



Controlling Health: Medical Self-Efficacy, Energy- Fatigue, and Disclosure of HIV Status

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Definitions



- ❖ Locus of Control – a person's belief about whether the outcomes of their actions are **contingent on what they do (internal)** or on events outside of their personal control (external)
- ❖ Self-Efficacy – the belief that one is capable of performing in a certain manner to attain certain goals
- ❖ Disclosure – the speech or act of making something evident, e.g. disclosing HIV Status
- ❖ Quality of Life – the degree of well-being reported by an individual
- ❖ PLH – People Living with HIV

Review of Literature



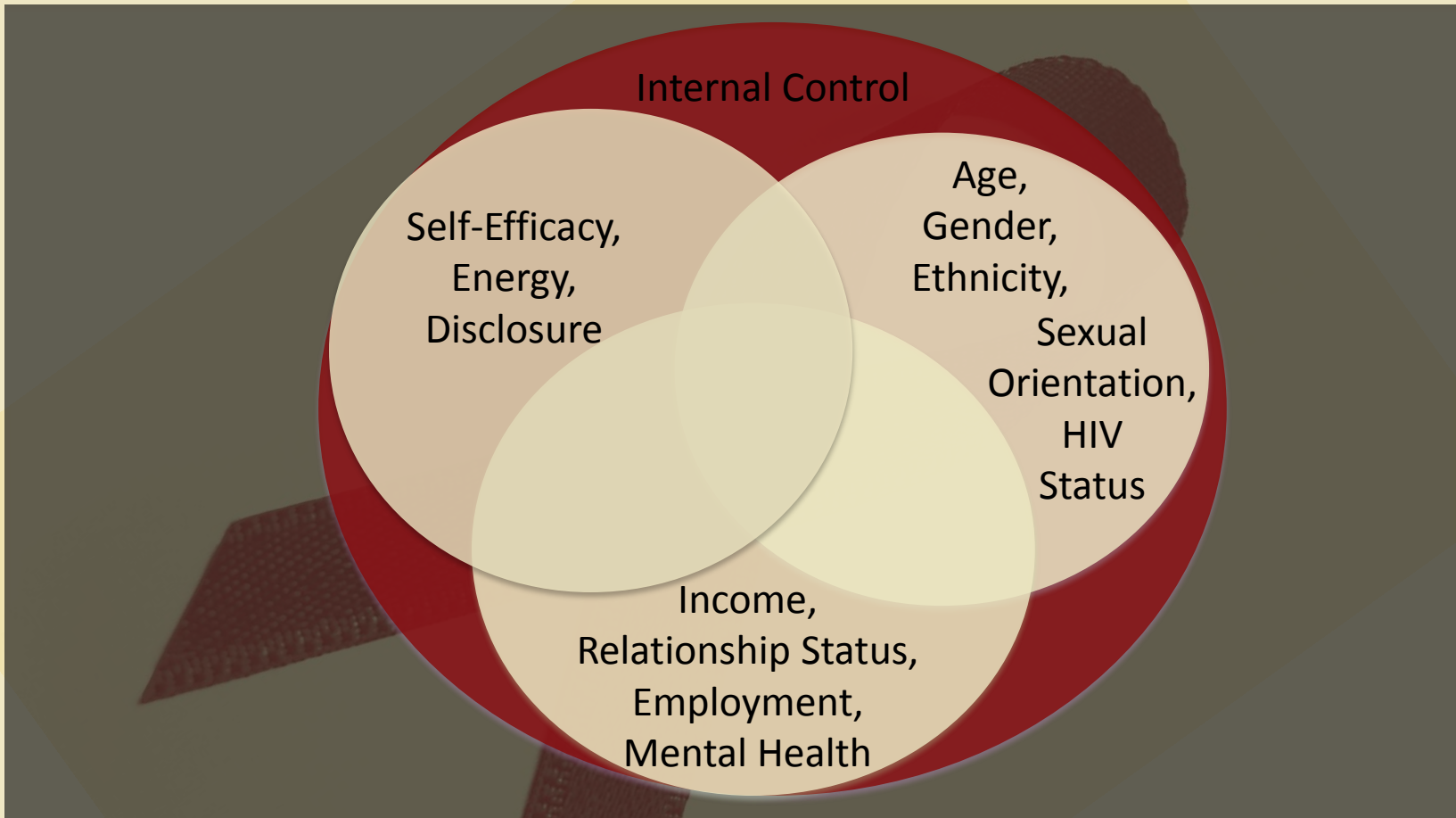
- ✧ Locus of control predicts and explains health behavior (Ubbiali et al., 2008)
- ✧ PLH who do not disclose their HIV status to sexual partners report higher levels of risky sexual behavior as well as significantly lower levels of self-efficacy (Kalichman & Nachimson, 1999)
- ✧ HIV disclosure is positively associated with overall quality of life (Chandra et al., 2003)

Gaps in Knowledge

- ✧ The use of a locus of control measure in PLH to understand medical outcomes and decisions of PLH have not yet been examined.
- ✧ The effects of disclosure in relation to energy or fatigue have yet to be studied.

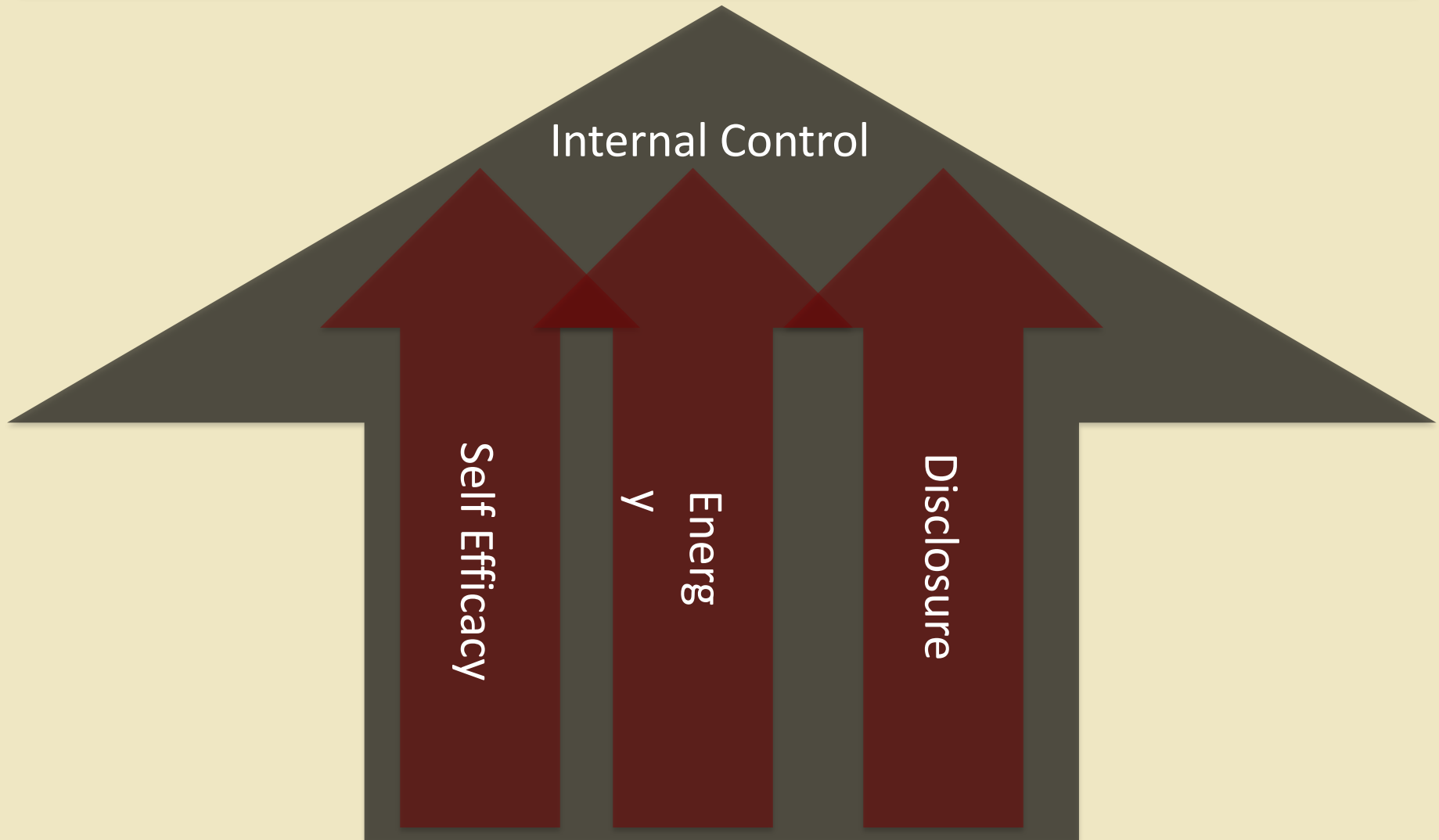


Internal Locus of Control Theory



(Levensen, 1973)

Hypotheses



Self Efficacy

Energy

Disclosure

Internal Control

Methodology

- ✧ Study conducted with approval obtained by the Institutional Review Board (IRB)
- ✧ HIV+ individuals recruited from AIDS Service Organizations (ASO) in the Dallas-Ft. Worth metropolitan area
- ✧ Participants met inclusion criteria:
 - ✧ Over the age of 18
 - ✧ English-speaking
 - ✧ diagnosis of HIV
- ✧ Provided informed consent
- ✧ In compensation, participants received \$15 per baseline survey collected



Institutional
Board (IRB)

Medical Self-Efficacy



- ✧ Self-Efficacy of Managing Chronic Disease (HIV) scale (SEMCD; Lorig et al., 2001)
- ✧ 6-item scale measured on a 6-point likert-type scale
- ✧ 1 – Not at all confident
- ✧ 6 – Totally confident
- ✧ Reliability: Internal Consistency ($\alpha = .91$)
- ✧ Sample Question: “How confident are you that you can do things other than just taking medication to reduce how much your illness affects your everyday life?”

Energy and Fatigue

- ✧ Using the Medical Outcomes Survey – HIV (MOS-HIV; Wu et al., 1994; $\alpha = .87$)
 - ✧ Energy and Fatigue is the subscale we used to measure (Wu et al., 1994; $\alpha = .78$)
- ✧ A 4-item subscale measured on a 6-point likert-type scale
- ✧ 1 – None of the time
- ✧ 6 – All of the time
- ✧ Validity: Construct Validity
- ✧ Sample Question: “How often, during the last 4 weeks, did you feel worn out?”



Disclosure



- ✧ Using the HIV Stigma Scale (HSS; Berger, Ferrans, & Lashely, 1996; $\alpha = .96$)
 - ✧ Disclosure is a subscale we used to measure (Berger, Ferrans, & Lashely, 1996; $\alpha = .90$)
- ✧ A 10-item scale measured on a 4-point likert-type scale
- ✧ 1 – Strongly disagree
- ✧ 4 – Strongly agree
- ✧ Validity: Construct Validity
- ✧ Sample Question: “In many areas of my life, no one knows I have HIV”

Internal Locus of Control

- ✧ Using the Multidimensional Health Locus of Control Scales (MHLC; Wallston, Wallston, & DeVellis, 1978; $\alpha = .60 - .75$)
 - ✧ Internal Locus of Control subscale used to measure (Wallston, Wallston, & DeVellis, 1978; $\alpha = .65$)
- ✧ A 6-item scale that was measured on a 6-point likert-type scale
- ✧ 1 – Strongly disagree
- ✧ 6 – Strongly agree
- ✧ Reliability/Validity: Test re-test reliability, concurrent validity (Moshki et. al, 2007)
- ✧ Sample Question: “The main thing that affects my health is what I do to myself”



Results

Descriptive Statistics

| | Mean (SD) | Range |
|-----|------------|---------|
| Age | 47.5 (7.5) | 24 - 61 |

N = 61

Univariate

| | Mean (SD) | Range | α |
|---------------|-------------|---------|----------|
| Self-Efficacy | 39.5 (14.1) | 6 - 60 | .93 |
| Energy | 12.8 (4.5) | 4 - 22 | .83 |
| Disclosure | 26.3 (5.8) | 10 - 40 | .70 |

Frequency Statistics

| | Frequency (%) |
|--|---------------|
| <u>Gender</u> | |
| Female | 32 (52.5) |
| <u>Ethnic Background</u> | |
| African American | 41 (67.2) |
| European American | 18 (29.5) |
| Other | 2 (3.3%) |
| <u>Sexual Orientation</u> | |
| Straight | 38 (62.3) |
| Gay/Lesbian/Bisexual | 23 (37.7) |
| <u>Have Seen a Mental Health Professional</u> | |
| Yes | 49 (80.3) |
| <u>Household Income</u> | |
| Below 10,000/yr | 30 (49.2) |

Correlations

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|----|-------|--------|-------------------|-------------------|------|------|-------------------|--------|------|------|----|
| 1 | -- | | | | | | | | | | |
| 2 | -.08 | -- | | | | | | | | | |
| 3 | -.06 | -.42** | -- | | | | | | | | |
| 4 | -.22 | -.27* | .34** | -- | | | | | | | |
| 5 | -.06 | .80** | -.52** | -.31* | -- | | | | | | |
| 6 | .08 | -.02 | .04 | -.09 | .02 | -- | | | | | |
| 7 | -.12 | -.21 | .10 | .15 | -.18 | .05 | -- | | | | |
| 8 | -.12 | .14 | -.13 | -.35** | .16 | -.13 | .15 | -- | | | |
| 9 | -.25* | .03 | .06 | .03 | -.06 | .06 | -.24 ^t | -.41** | -- | | |
| 10 | .10 | .10 | -.02 | -.10 | .09 | -.13 | -.03 | -.02 | -.20 | -- | |
| 11 | .13 | -.05 | -.23 ^t | -.24 ^t | .02 | -.09 | .11 | .27* | .10 | .30* | - |

- 1 – Age
- 2 – Gender
- 3 – Ethnicity
- 4 – Education
- 5 – Sexual Orientation
- 6 – Mental Health
- 7 – Income
- 8 – Self-efficacy
- 9 – Energy
- 10 – Disclosure
- 11 – Internal Locus of Control

** p<.01 *p<.05 ^t trending

Regression Analysis

Linear Regression

| | β | t | p |
|---------------|---------|------|-------------------|
| Self-Efficacy | .33 | 2.53 | .014* |
| Energy | .27 | 1.95 | .057 ^t |
| Disclosure | .33 | 2.63 | .011* |

$F(6, 54) = 2.52, p < .02$ Adj. $R^2 = .20$
Tolerance = .92, VIF = 1.09

** $p < .01$ * $p < .05$ ^t trending

Discussion



- ❖ Our findings suggest positive medical outcomes of PLH will help with the ability to effectively manage their HIV.
- ❖ Effective management of HIV may play an significant role in the improvement of quality of life among PLH.
- ❖ Improving quality of life may help people living with HIV to adopt positive coping strategies (Préau et al, 2005).

Clinical Implications

- ✧ Internal locus of control specific to the HIV+ populations may improve the understanding of psychosocial variables that could play a role in HIV populations.
- ✧ In order to increase the health and social benefits associated with higher levels of internal locus of control, clinicians must work towards understanding barriers in the:
 - ✧ Self-efficacy of managing chronic diseases,
 - ✧ Willingness to disclose HIV status,
 - ✧ And factors affecting physical and emotional energy and fatigue;that PLH face in the context of their medical condition and well-being.



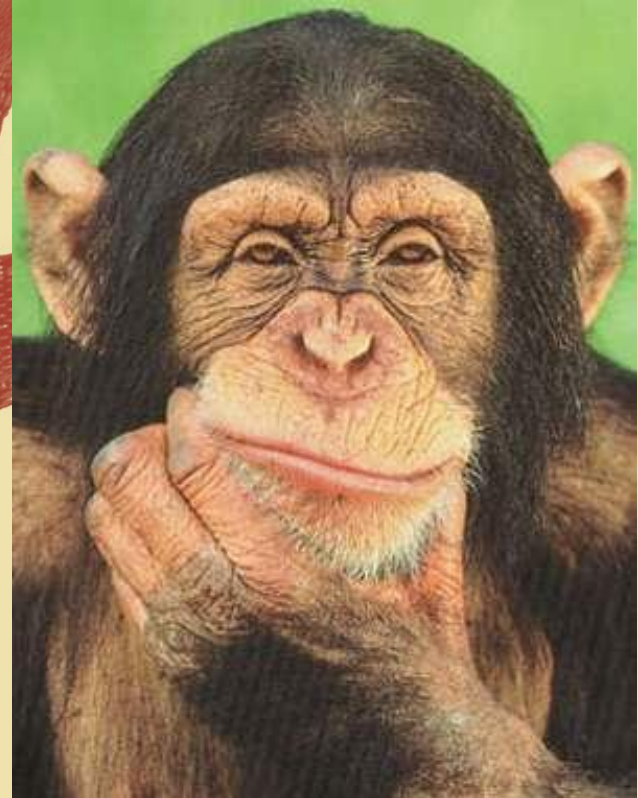
Limitations



- ✧ The cross-sectional, correlational design of our study limits causal inferences
- ✧ Sample population was only selected from one geographic location limiting generalizability
- ✧ Ethnically imbalanced, which also limits generalizability

Future Research

- ✧ Longitudinal studies
- ✧ Studies of other quality of life variables (role limitations, health distress, emotional well-being) in relation to internal locus of control
- ✧ Qualitative and focus group studies



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