

# Psychometric evaluation of the Chinese version of the Measure of Processes of Care for Service Providers (MPOC-SP)

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## Introduction

- Family-centered service (FCS) has been considered as the 'best practice' in early intervention services.
- The Measure of Processes of Care for Service Providers (MPOC-SP) has been widely used to measure professional's perception about their implementation of FCS.
- Translation and validation of the Chinese version of the MPOC-SP (Chinese MPOC-SP) will be useful in program evaluation and professional self-reflection in Taiwan.

## Purposes

- To evaluate the test-retest and internal consistency reliability of the Chinese MPOC-SP.
- To evaluate the construct validity Chinese MPOC-SP by discriminating between professional's background, year of work experience, and type of service institute.

## Participants: 92 early intervention professionals

Variables	n	%	Variables	n	%
<b>Age</b>			<b>Profession</b>		
< 30 y/o	31	33.7	Physical therapist	25	27.2
30-39 y/o	40	43.5	Occupational therapist	17	18.5
40-49 y/o	14	15.2	Speech therapist	17	18.5
> 50 y/o	6	6.5	Social worker	18	19.6
missing	1	1.1	Educator	11	12.0
<b>Sex</b>			<b>Settings where services provided</b>		
Male	5	5.4	Medical	29	31.5
Female	87	94.6	Education	9	9.8
<b>Years of work experience</b>			Community		
0-5 y	32	34.8		54	58.7
6-10 y	32	34.8			
11-15 y	14	15.2			
>16 y	11	12.0			
missing	3	3.3			

<sup>a</sup> Others include clinical psychologist, audiologist, babysitter

## Measures

The Chinese MPOC-SP is a 27-item self-report questionnaire, filled out by early intervention professionals, to evaluate their family-centeredness of service delivery. [see Figure 1 for example items]

For test-retest reliability, 38 professionals filled out the questionnaire twice within 2-4 weeks.

IN THE PAST YEAR, TO WHAT EXTENT DID YOU...	Indicate <u>how much</u> this event or situation happens to you.							
	To a Very Great Extent	To a Great Extent	To a Fairly Great Extent	To a Moderate Extent	To a Small Extent	To a Very Small Extent	Not at All	Not Applicable
1. ...suggest treatment/ management activities that fit with each family's needs and lifestyle?	7	6	5	4	3	2	1	0
2. ...offer parents and children positive feedback or encouragement (e.g., in carrying out a home program)?	7	6	5	4	3	2	1	0
3. ...take the time to establish rapport with parents and children?	7	6	5	4	3	2	1	0
4. ...discuss expectations for each child with other service providers, to ensure consistency of thought and action?	7	6	5	4	3	2	1	0
5. ...tell parents about options for services or treatments for their child (e.g., equipment, school, therapy)?	7	6	5	4	3	2	1	0

Figure 1. Examples of the MPOC-SP

## Data Analysis

- Internal consistency was calculated by Cronbach's Alpha.
- Test-retest reliability was calculated by Intraclass Correlation Coefficients (ICCs).
- Construct validity was analyzed by MANOVAs followed by post hoc comparisons (significance level:  $p < .05$ ).

## Results

- Excellent internal consistency (Cronbach's Alpha= 0.80-0.92) and acceptable test-retest reliabilities (ICCs=0.54-0.76) [Table 2]
- Differences in professional background in 'Communicating Specific Information about the child' ( $F=4.279$ ,  $p=.002$ ) [Figure 2]
- Differences in type of service settings in 'Providing General Information' ( $F=5.322$ ,  $p=.007$ ) [Figure 3]
- Differences in years of work experience in 'Showing Interpersonal Sensitivity' ( $F=4.347$ ,  $p=.007$ ) and 'Treating People Respectfully' ( $F=3.342$ ,  $p=.023$ ) [Figure 4]

Table 2 Internal consistency and test-retest reliability (n=38)

	Internal consistency Cronbach's $\alpha$	Test-retest reliability			
		Test M (SD)	Retest M (SD)	ICC	95% CI
Showing Interpersonal Sensitivity	0.87	5.3 (0.6)	5.3(0.7)	0.76	0.58-0.87
Providing General Information	0.92	4.9(1.0)	5.1(1.0)	0.71	0.51-0.84
Communicating Specific Information	0.80	5.6(0.9)	5.6(0.9)	0.54	0.26-0.73
Treating People Respectfully	0.88	5.7(0.6)	5.8 (0.6)	0.76	0.58-0.87

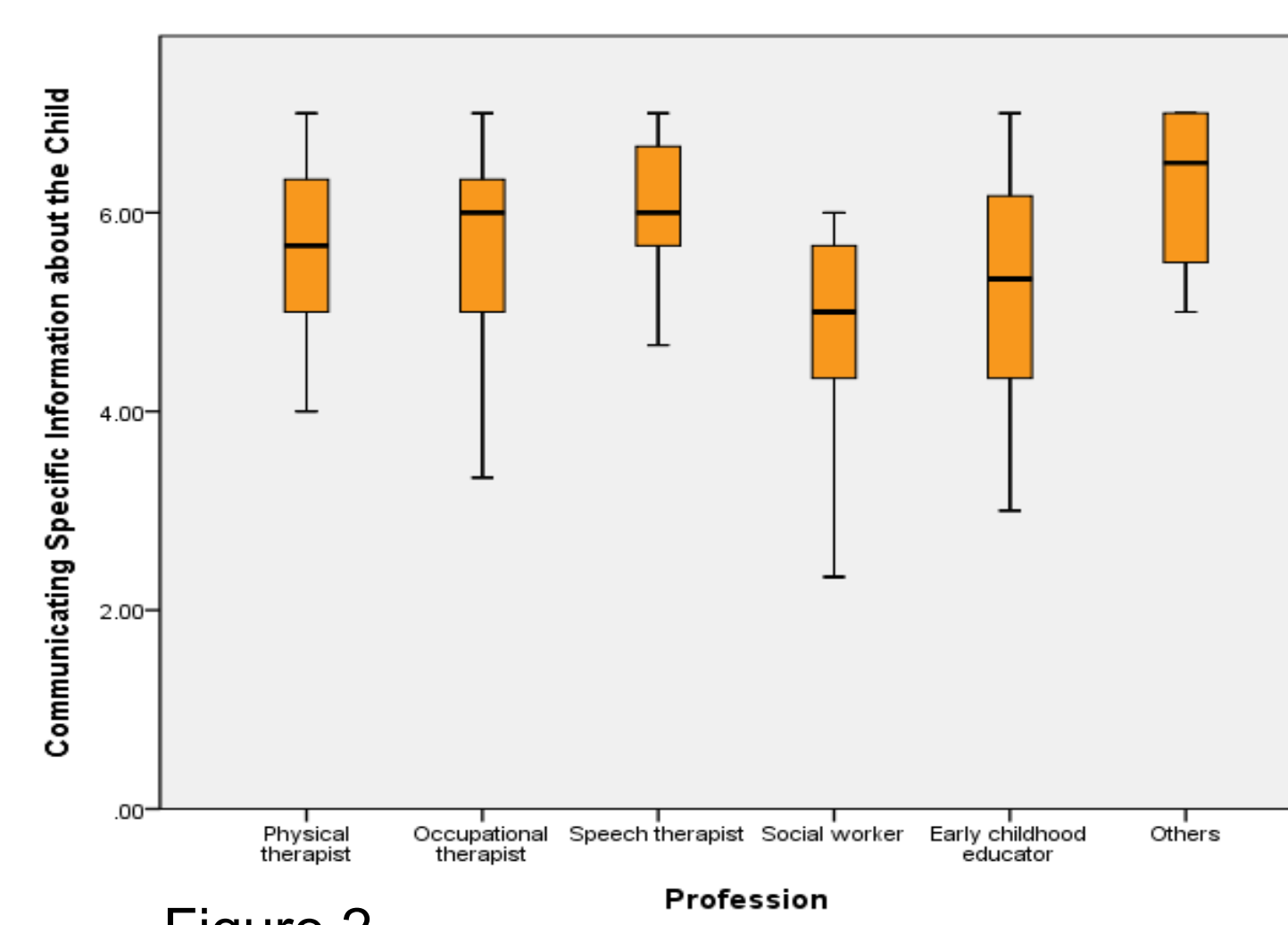


Figure 2

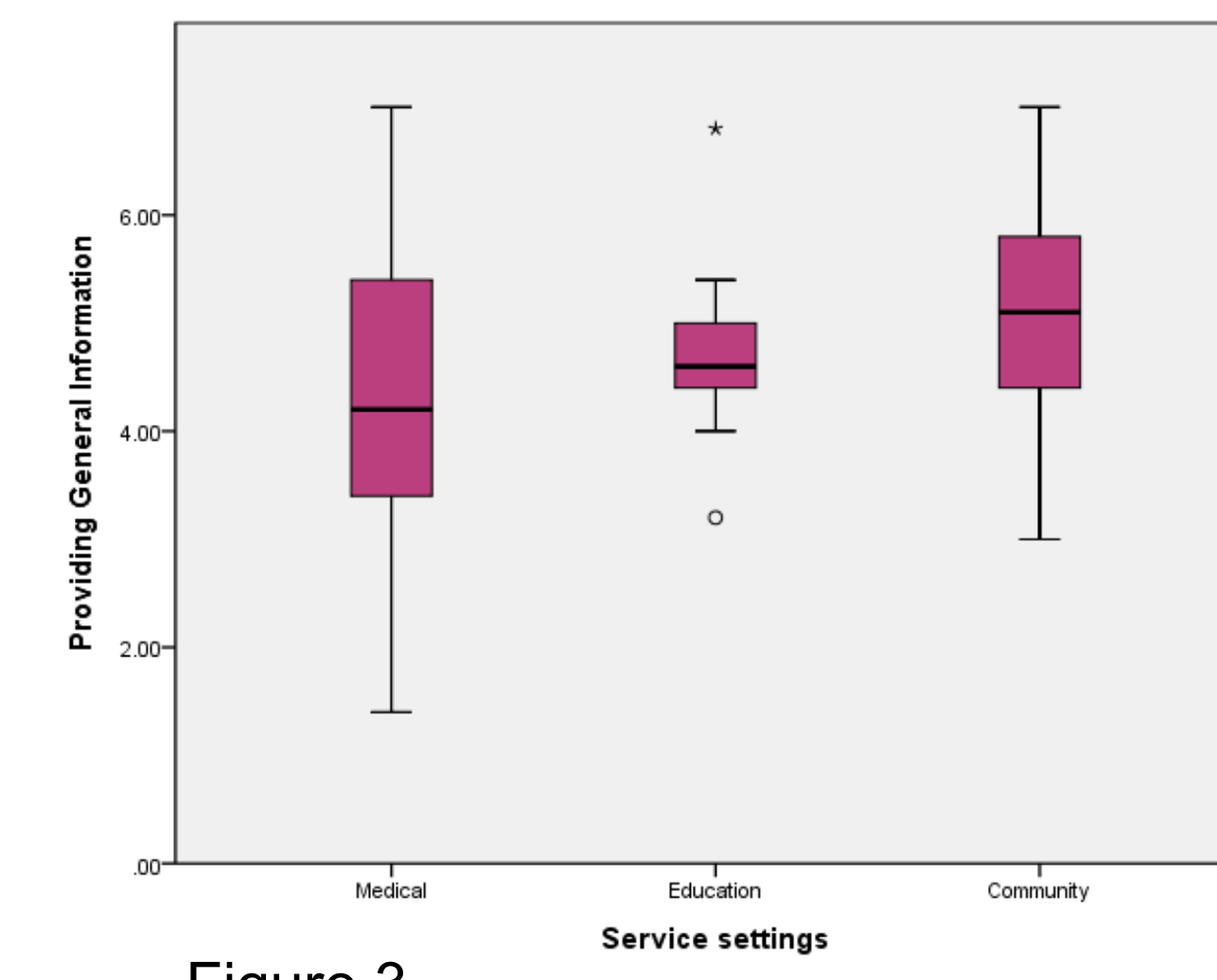


Figure 3

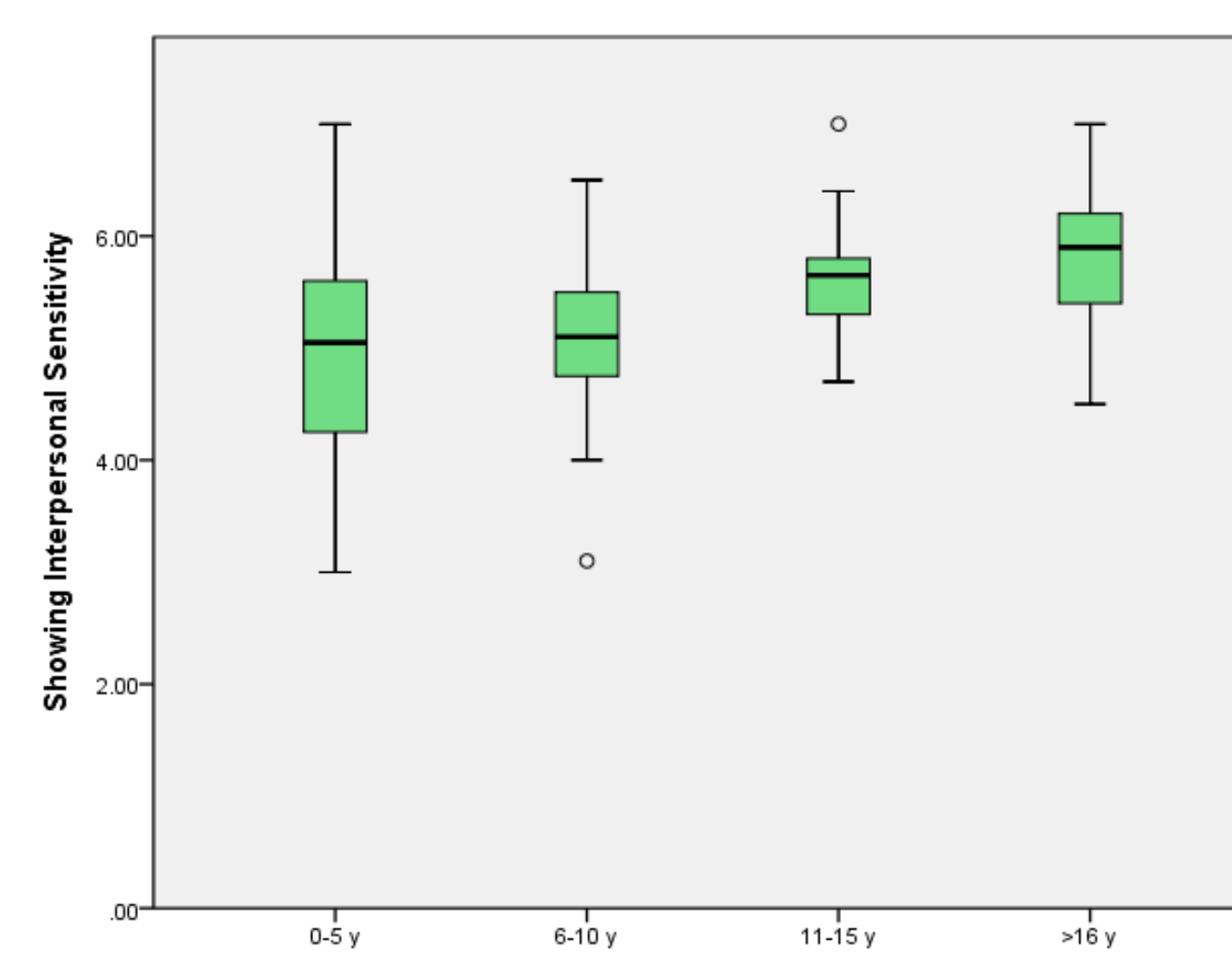
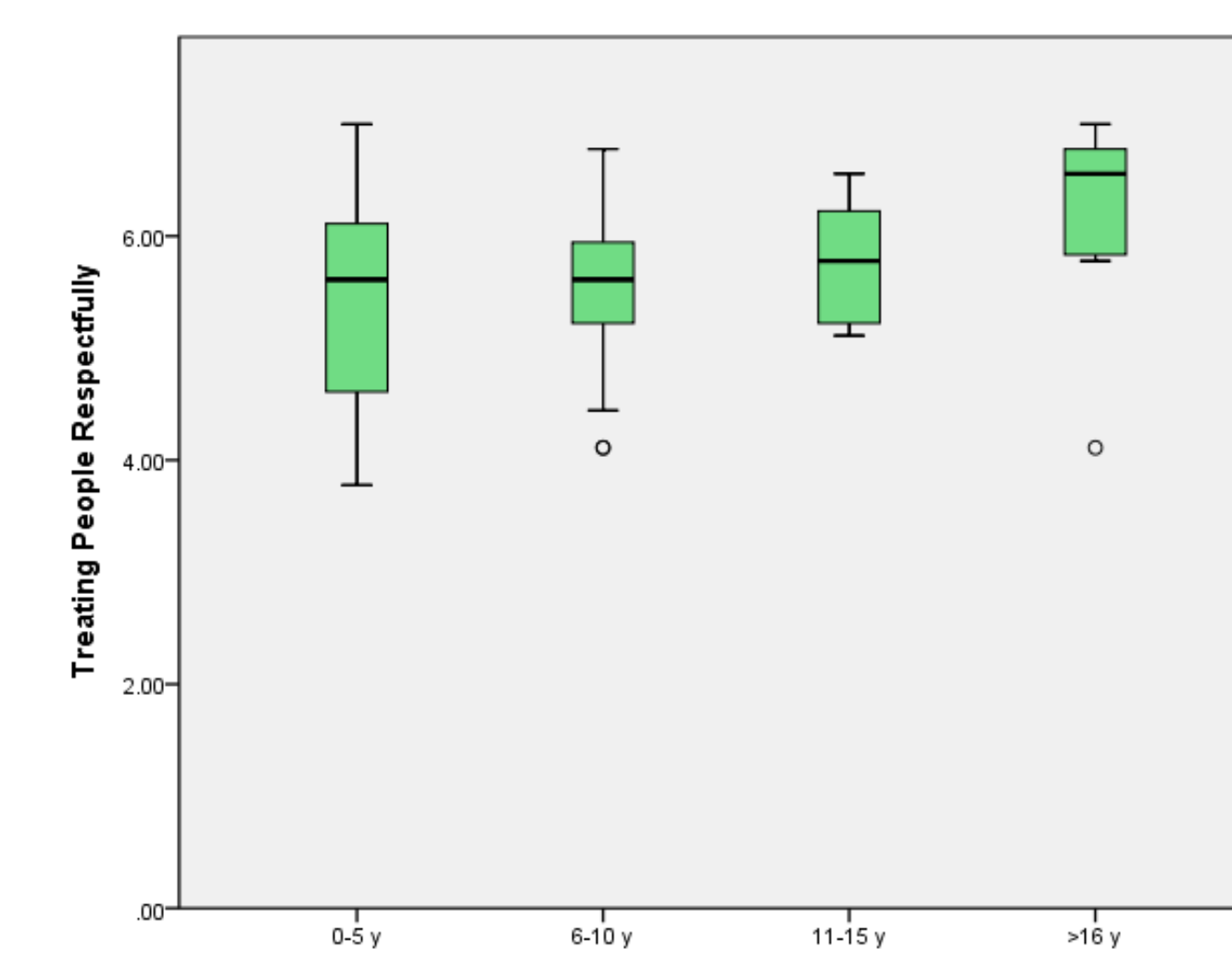


Figure 4



## Conclusions

- The Chinese MPOC-SP is reliable and can distinguish between diverse professional backgrounds, working experiences, and service settings.
- The study provides a useful tool for program evaluation and professional development in Taiwan.

## Acknowledgements

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