

A Model of Family Involvement for Young Children with Special Needs in Taiwan

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Taiwan

- Population in 2010: 23 million
- 0-14 years old: 15.7%
- Population for 0-6 years old : 1,300,000.
- Total Fertility Rate: 1.14 births/per woman
- > 65 years old: 10.7%

Purpose of the study

- Test the pathway of a parent involvement model for young children with developmental delays or disabilities.
- **Research Questions:**
 - How well will the observed data fit with the proposed model?
 - To what extent which selected child, family, and school variables predict parent involvement at home and in school?
 - Whether the effect of the above variables on parent involvement is mediated by parental efficacy?

Method

- Sample
 - Special Needs Education Longitudinal Study (SNELS) in 2008
 - Considering each disability category
 - Stratified random sampling
 - Weighted data
 - Sample size
 - 1417 children at the age of 3 and 5 years old
 - Respondents
 - Primary caregivers
 - Teachers

Table 1 Demographic characteristics of children with special needs.

Variable	Unweighted%	Weighted %
Gender		
Male	67.5	69.3
Female	32.5	30.7
Age group		
3 year-old	31.8	31.8
5 year-old	68.2	68.2
Educational placement		
Preschool	62.4	69.7
Special school	11.4	10.0
Early Intervention Institute	26.2	20.3

N=1417

Table 2 Primary disability category by percentage.

Disability category	Unweighted%	Weighted %
Developmental delay	19.3	36.1
Mental retardation	12.5	13.0
Multiple impairment	14.9	12.0
Autism	12.9	10.6
Speech impairment	7.8	7.5
Physical impairment	11.9	7.6
Hearing impairment	7.8	4.8
Health impairment	5.8	3.8
Visual impairment	2.5	1.2
Other impairment	4.7	3.4

Table 3 Demographic characteristics of respondents.

Variable	N	Unweighted %	Weighted%
Primary caregiver's age	1417		
Under 20		0.1	0.1
20 ~ 29		11.6	11.6
30 ~ 39		60.1	60.3
40 ~ 49		21.3	21.7
Above 50		6.9	6.4
Primary caregiver's education	1413		
Less than a high school diploma		21.9	20.8
High school diploma		40.9	42.5
Some college		20.5	20.0
Four-year degree or higher		16.8	16.7
Mother's nationality	1410		
Taiwanese		81.7	82.2
Taiwanese(Aborigine)		2.7	2.4
China		5.9	5.6
South-East Asia		9.2	9.8
Marital status	1413		
Married		88.9	88.6
Single or not married		11.1	11.4

Measures

- **Dependent Variables (Endogenous Constructs)**
 - **Involvement at home**
 - Play/talk, read, chat about things happened at school, take the child out, teach in daily routines, set rule for routines
 - **Involvement at school**
 - Levels of active involvement, contact with teachers, participation in school activities

Measures

- Independent Variables (Exogenous Constructs)
 - Child characteristics(2)
 - levels of severity, behavioral problems
 - Family characteristics(SES) (3)
 - education, income, occupation rank
 - Family characteristics(family resources) (2)
 - helping hands, family's acceptance of disability
 - School characteristics (8)
 - parental satisfaction with school administration, support, teaching... etc
 - Parent efficacy(1)

Data Analysis

- SPSS
 - Descriptive analysis
 - Correlation
- Amos
 - SEM

Results:

- Model fit
- Chi-square statistic (CMIN)
 - $\chi^2(256)=1431.9$, $N=1378$, $P < .001$
- $CMIN/DF=5.593$ ($CMIN/DF < 3$)
- $GFI=.918$
- $AGFI=.896$
- $NFI=.892$
- $NNFI=.894$
- $SRMR=.047$ ($SRMR < .08$)
- $RMSEA=.058$ ($SRMR < .08$)

Results of the model

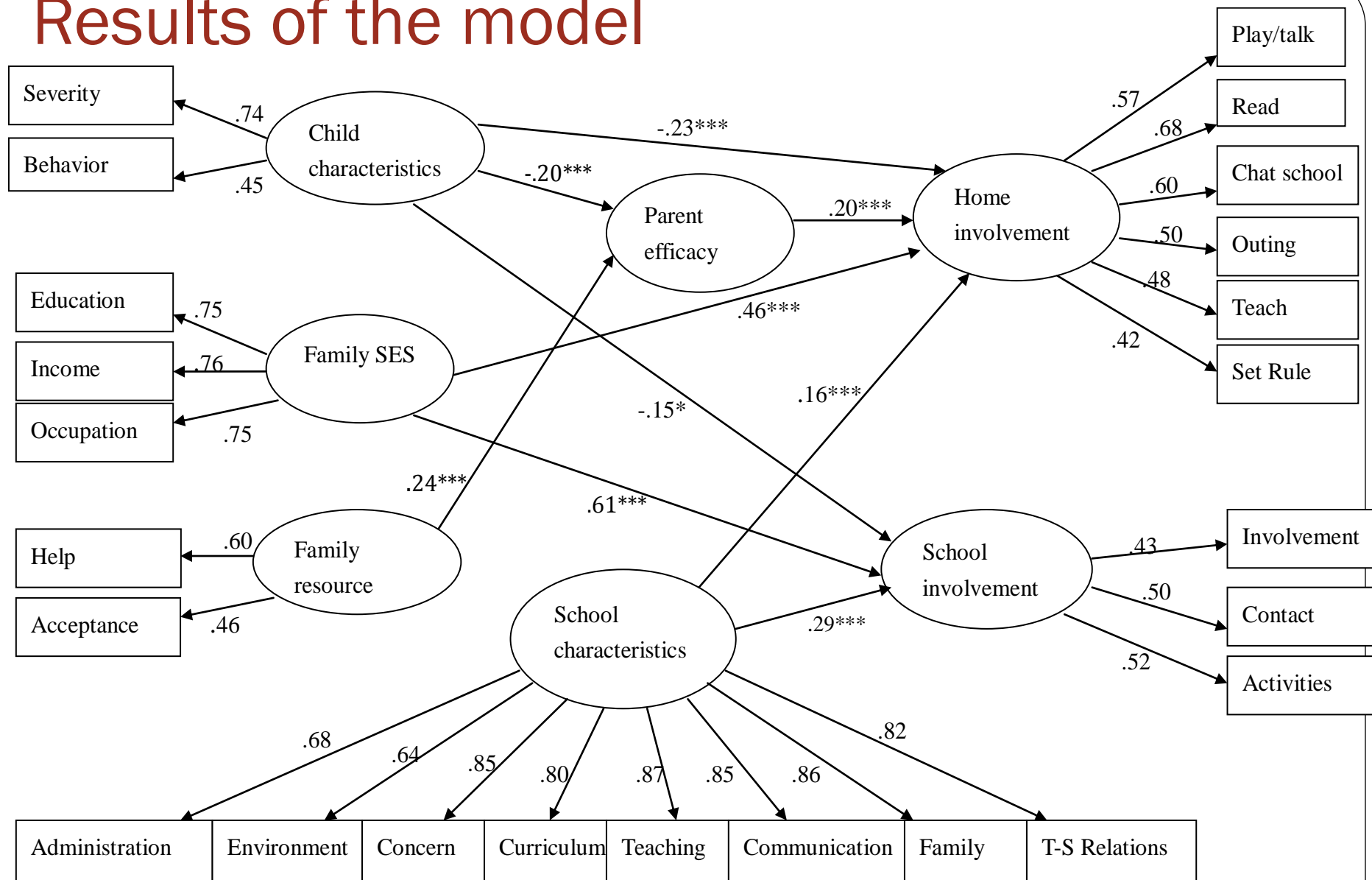


Figure 2 Factor loadings of the measured variables on the latent constructs and standardized structural coefficients.

* $p < .05$; *** $p < .001$

Results

- Partially supported the proposed model of parent involvement
- Family SES and school characteristics had positive effects on both school-based and home-based involvement.
- The impact of a child's disability had a negative direct effects on both home and school involvement.

Results

- Parental efficacy emerged as a significant predictor of home involvement
- No significant mediator effect was found.

Table 4 Standardized estimates (β) of direct and indirect effects

	School characteristics	Child characteristics	SES	Family resource	Efficacy
Direct effect					
Efficacy	0.024	-0.198	0.001	0.241	
H.I.	0.164	-0.226	0.461	0.024	0.196
S.I.	0.292	-0.148	0.611	-0.138	0.075
Indirect effect					
H.I.	0.005	-0.039		0.047	
S.I.	0.002	-0.015		0.018	
Total effect					
efficacy	0.024	-0.198	0.001	0.241	
H.I.	0.169	-0.265	0.461	0.071	0.196
S.I.	0.294	-0.163	0.611	-0.119	0.075

*Home involvement (H.I.); School involvement (S.I.)

Discussion

- The largest effects of family SES on home involvement and school involvement
- Families whose children had more severe disabilities had lower parent efficacy and lower levels of parent involvement
 - Further research on severity of disability as a moderator
- Important role of school characteristics
- No mediator effect

Constructing a disability index for SNELS in a sample of pre-elementary children with disabilities

- purpose of the study
 - to develop and test a disability index in a heterogeneous population of pre-elementary children with disabilities via using the Special Needs Education Longitudinal Study (SNELS).

Thanks for listening.



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