Assessing Cultural Receptivity in Fostering: Scale Development and Validation

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Statement of the Research Problem

Three-fourths of the 556,000 children in foster care live with foster families (U.S. Department of Health and Human Services, 2002). A shortage of foster parents of diverse cultures coupled with the problem of an overrepresentation of children of minority cultures in the child welfare system has resulted in a dire need to place children in transcultural placements.

Transcultural placement success requires that foster parents be receptive to the role that culture plays in children's development. Cultural receptivity (a construct developed by the author) involves people's openness to participate in activities that support foster children's cultural identity and development.

Despite the fact that receptivity to children's cultures seems to be a useful concept for foster care, the literature includes no conceptual or empirical references to the issue and to my knowledge, no measure of cultural receptivity has existed heretofore. Therefore, the purpose of this study is to test the psychometric properties of the Cultural Receptivity in Fostering Scale (CRFS) (developed by the author) that assesses foster parents' levels of cultural receptivity.

Research Background and Hypotheses

- What is the factorial structure of the CRFS?
- What is the internal consistency reliability of the CRFS factor(s)?
- What is the validity of the CRFS towards its intended interpretation and use?

The following sets of propositions are tested to validate the interpretations of the CRFS scores based on relationships to other variables external to the scale. The antecedent and outcome variables used in these propositions are considered indicators of

quality fostering. Support for these propositions implies that interpretations of the CRFS scores based on theory and empirical evidence is validated.

- 1) Demographic characteristics will not account for an appreciable amount of variance in CRFS scores.
- 2) Greater cultural receptivity will follow from the following factors.
 - a) Foster mothers who are more accepting of children will be more culturally receptive.
 - b) Foster mothers who are more experienced caring for children will be more culturally receptive.
 - c) Foster mothers who are more satisfied as parents will be more culturally receptive.
 - d) Foster mothers who have more family resources will be more culturally receptive.
 - e) Foster mothers who have more time available to foster will be more culturally receptive.
 - f) Foster mothers who have greater perceived responsibility to parent and work with foster care agencies will be more culturally receptive.
 - g) Foster mothers who have a greater tendency to like children will be more culturally receptive.
 - h) Foster mothers who have greater personal dedication to fostering will be more culturally receptive.
 - i) Foster mothers who have more anticipated help with fostering from worship groups, professionals, and kin will be more culturally receptive.
 - j) Foster mothers who receive more information about fostering culturally different children will be more culturally receptive.
 - k) Foster mothers who have more social supports will be more culturally receptive.
- 3) Foster mothers who are more culturally receptivity will have the following outcomes.
 - a) Greater cultural competence.
 - b) Greater receptivity to foster children's connections with birth families.
 - c) Greater willingness to foster children with behavioral or emotional problems, children with special needs, and children of a different race, religion, culture, or sexual orientation.
 - d) Greater potential to foster in general and to promote foster child development in particular.
 - e) Greater intention to continue fostering (i.e., 6 months, 1 year, 3 years).
 - f) Longer duration of fostering (i.e., years).
 - g) Larger number of children licensed to foster at one time.
 - h) Larger number of foster children currently fostered.
 - i) Larger number of foster children adopted.
 - j) Smaller number of foster children placed somewhere else at the request of foster mothers.

Methodology

Sample and Design

Data were collected from October, 2002, through September, 2003. Using a cross-sectional design, a total of 304 approved, certified, or licensed non-kinship foster mothers were recruited nationally. Foster mothers were recruited through state and local foster parent associations. Table 1 shows the foster mothers' demographic characteristics.

Foster mothers were mailed two questionnaires, the Casey Home Assessment Protocol-Self-Report (CHAP-SR) questionnaire (Orme, Cox, Rhodes, Coakley, Cuddeback, & Buehler, 2003) and the Casey Foster Applicant Inventory-Applicant (CFAI-A) (Orme, Cuddeback, Buehler, Cox, & LeProhn, 2003). Each of these questionnaires contained multiple scales (e.g., CRFS), subscales, and other questions designed to measure aspects of fostering and parenting, as well as assess individual and family functioning.

Statistical Analyses

For the most part, bivariate correlations were used to test propositions concerning the CRFS antecedents. Ordinary Least Squares (OLS) regression was used to test such propositions involving antecedents measured by multidimensional scales.

Bivariate correlations also were used to test some propositions involving outcomes thought to follow from cultural receptivity. Multivariate regression (using the general linear model) was used to test propositions involving multivariate continuous outcomes (CFAI-A core subscales) (Cohen, Cohen, West, & Aiken, 2003). Binary logistic regression was used to test propositions involving binary outcomes (intention to continue fostering) (Hosmer & Lemeshow, 2000).

Poisson regression, negative binomial regression, or zero-altered negative binomial regression was used to test propositions involving outcomes that are counts (number of years fostered, number of children licensed to foster at one time, number of foster children currently fostered) (Greene, 2000; Long, 1997; Orme & Buehler, 2001). More specifically, Poisson regression was used when overdispersion was not present. Negative binomial regression was used when overdispersion was present. Zero-inflated negative binomial regression was used when overdispersion was present and when results suggested a mix of two processes in the count variable, one that generates only zero counts, and another that generates both zero and positive counts.

Negative binomial regression was used to test Propositions 3.f, 3.h, and 3.i. Poisson regression was used to test Proposition 3.g. Zero-altered negative binomial regression was used to test Proposition 3.j. Non-directional hypotheses with $\alpha = .05$ were tested, because results in either direction would be important.

Results

What is the Factorial Structure of the CRFS?

An exploratory factor analysis (EFA) of the CRFS was conducted to explore whether one or more dimensions underlie the item scores. Unweighted least squares was used to extract factors because it leads to a consistent estimation of model parameters without the assumption that the observed variables have a particular distribution. Most of the item distributions were skewed negatively, although some were relatively normal.

Bartlett's test of sphericity $[X^2(190, N = 303) = 6095.15, p < .001]$ and the Kaiser-Meyer-Olkin measure of sampling adequacy (.96) strongly supported the suitability of the 25 CRFS items for factor analysis. Additionally, the scree test clearly indicated a one-factor solution. Table 2 provides descriptive statistics for the CRFS.

What is the Internal Consistency Reliability of the CRFS Factor(s)?

The CRFS has an alpha of .97. This indicates that the CRFS has excellent internal consistency reliability. Cronbach's alpha (α) was used to quantify the internal consistency reliability of the CRFS (Nunnally & Bernstein, 1994). Additionally, a careful item analysis was conducted prior to computing coefficient alpha. This included an examination of item means and standard deviations, inter-item correlations, and corrected item-total correlations.

Item means

Foster mothers' average score across item means was 4.26, with a range from 3.91(SD = .86) to 4.94(SD = .90) on the 5-point scale. Mid-range means demonstrate that the item was worded properly as to allow respondents to give the item a low rating (i.e., *none*). Items with means that are close to the extreme range value are indicative of low variances (DeVellis, 1991).

Item variances

The CRFS mean item variance is .67 and the range is .38. This moderate value suggests that the CRFS is capable of efficiently discriminating among different individuals (DeVellis, 1991).

Mean inter-item correlation

The CRFS items have a mean inter-item correlation of .54 and the range is .43. The minimum mean inter-item correlation is .35 and the maximum is .78. These interitem correlations are typical of a good scale (DeVellis, 1991).

Corrected item-total correlations

The CRFS was evaluated using the corrected item-correlation. All corrected item-total correlations were positive and greater than .60, and the vast majority were greater than .69. The large, positive correlations (i.e., range from .60 to .84) suggest that all of the CRFS items measure the same underlying construct and that the items have good discrimination (Nunnally & Bernstein, 1994).

What is the Validity of the CRFS towards its Intended Interpretation and Use?

Three sets of propositions were formulated to investigate the relationship between cultural receptivity and a broad range of external variables. Support for these propositions implies that interpretations of the CRFS scores based on theory and empirical evidence is validated.

Demographic characteristics

Foster mothers' demographic characteristics had no effect on cultural receptivity. There was not a statistically significant relationship between cultural receptivity and the multidimensional model of race, educational level, marital status, and income (see Table 3).

Antecedents

Table 4 shows selected bivariate correlations between CRFS scores and the following hypothesized antecedents. The results indicate that foster mothers with greater cultural receptivity have more parental acceptance of children; more experience caring for children; more time available to foster; greater perceived responsibility to parent and work with foster care agencies; greater tendency to like children; greater personal dedication to fostering; more anticipated help with fostering from professionals; and they received more information about working with culturally different children.

However, foster mothers' level of cultural receptivity was not affected by their anticipated help with fostering from either worship groups or their kin (see Table 4). Although overall, foster mothers' reported anticipated help from all three sources (i.e., professionals, worship groups, and kin) leads to greater cultural receptivity (R = .16, $R^2 = .03$, F(3,300) = 2.75, p = .043). Finally, there was not a statistically significant relationship between CRFS scores and satisfaction with parenting, family resources, or social supports (see Table 4).

Outcomes

Table 4 shows selected bivariate correlations between CRFS scores and the following hypothesized outcomes. Foster mothers with greater cultural receptivity have greater cultural competence; greater receptivity to foster children's connections with birth families; greater willingness to foster children with behavioral or emotional problems, children with special needs, and children of a different race, religion, culture, or sexual orientation. Overall, foster mothers with greater cultural receptivity have more willingness to foster these different types of children (R = .32, $R^2 = .10$, F(3,285) = 10.75, p = .000).

Additionally, foster mothers with greater cultural receptivity possess greater potential to foster in general (R = .36, $R^2 = .13$, F(3,300) = 29.13, p = .000) and in particular, greater potential to promote foster child development and to foster challenging children. However, there was not a statistically significant relationship

between cultural receptivity and potential to manage challenging relationships with foster care workers and agencies (see Table 4).

Results indicated that foster mothers with greater cultural receptivity are more likely to intend to continue fostering six months after the time they were surveyed for this study (B(304) = .03, $X^2 = 4.35$, OR = 1.03, p = .037). However, there was not a statistically significant relationship between cultural receptivity and intention to continue fostering over the next year (B = .02, $X^2 = 3.18$, OR = 1.02, p = .074) or over the next 3 years (B = .01, $X^2 = .48$, OR = 1.01, P = .486). Finally, cultural receptivity was not related to indicators of foster family utilization or indicators of placement stability (see Table 5).

Utility for Social Work Practice

The results of this study provide relatively strong evidence that the CRFS is a unidimensional assessment tool that consistently measures the construct *cultural receptivity*. Assessing cultural receptivity could assist social workers in determining whether foster parents are willing to employ culturally stimulating parenting strategies when raising foster children of different cultural backgrounds. Further, as demonstrated in this study, cultural receptivity is related to a number of different characteristics of overall fostering quality, which contribute to children's well-being. Thus, the CRFS is a valid tool that would be useful in the assessment of prospective foster parents who will foster children of different cultures.

References

- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.).
- DeVellis, R. F. (1991). *Scale development: Theory and applications*. Newbury Park, CA: Sage Publications, Inc.
- Greene, W. H. (2000). *Econometric analysis* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression* (2nd ed.). New York: John Wiley.
- Long, J. S. (1997). *Regression models for categorical and limited dependent variables*. Thousand Oaks, CA: Sage.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.
- Orme, J. G., & Buehler, C. (2001). Foster family characteristics and behavioral and emotional problems of foster children: A narrative review. *Family Relations*, 50(1), 3-15.
- Orme, J. G., Cox, M. E., Rhodes, K. W., Coakley, T. M., Cuddeback, G. S., & Buehler, C. (2003). *Casey Home Assessment Protocol (CHAP): Technical Manual.*Knoxville, TN: University of Tennessee, Children's Mental Health Services Research Center.
- Orme, J. G., Cuddeback, G. S., Buehler, C., Cox, M. E., & Le Prohn, N. (2003). *Casey Foster Applicant Inventory (CFAI): Technical Manual*. Knoxville, TN: University of Tennessee, Children's Mental Health Services Research Center.
- U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2002). *Adoption and Foster Care Analysis and Reporting System (AFCARS)*, Text available: http://www.acf.dhhs.gov/programs/cb/publications.afcars/report7.htm.

Table 1 Foster Mothers' Demographic Characteristics

Characteristic	%
Marital Status ($N = 303$)	
Married	74.6
Domestic partnership	4.0
Single, never married	6.3
Widowed	3.0
Divorced or separated	12.2
Race $(N = 304)$	
European-American	87.2
African-American	10.5
Hispanic	3.0
American Indian	2.0
Highest Degree $(N = 304)$	
<hs< td=""><td>2.2</td></hs<>	2.2
HS/GED	21.7
College, No Degree	29.9
Two-Year Degree	16.8
Bachelor's Degree	18.8
Advanced Degree	10.5
Employment status ($N = 304$)	
Full-time	32.6
Part-Time	17.1
Unemployed, looking for work	1.0
Homemaker, not employed outside home	34.9
Disabled or retired, not employed outside home	7.2
Other	7.2
Yearly Family Income (N = 302)	
<10,000	1.3
10,000 - 19,999	6.3
20,000 - 29,999	10.6
30,000 – 39,999	20.2
40,000 - 49,999	11.5
50,000 - 59,999	15.2
60,000 – 69,999	11.3
70,000 – 79,999	7.0
80,000 - 89,999	6.3
≥ 90,000	10.2

Note. Race percentages do not add up to 100% because foster mothers were asked to select all that applied. Income data is missing for two mothers (.7%).

Table 2 Descriptive Statistics for the CRFS

M Missing	SD	Mean (SE)	Mdn	Range	Skew (SE)	Kurtosis (SE)	N	
80.42	15.25	.87	82.00	100	95(.14)	2.03(.28)	304	0

Table 3 CRFS Regressed on Demographic Characteristics

	CRFS ($N = 301$)			
Demographics	В	β	t	
Education	-1.44	15	-2.28*	
European-American	1.68	.04	.63	
Married/partnered	-6.03	16	-2.49*	
Income	.20	.13	1.89	
	$R^2 = .03$			
	F(4, 296) = 2.25,			
	p = .064			

Note. *p < .05, two-tailed, ** p < .01, two-tailed.

Table 4 Selected Bivariate Correlations between CRFS Scores and Hypothesized Antecedents and Outcomes

	r	N
Antecedents		
Personal Dedication to Fostering Scale	.38**	304
Available Time Scale	.42**	304
Foster Parent Role Performance Scale-Parenting	.32**	304
Foster Parent Role Performance Scale-Agency	.26**	304
Parental Acceptance Scale	.29**	304
Barnett Liking of Children Scale	.23**	303
Agency Information Regarding Racially or Culturally Different	.12*	304
Children		
Help with Fostering Inventory-Professionals	.15**	304
Help with Fostering Inventory-Worship	.07	304
Help with Fostering Inventory-Kin	.09	304
Kansas Parental Satisfaction Scale	.04	303
Family Resources Scale	.06	293
Support Functions Scale	.06	304
Outcomes		
Cultural Competence Scale	.35**	304
Receptivity to Working with Birth Families Scale	.32**	304
WFS: Behavioral or Emotional Problems	.25**	297
WFS: Special Needs	.23**	290
WFS: Different Race, Religion, Culture, or Sexual Orientation	.27**	293
CFAI-A: Promote Foster Child Development	.39**	304
CFAI-A: Foster Challenging Children	.36**	304
CFAI-A: Manage Worker/Agency Challenges	.10	304

Note. Willingness to Foster Scale (WFS), Casey Foster Applicant Inventory-Applicant (CFAI-A). *p < .05, **p < .01.

Table 5 Foster Family Utilization and Placement Stability Variables Regressed on CRFS

Variables	В	SE B	$\Delta\%$
Years Fostered		N = 304	_
CRFS	002	.004	-3.00
Children Licensed to Foster		N = 303	
CRFS	.001	.002	1.54
Children Fostered		N = 304	
Years Fostered	.127**	.009	149.97
CRFS	002	.004	-3.00
Children Removed		N = 295	
Years Fostered	.071**	.009	66.89
CRFS	006	.005	-8.75
Children Adopted		N = 296	
Children Fostered	.004*	.002	31.03
CRFS	.004	.006	6.29

Note. Poisson regression was used in the analysis of children licensed to foster. Negative binomial regression was used in the remaining analyses.

^{*}*p* < .05, ***p* < .01.