo, Luke, & Austin, 2002; Kelly et al., 1998; Range et al., 1997; Simoni & Ng, 2000)

Physical symptoms: night sweats, fatigue, opportunistic infections (Breitbart et al., 1998; Rosenfeld et al., 1996; Vogl et al., 1999)

Forgiveness as a coping strategy in HIV- populations

Related to less trauma symptoms (Snyder & Heinze, 2004; Reed, 2004; Witvliet Phipps, Feldman, & Beckham, 2004)

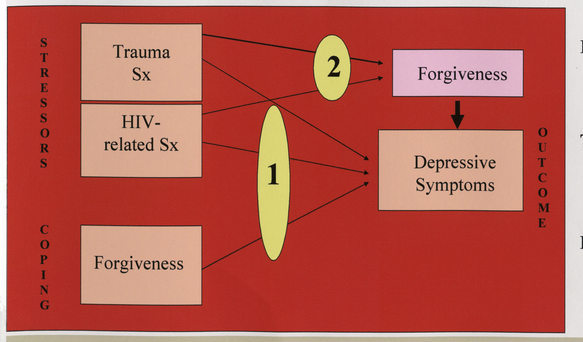
Related to less depressive symptoms (Brown, 2003; Seybold, Hill, Neumann, & Chi, 2001; Thompson et al., 2005)

Trauma is associated with depression in PLH (Kelly et al., 1998; Roberts, Ciesla, Direnfeld, & Hewitt, 2000; Simoni & Ng, 2000)

Childhood trauma & depression predict suicide attempts (Roy, 2000).

Hypotheses

1. High levels of both trauma-related and HIV-related symptoms and low levels of dispositional forgiveness will be predictive of cognitive affective depression symptoms, after controlling for demographic and other HIV-related variables.
2. In the event that the trauma symptoms do not predict depression, then we hypothesize that dispositional forgiveness mediates the relationship between trauma and depression.



Method

Participant Characteristics

Demographic and Medical Variable Summary

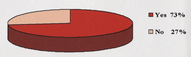
Variables	Mean	Standard Deviation	Range
Age	41.26	8.33	19 – 68
Education	12.09	2.60	1 – 22
CD4 Count	406.39	262.53	3 – 1500
Months Since Dx	90.17	62.64	1.02 – 276.16
Symptoms	7.53	5.83	0 – 20
Trauma	27.57	18.77	0 – 72
Forgiveness	81.62	15.15	27 – 125
Depressive Sx	12.88	6.88	0 – 33

Sex

Race/Ethnicity

Sexual Orientation

HIV-Med Use



Employment

Income

Measures

	α	
Physical Symptoms		
HIV Symptom Checklist (Johns Hopkins University, 1987)		"Fatigue lasting for at least 2 weeks." 0=Not Present, 4=Very Severe
Depressive Symptoms		
CES-D (Radloff, 1977) Cognitive-Affective Subscale (Kalichman et al., 2000)	.82	"I had crying spells." 0=Rarely, 3=Most of the time
Trauma Symptoms		
Acute Stress Disorder Screener (Gore-Felton, n.d.)	.94	"Do you ever experience nightmares related to [traumatic event]." 0=Not at all, 4=All the time
Forgiveness		
Heartland Forgiveness Scale (Thompson, 2005)	.76	"When someone disappoints me, I can eventually move past it." 1=Almost always false, 7=Almost always true

Data Analyses

- All data were entered twice to control for data entry errors
- All data were analyzed using SPSS version 11.5 (SPSS, Inc., Chicago, IL)
- Standard procedures for assuring normality were performed
- Univariate & bivariate analyses were performed
- Exploratory hierarchical multiple regression analysis was conducted
- Multicollinearity statistics were checked

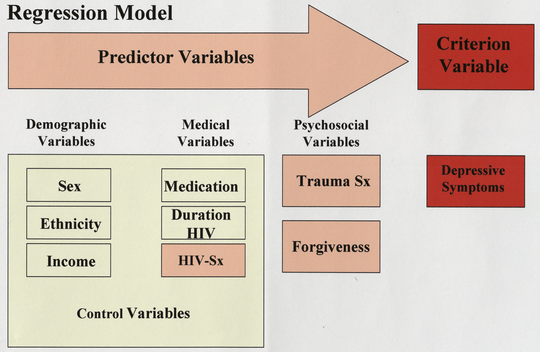
Correlation Matrix

Intercorrelations Among Variables

Scale	1	2	3	4	5	6	7	8	9	10
1. Depress	-									
2. Trauma	.50**	-								
3. Forgive	-.50**	-.20**	-							
4. Meds	-.05	-.20**	-.03	-						
5. MoDx	.03	.02	.00	.09	-					
6. Sympt	.38**	.44**	-.16*	.11	.16*	-				
7. Sex	-.01	-.13	.09	.00	.12	-.12	-			
8. EthAA	.05	-.02	-.04	-.13	.07	.06	-.04	-		
9. EthHA	.04	.04	-.13	.09	-.03	.05	-.01	-.36	-	
10. Income	.12	.03	-.12	.02	-.02	.11	-.17*	.12	-.05	-

Note: * p < .05, ** p < .01.

Regression Model



Summary of Regression Analysis

	β	*t*	*p*
Sex	.11	2.10	.04
Ethnicity AA	.03	0.55	NS
Ethnicity HA	-.02	-.42	NS
Income	.05	0.97	NS
Medication Use	.00	0.00	NS
Duration of HIV in Months	-.05	-0.86	NS
HIV-related Symptoms	.16	2.68	.01
Trauma Symptoms	.36	5.90	<.001
Forgiveness	-.42	-7.74	<.001

Adj R^2 = .43

$F(9, 203) = 19.01$, $p < .001$

Conclusions

H1: Confirmed—After controlling for demographic and HIV-related variables, higher levels of trauma-related and HIV-related symptoms and lower levels of dispositional forgiveness were associated with higher levels of depressive symptoms.

H2: Not confirmed—The relationship between trauma-related symptoms and cognitive-affective depression symptoms does not appear to be mediated by dispositional forgiveness.

Therefore, although both (a) trauma-related symptoms and (b) the general disposition to forgive self-, others-, and uncontrollable situations are related to cognitive-affective related symptoms, it appears that a disposition to forgive does not directly disrupt the pathway between trauma and depression.

Clinical Implications

- **Depression screening should be a high priority for PLH who are: male, have multiple HIV- or trauma-related symptoms, and/or those with low levels of dispositional forgiveness.**
- **Post-traumatic symptom screening for PLH with depression should be a priority.**
- **Since 36.2% of this sample met the cut-off for clinically significant levels of depression, interventions are necessary to treat PLH with depression.**
- **Efficacy of interventions for depression in PLH that address traumatic events and foster forgiveness—toward self, others, & uncontrollable situations—may be higher than efficacy of conventional interventions.**
- **At present, there is insufficient evidence that forgiveness interventions applied specifically to traumatic experiences would alleviate comorbid depression symptoms; however, interventions that target individuals with trauma-related symptoms and who are unable to forgive themselves, others, or uncontrollable circumstances may effectively reduce depressive symptoms in PLH beyond the impact of HIV-symptom alleviation.**

Limitations

- **The correlational, cross-sectional design of this study limits any causal references.**
- **Possible unidentified variables could mediate/moderate these relationships.**
- **All data was collected via self-report measures, which introduced method error variance.**
- **Generalizability of our sample may be limited because we used a low-income convenience sample of PLH in the southern United States who utilize AIDS-service organizations —Those who have higher income, do not seek services, or live in other regions may differ.**

Future Research

- **Longitudinal studies (to establish cause and effect relationships)**
- **Multiple modes of data collection**
- **Access to middle/high SES PLH**
- **Interventions**

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