

JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH


The IPV survivor decisional balance to leave (IPVDB-L) scale: Validity, reliability and implications

Jessica G. Burke, PhD, MHS
 University of Pittsburgh Graduate School of Public Health
Patricia S. Mahoney, MA
 Johns Hopkins Bloomberg School of Public Health
Samantha L. Illangasekare, MPH
 Johns Hopkins Bloomberg School of Public Health
Karen A. McDonnell, PhD
 George Washington University, School of Public Health
Andrea C. Gielen, ScD
 Johns Hopkins Bloomberg School of Public Health

Funding provided by the National Center for Injury Prevention and Control to the Johns Hopkins Center for Injury Research and Policy


Objectives

- Review the need for IPV intervention protocols
- Describe the Transtheoretical Model of Change and the concept of "decisional balance"
- Explain how theory can be applied to assist IPV survivors to achieve survivor-focused goals
- Outline development and validation of the IPV Survivor Decisional Balance to Leave (IPVDB-L) Scale
- Critically discuss implications of scale development and application to research and intervention


Need for IPV intervention protocols

- Little direction for health care professionals on how to intervene with women experiencing IPV
- Dearth of research on effectiveness of interventions for use in clinical settings
 - Example: McFarlane and Parker interventions (McFarlane, 1998; Parker, 1999)
- Need for tested theory-based interventions

The Transtheoretical Model of Change (TM)

- Originally developed to address process of smoking cessation, applied to many other health behaviors
- Asserts that behavior change occurs as a process through five stages
 - Precontemplation
 - Contemplation
 - Preparation
 - Action
 - Maintenance

(Prochaska & DiClemente, 1982; Prochaska & DiClemente, 1983)

Decisional Balance

- Component of TM that facilitates process through stages towards behavior change
- Decision-making has anticipated gains and losses
 - Utilitarian gains and losses for self
 - Utilitarian gains and losses for significant others
 - Approval or disapproval from significant others
 - Self-approval or self-disapproval
- Movement across stages is influenced by factors related to decision to change: pros and cons

(Janis & Mann, 1977; Prochaska & DiClemente, 1984)

Application of TM and decisional balance to IPV

- Research suggests that TM is a promising theoretical approach for interventions addressing abuse
 - Qualitative in depth interviews with 78 abused women (Burke et al, 2001)
 - Key informant interviews with additional 23 abused women (Burke et al, 2004)
 - Found that decisional balance was related to women's ability to end the relationship
- Behavioral outcome: leaving the relationship
 - Behavior must be specific rather than general
 - Behavior must be in control of survivor
 - Survivor theory vs. learned helplessness - empowering women to take action to staying safe

Development of IPVDB-L Scale

- Items modified from previous measure of decisional balance (Brown, 1999)
 - 6 pros items
 - 6 cons items
- Eight items added based on results from qualitative interviews with abused women (Burke et al, 2001; Burke et al, 2004)
- Asked to indicate levels of agreement with statements reflecting pros (positive aspects of leaving relationship) and cons (constraints/challenges to leaving relationship)

Items included in final IPVDB-L Scale

- 8 pros items
 - I feel calmer when he is not around
 - I'm tired of walking on eggshells around him
 - Remaining in this relationship is harmful to me
 - I don't feel good about myself in this relationship
 - I feel happier when he is not around
 - Everyone would be better off if we were not together
 - I feel like I am going crazy in this relationship
 - The abuse is getting worse and worse
- 5 cons items
 - I think I can make this relationship work
 - I would be lonely without him
 - I need him for financial support
 - I would feel like a failure if my relationship ended
 - I need him for emotional support

Testing IPVDB-L Scale: METHODS

- 96 women recruited from community health clinics
 - At least 18 years old, not pregnant, English speaking, without private insurance
 - Have experienced physical abuse by partner in past year
- Quantitative survey measuring:
 - Demographics (race, age, employment status, educational status, federal income support status)
 - Relationship status
 - Abuse history (CTS)
 - Decisional balance (20 item scale)

Measuring Stage of Change for Leaving

- Constructed a "stage of change for leaving" variable
 - Relationship status
 - Separation status
 - Plans to end relationship in the next six months
- Women categorized in one of 4 stages:

PREPREPARATION	Together, no intention to leave	21.9%
PREPARATION	Together, intends to leave within 6 months	30.2%
ACTION	Left within past 5 months	21.9%
MAINTENANCE	Left 6 or more months ago	26.0%

Testing IPVDB-L Scale: ANALYSIS

- Inter-item correlations
- Exploratory principal components analysis
- Principal axis factoring
 - Varimax rotation
 - Orthogonal factors
- Cronbach's alphas for each factor
- Bivariate analysis to determine relationship between pros and cons to stages of leaving
 - ANOVA
 - Scores of pros and cons scales were standardized (M=50, SD=10)

Testing IPVDB-L Scale: RESULTS

Sample Characteristics:

African American	83%
High school graduate	58%
Receiving food stamps or WIC vouchers	82%
Unemployed	81%
Mean age in years (SD)	40.4 (7.2)
Age range in years	20-54
Severe abuse in past year	97%
Any abuse in past 6 months	78%

Psychometric Properties of IPVDB-L Scale

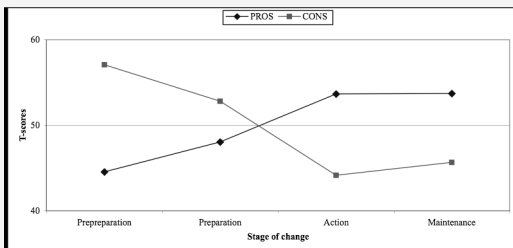
- Two factor solution (Pros and Cons)
 - Accounts for 53.1% of the total variance
- Items retained with a factor loading of 0.40 or greater
 - Factor loadings ranged from 0.58 - 0.77
- High internal consistencies for each factor
 - Pros: Cronbach's alpha = 0.89
 - Cons: Cronbach's alpha = 0.81

ANOVA results: Means of Pros and Cons by Stages of Leaving

Stages of Leaving	Pros to Leaving		Cons to Leaving	
	M	SD	M	SD
Prepreparation	2.84 ^a	.526	2.46 ^a	.478
Preparation	3.04 ^{a,b,c}	.668	2.20 ^a	.600
Action	3.36 ^{b,c}	.396	1.68 ^b	.542
Maintenance	3.36 ^{b,c}	.455	1.77 ^b	.457
Total	3.15	.567	2.03	.603

Note: Means in the same column that do not share superscripts differ at $p < .05$ in the Tukey significant difference post-hoc comparison. Means and standard deviations for raw scores are reported. ANOVA was conducted and post-hoc analyses are reported on standardized scores.

Decisional Balance and Stages of Leaving



Interpretation of Results

- IPVDB-L Scale shows reliability and construct validity
- Relationship between pros and cons and the stages of leaving is consistent with TM theory
 - Women in early stages have high cons/low pros
 - Women in late stages have low cons/high pros
- Suggests that the difference between pros and cons increases as women to take action to leave abusive relationship

Implications of IPVDB-L development and testing

- Provides support for the appropriateness of TM-based interventions for IPV
 - Interventions can be stage-tailored to meet women where they are in process to leave relationship
- Stage-tailored interventions can include activities to address decisional balance
 - Specific counseling to shift women’s ideas about pros and cons based on stage
- IPVDB-L scale can be used to assess pros and cons of leaving to assist with stage-tailored activities
- IPVDB-L scale can be used to evaluate intervention effectiveness

Application of TM and decisional balance IPV intervention

- Women’s Initiative for Safety and Health (WISH) Intervention
 - Based on TM
 - Stage-tailored 8-session individual counseling program
 - Focused on helping women make informed decisions about leaving abusive relationship
- Intervention activities are developed to reflect woman’s stage of leaving
- Decisional balance is a critical influencing factor in progressing towards leaving

Example of Decisional Balance Activity

- Contemplation stage: “Weighing advantages and disadvantages of the relationship”
 - Ask client to list positive aspects about relationship (pros) and negative aspects about relationship (cons)
 - Ask client to list positive aspects of ending relationship (pros) and negative aspects about ending relationship (cons)
 - Discuss how taking action to end current relationship will affect housing, finances, childcare, safety, recovery

Next steps...

- Implementation of stage-based WISH intervention in clinical setting
- Evaluation of WISH intervention in improving several outcomes:
 - Changes in decisional balance and other TM constructs
 - Movement through stages towards leaving abusive relationship
 - Increased safety behaviors/coping strategies
 - Reduced incidence and severity of violence
 - Improved physical health, mental health and quality of life outcomes
