



# EXAMINING STRESS-RELATED GROWTH AND COPING AS PREDICTORS OF SADNESS IN HIV+ INDIAN ADULTS: SOME PRELIMINARY FINDINGS

Casey N.-H. Batterbee<sup>1</sup>, Edward C. Chang<sup>1\*</sup>, Shanmukh V. Kamble<sup>2</sup>,  
Tina Yu<sup>1</sup>, & Olivia D. Chang<sup>3</sup>

<sup>1</sup>Department of Psychology, University of Michigan, (United States)

<sup>2</sup>Department of Psychology, Karnatak University, (India)

<sup>3</sup>Research in Action Academy™, Ann Arbor, MI, (United States)

## ABSTRACT

*The present study examined the role of stress-related growth and emotion-focused coping in predicting sadness among HIV positive Indian adults. Indeed, findings indicated that both stress-related growth and emotion-focused coping were significant in predicting sadness. Importantly, we found that emotion-focused coping behaviors augmented the prediction of sadness beyond stress-related growth. Specifically, several emotion-focused coping behaviors, namely, self-distraction, denial, and venting, emerged as significant unique predictors of sadness, beyond stress-related growth. Some implications of the present findings are discussed.*

## I. INTRODUCTION

The human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS) represents a serious concern throughout the world, with 35 million people currently living with HIV/AIDS [1]. Thus, given the prevalence of HIV, researchers have become interested in examining psychological outcomes among those who are HIV-positive. Indeed, it may be interesting to examine negative adjustment (e.g., sadness) among HIV-positive individuals in a region where HIV is prevalent (e.g., India) [2].

One variable that may be interesting to examine in relation to sadness is *stress-related growth*, defined as positive life changes that occur after stress [3]. Indeed, an HIV-positive diagnosis may be a stressful event in one's life, and has been shown to be associated with stress-related growth [4]. Additionally, other coping processes may also play a role in sadness among HIV-positive individuals, such as *emotion-focused coping*, or coping aimed at reducing or managing the emotional distress associated with the stressful situation [5]. However, researchers have noted that certain facets of emotion-focused coping may be adaptive, while others may be maladaptive [6]. Indeed, it would be of interest to examine the roles of both emotion-focused coping and stress-related growth in relation to sadness in an HIV-positive population.

## **II. PURPOSE OF THE PRESENT STUDY**

Given these considerations, we conducted the present study to examine the relations between stress-related growth, emotion-focused coping, and feelings of sadness in HIV-positive Indian adults.

We expected to find a negative relationship between stress-related growth and sadness. We also expected coping to add to the prediction of sadness. Finally, we expected maladaptive emotion-focused coping behaviors (viz., venting, behavioral disengagement) to be positively predictive of sadness.

## **III. METHOD**

### **3.1 Participants**

Two hundred and twenty-one HIV-positive adults (97 males & 114 females) from a population of day-laborers in south Karnataka, India. Participants' ages ranged from 19 to 54 years. The majority of participants indicated that they were currently divorced (57.5%) and had less than 12 years of formal education (30.2%).

### **3.2 Measures**

#### **3.2.1 Stress-related Growth.**

The Posttraumatic Growth Scale (PGS) [7] was used to assess for stress related growth. Respondents are asked to indicate the extent to which they experienced a change after a stressful event from a scale of 1 (I did not experience this change) to 5 (I did experience this change to a great degree) on 21 self-report questions, with higher scores indicating greater growth.

#### **3.2.2 Emotion-Focused Coping.**

We selected measures from the Brief COPE scale [8] to assess for coping behaviors (viz., Self-Distraction, Denial, Emotional Support, Behavioral Disengagement, Venting, Positive Reframing, & Acceptance). Respondents are asked to rate 20 self report items measuring various coping behaviors across a 4-point Likert-type scale ranging from 1 (I haven't been doing this at all) to 4 (I've been doing this a lot), with higher scores reflecting greater coping.

#### **3.2.3 Sadness.**

To measure feelings of sadness, we used an item (viz., item 18, "I feltsad") from the Center for Epidemiologic Studies Depression scale (CES-D) [9]. Respondents are asked "how often you have felt this way in the last week" on a 4-point Likert-type scale from 0 (rarely or none of the time) to 3 (most or all of the time), with higher scores on our sadness measure indicating greater negative feelings.

### **3.3 Procedure**

Approval for the study was obtained from the Institutional Review Board prior to data collection.

## **IV. RESULTS**

We conducted a regression analysis to examine a prediction model in which emotion-focused coping behaviors might account for variance in sadness, beyond stress-related growth, in HIV-positive Indian adults. As a control, some demographic variables (e.g., age, gender, marital status, & education level) were entered in the First Step.

In the Second Step, we entered stress-related growth. Finally, emotion-focused coping behaviors (viz., self-distraction, active coping, denial, emotional support, behavioral disengagement, venting, positive reframing, & acceptance) were entered (as a set) in the Third Step.

As shown in **Table 1**, demographic variables did not account for any variance in sadness  $F(4, 204) = 2.16, n.s.$  Next, when stress-related growth was entered, it was found to account for a large ( $f^2 = .30$ ) 23% of additional unique variance in sadness,  $F(1, 203) = 63.38, p < .001$ . Finally, when coping was entered, it was found to account for a small ( $f^2 = .10$ ), but significant 9% of additional unique variance in sadness,  $F(12, 191) = 3.78, p < .001$ . Within the coping set, self-distraction ( $\beta = -.30, p < .001$ ), denial ( $\beta = -.15, p < .05$ ), and venting ( $\beta = .15, p < .05$ ) emerged as significant unique predictors of sadness. The full prediction model was found to account for a large ( $f^2 = .54$ ) 35% of variance in sadness,  $F(12, 197) = 9.01, p < .001$ .

## V. DISCUSSION

In examining the roles of stress-related growth and emotion-focused coping in relation to sadness among HIV-positive Indians, several interesting findings emerged. First of all, stress-related growth was found to significantly and negatively predict sadness, or in other words, it appears that stress-related growth is important in decreasing sadness among HIV-positive Indians. Second, emotion-focused coping was found to be significantly predictive of sadness above and beyond stress-related growth. Specifically, it appears that certain emotion-focused coping behaviors are significantly associated with reduced sadness (viz., self-distraction, denial), while others may be maladaptive and significantly associated with increases in sadness (viz., venting).

Overall, our findings have at least three important implications. First, the results of our study are consistent with past research that has demonstrated the importance of stress-related growth in relation to negative adjustment (i.e., sadness) among HIV-positive adults, highlighting the importance of interventions that foster stress-related growth in this population. Second, given that we found a significant negative relationship between two emotion-focused coping behaviors (viz., self-distraction & denial) and sadness, these behaviors may serve as protective factors in relation to sadness. However, while emotion-focused coping behaviors overall were significant in predicting sadness, it remains unclear how these behaviors may affect positive adjustment (e.g., happiness). Finally, our results were consistent with Carver et al.'s contention that venting represents a maladaptive emotion-focused coping behavior [10].

VI. FIGURES AND TABLES

Table 1

Results of Hierarchical Regression Analysis Showing Amount of Variance in Sadness Accounted for by Demographics, Stress-Related Growth, and Coping in HIV-Positive Indian Adults

Outcome and Predictors	$\beta$	$R^2$	$\Delta R^2$	$F$
<b>Sadness</b>				
Step 1: Demographics		.04	--	2.16
Age	-.15			
Gender	.04			
Marital Status	.11			
Educational Level	.00			
Step 2: Stress-Related Growth	-.50***	.27	.23	63.38***
Step 3: Emotion-Focused Coping		.35	.09	3.76***
Self-Distraction	-.30***			
Denial	-.15*			
Emotional Support	-.02			
Behavioral Disengagement	.08			
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Outcome and Predictors	$\beta$	$R^2$	$\Delta R^2$	$F$
Step 3: Emotion-Focused Coping (continued)		.35	.09	3.76***
Venting	.15*			
Positive Reframing	-.02			
Acceptance	.15			

Note.  $N = 208$ .

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p \leq 001$ .

VII. CONCLUSION

Overall, the present study highlights the importance of both stress-related growth and emotion-focused coping behaviors in predicting sadness among HIV positive Indian adults; however, some limitations are worth noting. First, while the present findings suggest it may be important to implement interventions fostering stress-related growth, it remains unclear how emotion-focused coping behaviors may influence positive adjustment (e.g., happiness). In other words, while we found that self-distraction and denial are significant in reducing sadness,

future studies should also examine positive adjustment variables to determine if these facets of emotion-focused coping have adaptive properties. Second, it would be interesting to determine if similar or different findings emerge among other cultural groups (e.g., East Asians). Finally, as we used a cross-sectional model, it would be interesting for future researchers to conduct prospective studies to examine how stress-related growth and emotion-focused coping might influence the sadness of HIV positive Indian adults over time.

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