

POVERTY AND HEALTH RESEARCH NETWORK

PILOT STUDY

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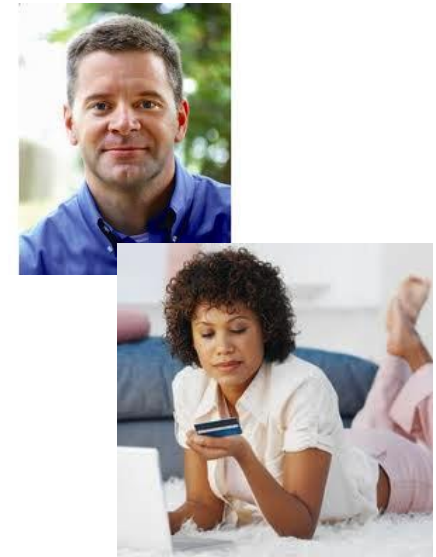
Population of Interest: People Living in Poverty



Single Parents



Couples



Singles



Background

Prevalence of lifetime PTSD

- Males – 1% to 5%
- Females – 3% to 10%
- Married Mothers – 8%
- Never married Single Mothers – 17%
- Separated/Divorced mothers – 23%
- Income assisted single mothers – 29%

(Afifi, Cox, & Enns, 2006; Bassuk, Buckner, Perloff, & Bassuk, 1998; Salomon et al., 2004; Tolman & Rosen, 2001).



Theories of Risk

- Vulnerability to assaultive and psychological trauma hypothesis
- Cumulative adversity hypothesis
- Protective resources hypothesis

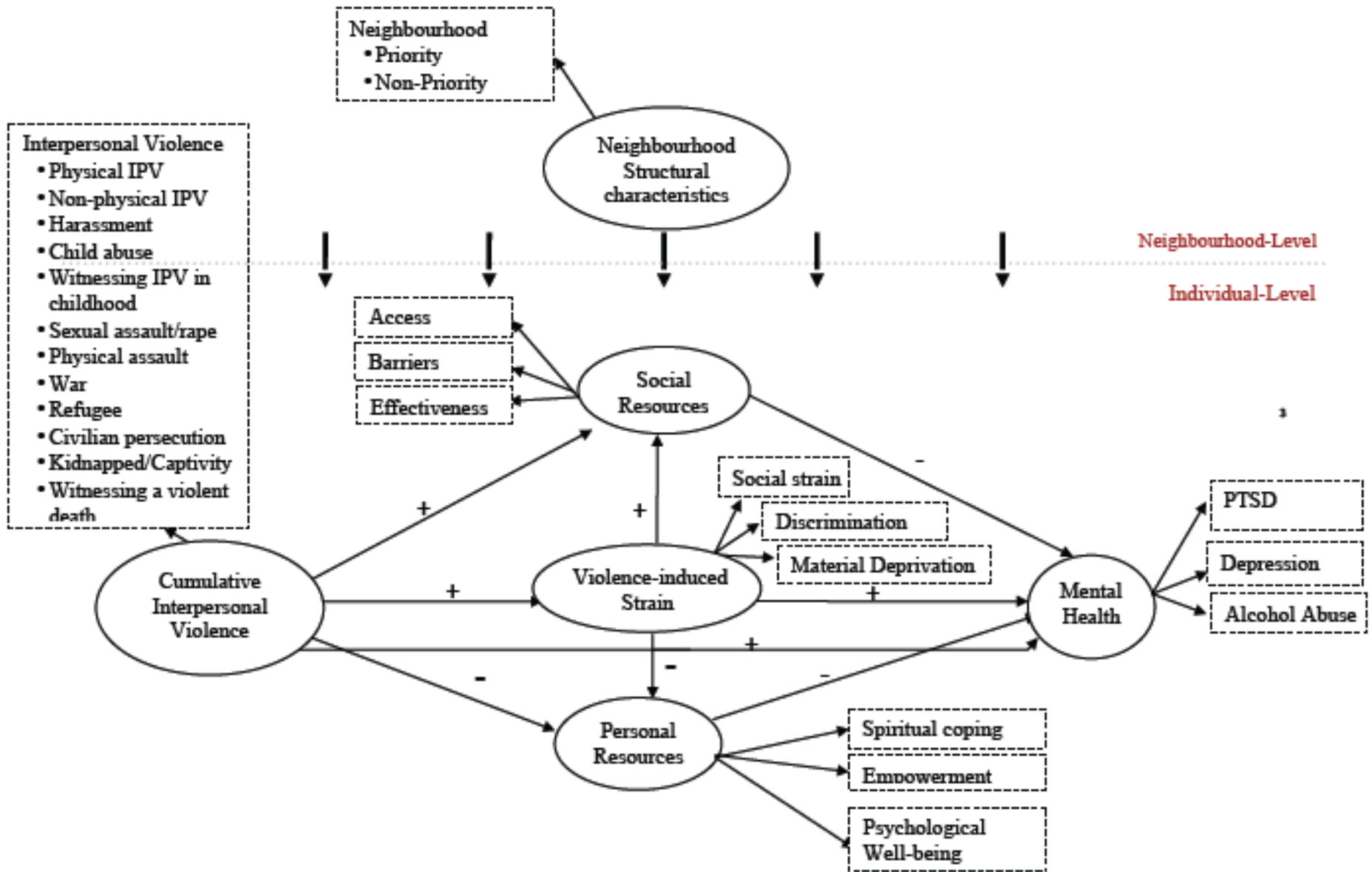


Gaps in Knowledge

- Studies exploring trauma and PTSD among income-assisted men and women
- Studies accounting for the cumulative effect of violent and non-violent traumatic experiences
- Studies accounting for the effect of neighbourhood advantage/disadvantage on the trauma-mental health process
- Studies testing theoretical model of the process through which PTSD develops and persists

Purpose

- To test a theoretical model that explains the process through which PTSD and other mental health problems develop among income-assisted individuals and examine how this process varies with gender & neighbourhood of residence.



Proposed Conceptual Model



Design:

- Cross-sectional

Sample:

- 327 Income-assisted men and women randomly selected from the active caseload of the provincial social assistance program.

Eligibility Criteria:

- Recipients of social assistance
- Fluent in English
- Report experiencing at 1 traumatic event in their lifetime

Men and women completed a survey designed to assess:

- Lifetime exposure to violent and non-violent traumas
- Current symptoms of PTSD, depression, stress, and alcohol abuse
- Use of neighbourhood health and social services
- Personal strengths and capacities

DATA COLLECTION - LIMITATION



- Surveys were completed on-line using Fluid Surveys or by telephone with an interviewer
- Due to a postal strike which occurred 1-week after the start of recruitment, paper-based survey were not used as originally intended
- Reminder notice - delayed

CUMULATIVE INTERPERSONAL VIOLENCE

Variable	Measures
Lifetime exposure to violent and non-violent trauma	<ul style="list-style-type: none"> • 14-Item Composite International Diagnostic Interview – PTSD module (WHO, 2004) • 33-item Index of Spouse Abuse (Hudson & McIntosh, 1981) - $\alpha=.97$ • 28-item Childhood Trauma Questionnaire (Bernstein & Fink, 1998) - $\alpha=.96$

SOCIAL STRAIN

Variable	Measures
Material Deprivation	Ontario Deprivation Index (ODI: Matern, Mendelson, & Oliphant, 2009). $\alpha=.80$
Discrimination	Day-to-Day Discrimination Scale (DDS: Williams, Yu, Jackson, & Anderson, 1997). $\alpha=.88$
Interpersonal Strain	Support and Strain Scale (SSS: Schuster, Kessler, & Aseltine, 1990). $\alpha= 0.78-0.98$



PERSONAL RESOURCES

Variable	Measures
Social Support	Support and Strain Scale (SSS: Schuster, Kessler, & Aseltine, 1990). $\alpha=.89-0.97$
Spirituality	Brief Multidimensional measurement of Religiousness/Spirituality (Fetzer Institute, 1999). $\alpha=0.70$
Psychological Well-being (Eudemonic)	Psychological Well-Being Scale (PWS: Ryff & Keyes, 1995). $\alpha=.45-0.70$
Empowerment	Personal Progress Scale-Revised (PPS-R: Johnson, Worrel, & Chandler, 2005). $\alpha= 0.78$



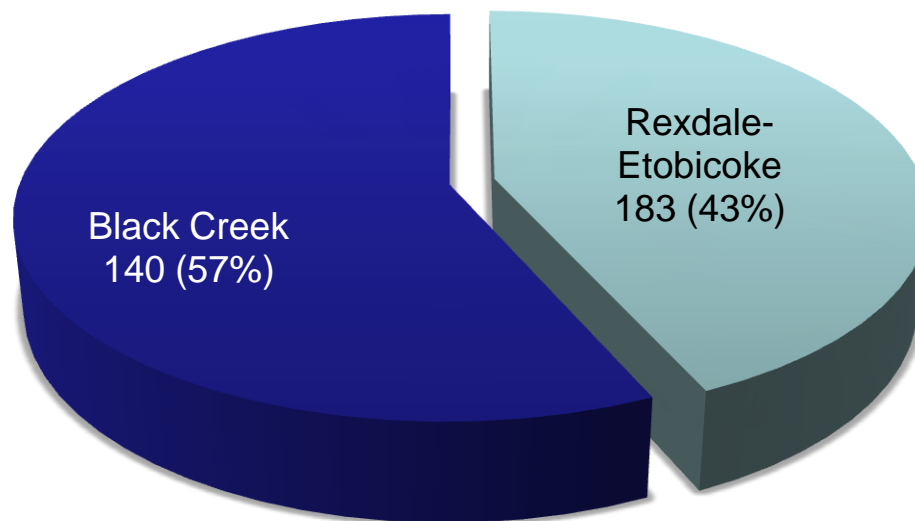
SOCIAL RESOURCES

Variable	Measures
Neighbourhood Resources <ul style="list-style-type: none">• Access• Effectiveness• Barriers	Effectiveness in Obtaining Resources Scale (EORS: Bybee & Sullivan, 2002).



MENTAL HEALTH

Variable	Measures
PTSD	<ul style="list-style-type: none"> • 24-item Traumatic Stress Scale (Killian, 2011) - $\alpha=.94$
Depression	<ul style="list-style-type: none"> • Depression and Stress subscales of the 21-item Depression Anxiety Stress Scales (DASS²¹: Antony, Bieling, Cox, Enns, & Swinson (1998)) - $\alpha=.93$
Alcohol Abuse	<ul style="list-style-type: none"> • 4-item CAGE (Ewing, 1984; Ewing & Rouse, 1970) - $\alpha=.55-.92$



NEIGHBOURHOOD REPRESENTATION (N=323)

SAMPLE CHARACTERISTICS BY NEIGHBOURHOOD AND SEX (N=308)

		Priority/NonPriority						Sex										
		Priority			NonPriority			Male			Female							
		\bar{x}	SD	n(%)	\bar{x}	SD	n	%	diff	\bar{x}	SD	n	%	\bar{x}	SD	n	%	diff
Age		32.0	7.83		32.7	8.69				34.3	8.03			31.4	8.29			
Race	Caucasian			20(14.0)			44(25.3)					26(23.0)				38(18.5)		
	Black			81(56.6)			68(39.1)					48(42.5)				102(49.8)		
	South Asian			15(10.5)			14(8.0)					13(11.5)				16(7.8)		
	Hispanic			15(10.5)			30(17.2)		***			14(12.4)				31(15.1)		ns
	Other			8(5.6)			18(10.3)					11(9.7)				15(7.3)		
	Multi-Race			4(2.8)			0(0)					1(9)				3(1.5)		
Marital Status	Single/Unattached			100(69.9)			102(58.6)					71(62.8)				132(64.4)		
	Couple			17(11.9)			31(17.8)		ns			23(20.4)				25(12.2)		*
	Separated/Divorced			26(18.2)			41(23.6)					19(16.8)				48(23.4)		
Education	Grade School			5(3.5)			7(4.0)					6(5.3)				6(2.9)		
	High School			73(51.0)			89(51.4)					57(50.4)				106(52.0)		
	Post Secondary (part)			20(14.0)			16(9.2)					10(8.8)				26(12.7)		
	Post Secondary			37(25.9)			52(30.1)		ns			28(24.8)				61(29.9)		**
	Graduate School (part)			4(2.8)			1(.6)					2(1.8)				3(1.5)		
	Graduate School			4(2.8)			8(4.6)					10(8.8)				2(1.0)		
Parental Status	Parent/Guardian			93(65.0)			112(64.4)		ns			50(44.2)				155(75.6)		***
	Non Parent/Guardian			50(35.0)			62(35.6)					63(55.8)				50(24.4)		
# children (0-18 yrs) at home	0			62(43.1)			80(45.7)					79(69.9)				62(30.2)		
	1			30(20.8)			41(23.4)					10(8.8)				61(29.8)		***
	2			27(18.8)			29(16.6)		ns			15(13.3)				41(20.0)		
	>=3			25(17.4)			25(14.3)					9(8.0)				41(20.0)		

SAMPLE CHARACTERISTICS BY NEIGHBOURHOOD AND SEX (N=308)

		Priority/NonPriority						Sex							
		Priority			NonPriority			Male			Female				
		\bar{x}	SD	n(%)	\bar{x}	SD	n(%)	<i>diff</i>	\bar{x}	SD	n(%)	\bar{x}	SD	n(%)	<i>diff</i>
Canadian Born	Yes			53(37.1)			74(42.5)				39(34.5)			88(42.9)	
	No			90(62.9)			100(57.5)	<i>ns</i>			74(65.5)			117(57.1)	*
Survey Type	On-Line Survey			81(55.1)			110(62.5)				69(61.1)			118(57.6)	
	Telephone Interview			66(44.9)			66(37.5)	<i>ns</i>			44(38.9)			87(42.4%)	<i>ns</i>
Initial Immigrant Status	Landed Immigrant			38(27.3)			59(34.3)				37(33.3)			60(29.9)	
	Refugee			39(28.1)			34(19.8)	*			30(27.0)			43(21.4%)	<i>ns</i>
	Visitor/Temporary Resident			14(10.1)			7(4.1)				5(4.5)			17(8.5)	

*Note #1: ns=non-significant, *<.05, **<.01, ***<.001*

Note#2: Percentage shown are valid percentages



SCORE OF 36 MORE ON THE TSS ($\alpha=.964$)

TSS SCORE	Male n(%)	Female n(%)	Total n(%)	Sex difference	Neighbourhood difference
No PTSD	76 (67.3)	130 (63.4)	206 (64.8)	No $t=-1.21, p=.113$	No $t=.589, p=.278$
Probably PTSD	37 (32.7)	75 (36.6)	114 (35.2)		
Total	113	205	318		
Average Score	28.50	31.39	30.22		

MENTAL HEALTH DEPRESSION



SCORES ON THE DASS ($\alpha=.893$)

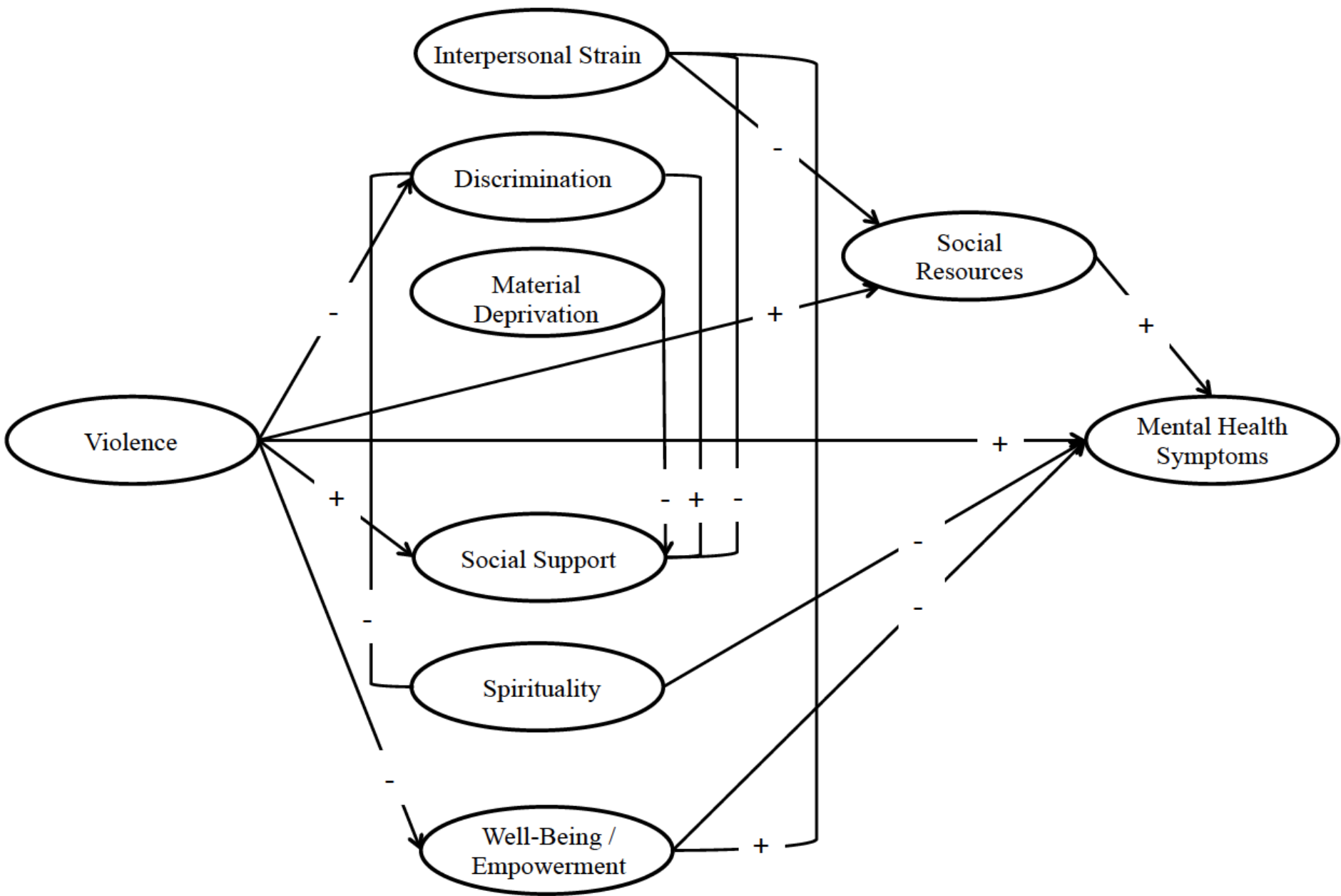
DASS SCORE	Male n(%)	Female n(%)	Total n(%)	Sex difference	Neighbourhood difference
Normal	45 (39.8)	79 (38.5)	124 (39.0)	No $X^2=.476, p=.280$	No $X^2=1.30, p=.430$
Mild	13 (11.5)	24 (11.7)	37 (11.6)		
Moderate	29 (25.7)	59 (28.8)	88 (27.7)		
severe	9 (8.0)	16 (7.8)	25 (7.9)		
Extremely Severe	17 (15.0)	27 (13.2)	44 (13.8)		
total	113	205	318		

MENTAL HEALTH ALCOHOL ABUSE



SCORE OF 2 OR MORE ON THE CAGE

CAGE	Male n(%)	Female n(%)	Total n(%)	Sex difference	Neighbourhood difference
No alcohol abuse	78 (73.6)	156 (81.7)	234 (78.8)	No $\chi^2=2.67, p=.51$	No $\chi^2=.000, p=.487$
Likely lifetime alcohol abuse	28 (26.4)	35 (18.3)	63 (21.2)		
TOTAL	106	191	297		



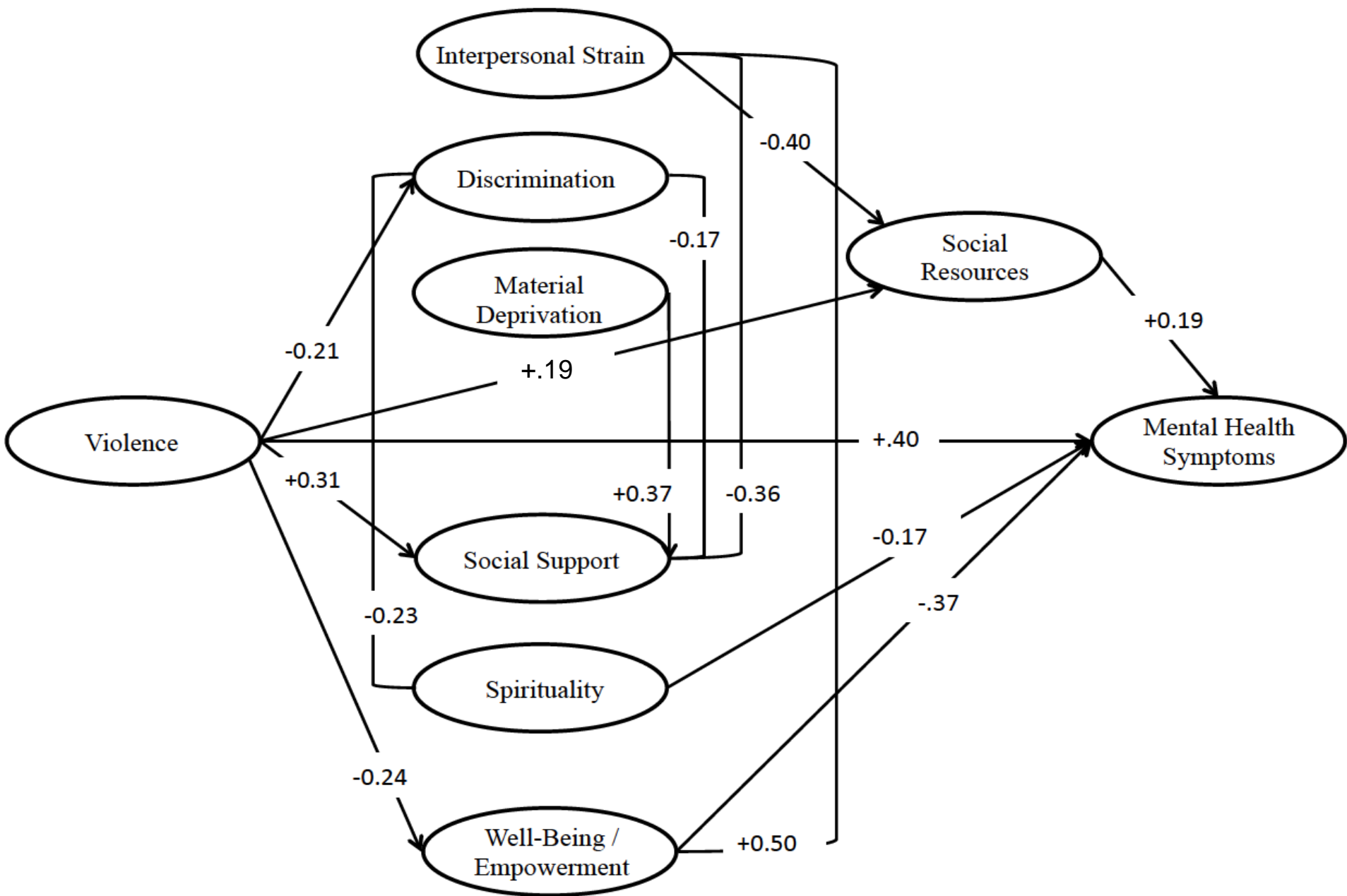
REVISED CONCEPTUAL MODEL

Fit Indices of Tested Models



Model	χ^2	df	Adj. χ^2	RMSEA	NNFI	SRMR	CFI
Full Sample	819.33	275	2.98	0.08	0.89	.11	0.91
Males	1032.79	275	3.76	0.16	0.77	0.15	0.81
Females	764.85	275	2.78	0.10	0.85	0.12	0.89
Priority	18578.70	275	67.56	0.69	-0.35	0.12	0.00
Non-priority	746.73	275	2.72	0.10	0.86	0.14	0.88

Model fit adequate only for full sample 23



Standardized path coefficient for revised conceptual model



Key Messages

- Cumulative Trauma is the central factor contributing to severity of current mental health symptom
- ONLY SPECIFIC social strain and personal resource factors are important to the trauma-mental health process for men and women.
- More research is needed to disentangle why some mediators are more prominent and how they might vary by gender and neighbourhood status.



- Cross-sectional design
- Response rate/Sample size
- Operationalization of neighbourhood
- Recall bias
 - CTQ
 - Current Mental Health
- Measurement of cumulative interpersonal violence



- Theory refinement
- Front-line Practice
- Education of nurses and other practitioners
- Social Service Policies