



Can Stress Process Explain Immigrants' Mental Health Deterioration?

Results from the Canadian Community
Health Survey-Mental Health 2012

Fei-Ju Yang, Department of Sociology, McMaster University

Healthy immigrant effect

- After the first of year arrival at Canada, around one-third of the immigrants develops new emotional problems (Newbold, 2009)
- Immigrants are better-off than non-immigrants in chronic conditions, depression, psychological distress and alcohol dependence (Ali et al., 2004; Stafford et al., 2010).
- Recent immigrants are healthier physically and mentally than long-term immigrants
- Does this trend last?
- Why do immigrants become less healthy?

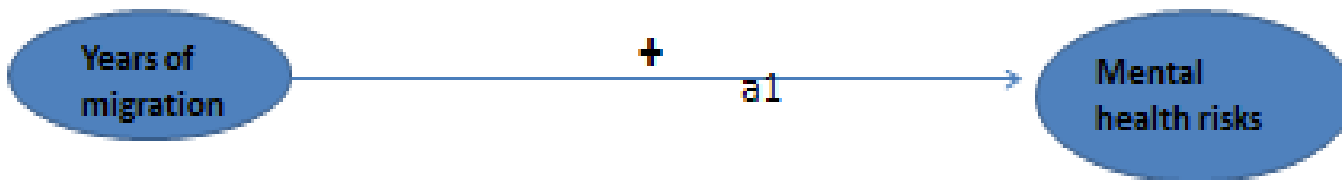


Stress Process Model

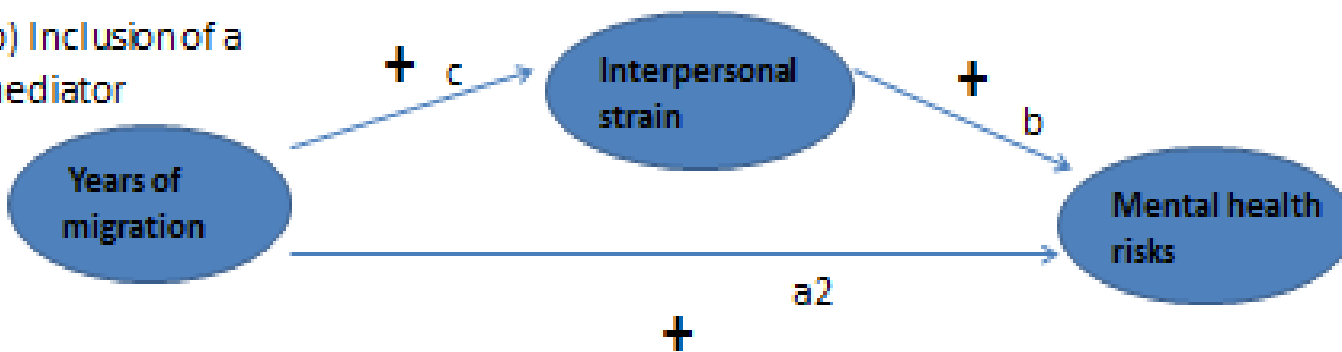
- Differential exposure to stressors based on one's social standings.
- Coping resources, such as social support and ethnic identity, can buffer or mediate the negative effects of stressors on psychological distress
- Positive and negative forms of social support
- Negative forms of social support: work-family conflicts, negative social interaction with others, etc.

Stress Process Model in the context of migration-pathway I (mediation)

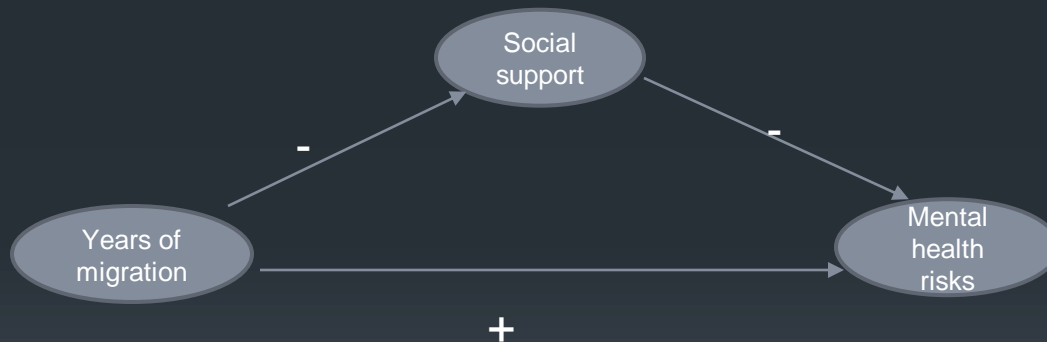
(a) Focal association



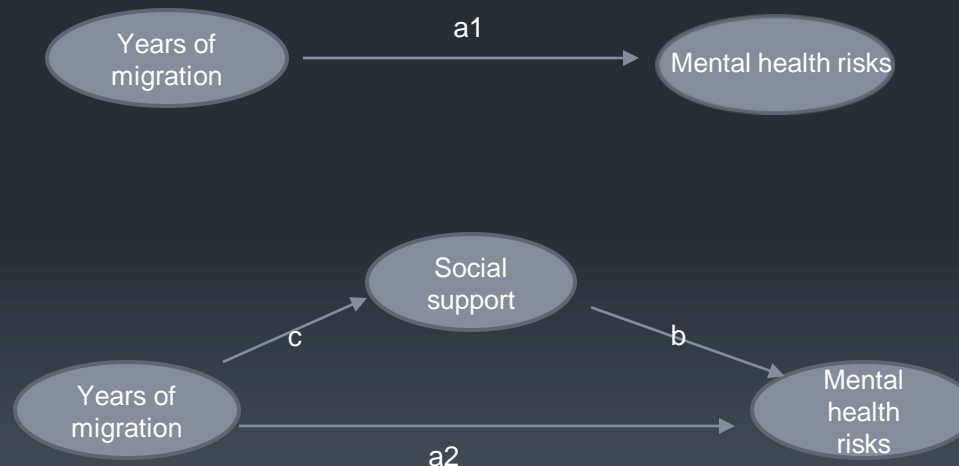
(b) Inclusion of a mediator



Stress Process Model in the context of migration-pathway II (mediation)



Stress Process Model in the context of migration-pathway III (suppression)



$a2 > a1$



The current study

- Is there a healthy immigrant effect for psychological distress in Canadian immigrant populations?
- Are interpersonal strain and social support pathways to psychological distress?



Methods

- Sample: 4,282 Canadian immigrant samples from Canadian Community Health Survey-Mental Health 2012
- Cross-sectional/stratified cluster design covers respondents of 15 years old and over
- Response rate: 86%
- Missing values were handled by multiple imputations methods

Sample descriptions



Variable	Proportion (weighted)
Years of migration	Total=100%
0-9 years	26.29%
10-19 years	23.41%
20-29 years	17.44%
30-39 years	11.07%
40-49 years	11.39%
50 years or more	10.40%
Minority/White	62.36%/37.64%
Male/Female	49.08%/59.92%
Linguistic minority	34.20%/33.98%/31.81%
Education	
>Bachelor's degree	12.14%
Bachelor's degree	20.34%
College/university certificate	25.00%
Trade certificate	8.26%
Some post-secondary	4.83%
Secondary grad	13.47%
<secondary	15.96%



Sample descriptions

Variable	Proportion (weighted)
Country of origin	
U.K.	7.7%
Germany	2.3%
Italy	3.6%
Netherlands	1.6%
China/Hong Kong/Taiwan	12.8%
Philippines	8.0%
India	7.2%
Work status	
Currently working	61.56%
Not working	32.59%
Retired/above working age	7.20%
Permanently unable to work	1.84%

Sample descriptions

Variable	Proportion (weighted)/Mean(S.E.)
Income adequacy (household income divided by number of household members)	Total=100%
Lowest	30.30%
Lower-middle	26.06%
Upper-middle	24.15%
Highest	19.49%
Age range	Total=100%
<18	2.00%
18-24	7.90%
25-34	16.03%
35-44	21.35%
45-54	18.82%
55-64	14.92%
>65	18.97%
Social support	35.11(0.11) (range: 10-40)
Interpersonal strain	2.34 (0.05) (range: 0-12)
Psychological distress	4.44 (0.11) (range: 0-40)



Analytical strategy

- Ordinary least squares regression (OLS)
- Pathways: the association between years of migration and potential mediators/suppressors with controls
- Hierarchical regression (focal association only->with controls ->mediators/suppressors -> all variables)

The association between migration and interpersonal strain/social support

Variable	Social support	Interpersonal strain
Migration (ref.=<10)		
10-19 years	.03	.19**
20-29 years	.07*	.31***
30-39 years	.11**	.28***
40-49 years	.08*	.30***
>50 years	.09*	.32**
Female	.06***	.11**
Singles/unattached	-.13***	-.11**
Female one parents	-.08*	-.04
Upper-middle	.08***	-.07
Highest	.13***	.03
Trade certificate	-.00	.21**
Bachelor's degree	.11**	.18*
>Bachelor's degree	.04	.15
Minority	-.07*	-.04
Neither E/F	-.01	-.27***
Other Asia	-.08*	-.18
China, HK, Taiwan	-.17***	-.27*
Other Europe		-.27***

Results

Variable	Model 1	Model 2
Migration (ref. <10)		
10-19 years	.08	.17*
20-29 years	-.00	.18*
30-39 years	-.20*	.02
40-49 years	-.21*	.08
>50 years	-.15	.10
Female		.21***
Single/unattached		.13*
Some post-secondary		.32*
Permanently unable to work		1.39*
North America(ref. UK)		.24*
Linguistic minority		
E/F/Other		-.17*
Other		-.25**
Adjusted R squared	0.77%	9.37%

Other controls: age, income, city

Results

Variable	Model 2 (control)	Model 3(strain)
Migration (ref. =<10)		
10-19 years	.17*	.07
20-29 years	.18*	.02
30-39 years	.02	-.12
40-49 years	.08	-.07
>50 years	.10	-.06
Female	.21***	.16***
Some post-secondary	.13**	.28*
Permanently unable to work	1.39***	1.34***
Linguistic minority		
E/F/Others	-.17*	-.18*
Others	-.25**	-.11
North America (ref. =UK)	.26*	.23*
Other Europe	.06	.19*
Germany	.11	.42*
Netherlands	.19	.32*
Italy	.23	.42***
Interpersonal strain		.504***
Adjusted R squared	9.01%	21.06%

Results

Variable	Model 2 (control)	Model 4 (support)
Migration(ref. =<10)		
10-19 years	.17*	.20**
20-29 years	.18*	.25**
30-39 years	.02	.13
40-49 years	.08	.16
>50 years	.10	.18
Female	.21***	.26***
Some post-secondary	.13*	.27***
Permanently unable to work	1.39***	1.11***
North America (ref.=UK)	.24*	.28*
Germany	.38*	.37*
Linguistic minority		
E/F/Others	-.17*	-.16*
Others	-.25**	-.25***
Social support		-.92***
Adjusted R squared	9.01%	17.11%

Results

Variable	Model 2 (control)	Model 5(full)
Migration(ref.=<10)		
10-19 years	.17*	.07
20-29 years	.18*	.02
30-39 years	.02	-.12
40-49 years	.08	-.07
>50 years	.10	-.06
Female	.21***	.18***
Some post-secondary	.13**	.28*
Permanently unable to work	1.39***	1.34***
Linguistic minority		
E/F/Others	-.17*	-.17*
Others	-.25**	-.11
North America(ref.=UK)	.26*	.27*
Germany	.11	.41*
Netherlands	.19	.24
Italy	.23	.41***
Interpersonal strain		-.77(.33)***
Social support		.45(.25)***
Adjusted R squared	9.01%	26.39%



Conclusion

- The increase of interpersonal strain is one major pathway to immigrants' mental health deterioration
- Social support suppresses some of the negative effects of migration on distress for immigrants living in Canada for 20-29 years, but not for those for 10-19 years.
- The detrimental effects of interpersonal strain on distress is stronger than the beneficial effects of social support on distress