

# 캐나다 이민자의 정신건강 구조 모형

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## A Structural Equation Model on Mental Health of Korean Immigrants in Canada

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**Purpose:** The aim of this study was to construct a structural equation model that would further explain the mental health status of Korean immigrants living in Canada. **Methods:** Survey using a structured questionnaire was conducted with 386 people in Canada (Vancouver and Toronto). Six instruments were used in this model. The analysis of data was done with both SPSS 14.0 for descriptive statistics and AMOS 5.0 for covariance structure analysis. **Results:** Based on the constructed model, physical health status, immigrant life stress, self esteem, and quality of life were found to have significant direct effect on mental health. In addition, factors such as physical health status, immigrant life stress, quality of life, English proficiency, family cohesion and social support were found to indirectly affect mental health. The final modified model yielded Chi-square=34.79 ( $p<.001$ ),  $df=13$ ,  $\chi^2/df=2.68$ , GFI=0.98, AGFI=0.94, NFI=0.95, PNFI=0.44, PGFI=0.35, RMSE=0.07 and exhibited good fit indices. **Conclusion:** This structural equation model is a comprehensive theoretical model that explains the related factors and their relationship with mental health in Korean immigrants. Findings of this study can contribute to the designing of an appropriate prevention strategy to further improve the mental health of immigrants in Canada.

**Key words:** Immigrants, Stress, Quality of life, Self esteem, Mental health

## 서 론

1980 2000

2005

### 1. 연구의 필요성

2000 2009

17%

(Ministry of Foreign Affairs and Trade, 2010).

1966

(Kim, H. S.,

1970 2006).

주요어 : 이민, 스트레스, 정신건강

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Lee (1993), Noels (1996), Bhugra & Minas (2007), Christopher Kulig (2000), Oppedal (2004), Son (2007), (Kim, H. S., 2006), (Bernstein, 2007; Kim, H. S., 2006; Kim, Han, Shin, Kim, & Lee, 2005), (Kim et al., 2005), (Kim, H. S., 2006).

(Hoschl et al., 2008), (Oppedal, Ry-samb, & Sam, 2004), (Kim, H. S., 2006), (Oppedal et al., 2004), (Lee, 1993; Noels, Pon, & Clement, 1996), (Oppedal et al., 2004), (Oppedal et al., 2004; Sam, 2000), (Son, Lee, & Ryu, 2007), (Christopher & Kulig, 2000).

. Hoschl (2008)

## 2. 연구 목적

## 연구 방법

### 1. 연구 설계

### 2. 연구 도구

#### 1) 신체적 건강상태

#### 2) 영어구사능력

#### 3) 가족 응집력

#### 4) 사회적 지지

#### 5) 이민스트레스

Lee (1993)

#### 6) 자아존중감

Rosenberg

Jeon (1974)

#### 7) 삶의 질

#### 8) 정신건강

25

6 (Index of content validity, CVI) 70%

9 ( ) 16 5

Lee (1993) Cronbach's  $\alpha=.97$   
Cronbach's  $\alpha=.93$

(as cited in Jeon, 1974) 10

Likert 4 Cron-  
bach's  $\alpha=.85$  , Cronbach's  $\alpha=.77$

Campbell (1981) Lee (1998) 1

Cronbach's  $\alpha=.90$  , Cron-  
bach's  $\alpha=.96$

(SCL- 90- R)

13 , 10 , 12 , 9  
6 Derogatis Govi

(1973) Kim, Kim Won (1984)  
, 0 ( ) 4 ( )

5 Cron-  
bach's  $\alpha=.90$ , .90, .87, .88

.86

### 3. 연구 대상, 자료 수집 기간 및 방법

386 2009 1  
5

425 402 94.6%

386

### 4. 윤리적 고려

(IRB) ( No. 08-

152)

### 5. 자료 분석

SPSS WIN 14.0 , AMOS  
WIN 5.0

( $\chi^2$ ),  
(GFI), (RMSEA) ,  
(AGFI) (NFI) ,  
( $\chi^2/df$ ), (PGFI)  
(PNFI)

C.R. (Critical ratio)

p

## 연구 결과

### 1. 대상자의 특성

90.7% , 40 160 (41.5%)

, 50 85 (22.0%), 30 79 (20.5%) ,

237 (61.4%), 149 (38.6%)

(48.7%), (40.7%),

(7.8%), (2.8%) , (72.8%)

, (27.5%) , (24.1%),

(21.5%), (12.4%), (7.8%), (6.7%)

2,000 - 4,000

(25.9%) , 6,000 18.1% 1,000

- 2,000 15.3%, 19.7%

10- 20 (32.4%) ,

49.0%

26.2%,

24.9%

### 2. 이민자의 정신건강 관련 요인들의 상관관계

2

(Table 1).

(Pearson's correlation)

( $r=.40, p<.001$ ),

( $r=.17, p<.001$ ),

( $r=-.25, p<.001$ ),

( $r=-.26, p<.001$ ),

( $r=.35, p<.001$ ),

( $r=-.50, p<.001$ ),

( $r=.39, p<.001$ )

(Table 2).

### 3. 가설적 모형의 검정

#### 1) 적합도 검정

Figure

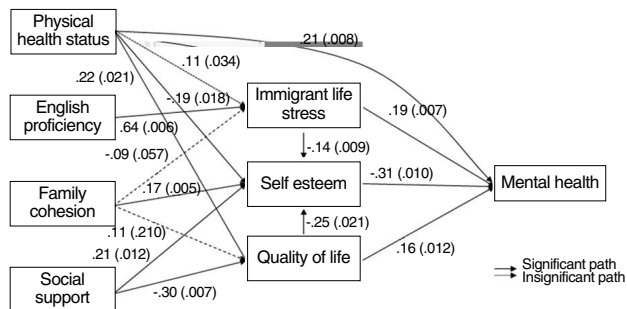
Table 1. Descriptive Statistics for Observed Variables (N=386)

Variables	Mean	SD	Range	Skewness	Kurtosis
Physical health status	2.21	0.77	1-5	0.34	0.02
English proficiency	3.67	1.20	1-5	-0.68	-0.34
Family cohesion	14.75	2.05	8-20	0.10	0.09
Social support	19.26	4.73	8-30	0.23	-0.50
Immigrant life stress	46.13	11.55	16-75	-0.28	-0.20
Self esteem	31.56	4.18	17-40	-0.16	-0.38
Quality of life	22.84	9.28	8-56	0.49	0.26
Mental health	30.42	21.40	0-103	0.95	0.76

Table 2. Pearson Coefficient Correlations for Variables

(N=386)

	Physical health status	English proficiency	Family cohesion	Social support	Immigrant life stress	Self esteem	Quality of life
	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)	r (p)
English proficiency	.14 (.006)						
Family cohesion	-.15 (.003)	-.06 (.269)					
Social support	-.24 (<.001)	-.07 (.172)	.22 (<.001)				
Immigrant life stress	.21 (<.001)	.65 (<.001)	-.14 (.006)	-.12 (.019)			
Self esteem	-.35 (<.001)	-.17 (.001)	.30 (<.001)	.38 (<.001)	-.27 (<.001)		
Quality of life	.30 (<.001)	.13 (.009)	-.20 (<.001)	-.36 (<.001)	.22 (<.001)	-.43 (<.001)	
Mental health	.40 (<.001)	.17 (.001)	-.25 (<.001)	-.26 (<.001)	.35 (<.001)	-.50 (<.001)	.39 (<.001)



**Table 3.** Model Fitness Index for Hypothetical and Modified Model (N=386)

(N=386)

Content	Evaluation criteria	Value of hypothetical model	Value of modified model
$\chi^2$		67.84	34.79
Df		13	13
$p$	>.05	<.001	<.001
$\chi^2/\text{df}$	<3	5.22	2.68
GFI (Goodness of fit index)	$\geq 0.90$	0.96	0.98
AGFI (Adjusted goodness of fit index)	$\geq 0.90$	0.88	0.94
NFI (Normed fit index)	$\geq 0.90$	0.90	0.95
PNFI (Parsimonious normed of fit index)	$\geq 0.6$	0.42	0.44
PGFI (Parsimonious goodness of fit index)	Larger value is better	0.35	0.35
RMSEA (Root mean square error of approximation)	$\leq 0.05$	0.11	0.07

 $\chi^2/\text{df}$  2- 3

5.22

GFI

0.96,

NFI 0.90

AGFI 0.88,

PNFI 0.42,

RMSEA

O. 11,

PGFI 0.35

(Table 3).

## 2) 유효성 검토

 $(\beta=.21, \text{ C.R.}=4.71),$  $(\beta=.19, \text{ C.R.}=4.39),$  $(\beta = -.31, C.R. = -6.58)$  $(\beta=.16, \text{C.R.}=3.43)$

$(\beta = -.19, C.R. = -4.13)$   $(\beta = .17, C.R. = 3.80)$ ,  
 $(\beta = .21, C.R. = 4.52)$ ,  $(\beta = -.14, C.R. = -3.14)$ ,  
 $(\beta = -.25, C.R. = -5.22)$   $(\beta = .64, C.R. = 16.46)$   
 $(\beta = .11, C.R. = 2.90)$   
 $(\beta = -.09, C.R. = -2.26)$   
 $(\beta = .22, C.R. = 4.76)$   $(\beta = -.30, C.R. = -6.24)$   
 $(\beta = .11, C.R. = -2.26)$

(Figure 1).

#### 4. 수정모형의 검정

##### 1) 적합도 검정

(Lee, 1990).

Amos

(mod-

ification index)

Figure 2

$(\beta = -.11, p = .210)$   $(\beta = .11, p = .034)$   
 $(\beta = -.09, p = .057)$

5

2

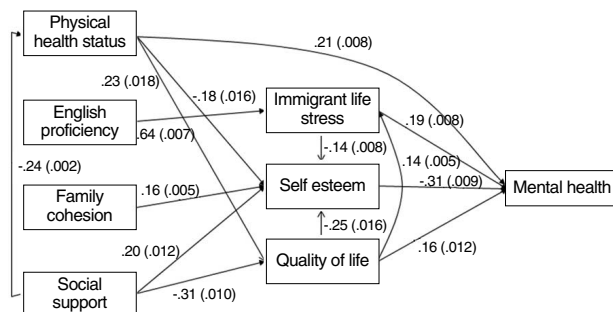


Figure 2. Testing for modified model.

$(\chi^2/df) = 2.68$   $(GFI) = 0.98$   $(AGFI) = 0.94$   
 $(NFI) = 0.95$   $(RMSEA) = 0.07$   
 $(PGFI) = 0.35$   $(PNFI) = 0.44$   
 (Table 3).

##### 2) 유효성 검정

$(\beta = .21, C.R. = 4.59)$   $(\beta = .19, C.R. = 4.40)$   $(\beta = .31, C.R. = -6.64)$   $(\beta = .16, C.R. = 3.43)$

$(\beta = .18, C.R. = -4.03)$   $(\beta = .16, C.R. = 3.75)$ ,  
 $(\beta = .20, C.R. = 4.29)$

$(\beta = .23, C.R. = 4.83)$   $(\beta = -.31, C.R. = -6.44)$   $(\beta = .25, C.R. = -5.22)$   $(\beta = .14, C.R. = 3.56)$

 $(\beta = .64, C.R. = 16.45)$  $(\beta = -.14, C.R. = -3.15)$  $(\beta = -.24, C.R. = -4.78)$ 

(Figure 2).

33.5%

Table 4. Direct Effect, Indirect Effect, and Total Effect in Modified Path Model

Endogenous variables	Indicators	Direct effect ( <i>p</i> )	Indirect effect ( <i>p</i> )	Total effect ( <i>p</i> )	CR	SMC
Physical health status	Social support	-.24 (.002)		-.24 (.002)	-4.78	.056
Quality of life	Social support	-.31 (.010)	-.05 (.006)	-.36 (.006)	-6.44	.179
	Physical health status	.23 (.018)		.23 (.018)	4.83	
Immigrant life stress	Quality of life	.14 (.005)		.14 (.005)	3.56	.424
	English proficiency	.64 (.007)		.64 (.007)	16.45	
	Social support		-.05 (.004)	-.05 (.004)		
	Physical health status		.03 (.006)	.03 (.006)		
Self esteem	Social support	.20 (.012)	.14 (.010)	.34 (.015)	4.29	.299
	Physical health status	-.18 (.016)	-.06 (.009)	-.24 (.012)	-4.03	
	Quality of life	-.25 (.016)	-.02 (.003)	-.27 (.005)	-5.22	
	Family cohesion	.16 (.005)		.16 (.005)	3.75	
	Immigrant life stress	-.14 (.008)		-.14 (.008)	-3.15	
	English proficiency		-.09 (.008)	-.09 (.008)		
Mental health	Physical health status	.21 (.008)	.12 (.020)	.32 (.014)	4.59	.335
	Quality of life	.16 (.012)	.11 (.005)	.27 (.015)	3.43	
	Immigrant life stress	.19 (.008)	.04 (.009)	.23 (.009)	4.40	
	Self esteem	-.31 (.009)		-.31 (.009)	-6.64	
	Social support		-.22 (.008)	-.22 (.008)		
	English proficiency		.15 (.007)	.15 (.007)		
	Family cohesion		-.05 (.005)	-.05 (.005)		

CR=Critical ratio; SMC=Squared multiple correlations.

논 의







- 정신건강에 영향을 미치는 요인들을 조사한 결과, 이민자의 정신건강에 영향을 미치는 요인들은 크게 개인적, 사회적, 문화적 요인으로 분류할 수 있다. (Kim, H. S., 2006)
- Jeong (1989)은 이민자의 정신건강에 영향을 미치는 요인들을 크게 개인적, 사회적, 문화적 요인으로 분류하였다. (Cronbach's  $\alpha=.62$ )
- (Cronbach's  $\alpha=.84$ )
- “ ”
- “ ”
- 정신건강에 영향을 미치는 요인들을 조사한 결과, 이민자의 정신건강에 영향을 미치는 요인들은 크게 개인적, 사회적, 문화적 요인으로 분류할 수 있다. (Kim, H. S., 2006)
- Noels (1996)
- (Kim, Y. S., 2006).
- (Kim et al., 2005)
- (Lahti, Liebkind, Jaakkola, & Reuter, 2006)
- Furnham Shiekh (1993)
- Bae (2008)
- (Kim et al., 2005; Kim, H. S., 2006; Lahti et al., 2006)

Bernstein (2007)

## 결론

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