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The Family Development Matrix Model of In Home Services for Public Child Welfare

Brad Richardson and Miriam Verploegh

University of Iowa

Author Note

Brad Richardson, Research Scientist/Engineer and Adjunct Associate Professor, School of Social

Work, National Resource Center for Family Centered Practice, The University of Iowa.

Miriam Verploegh, Ph.D. Candidate & Research Associate, School of Social Work, National

Resource Center for Family Centered Practice, The University of Iowa

Correspondents should be addressed to Brad Richardson at 100 University Research Park MTP-

4, Rm 162, Iowa City, IA 52242-5000. email: brad-richardson@uiowa.edu

Abstract

Despite the widespread use of the FDM model and reports of positive results since the late 1990s, the FDM model has not been adequately studied to test whether there is evidence supporting the contention that the approach effectively achieves outcomes such as reduced referrals to public child welfare and improvement in family functioning. This study explores data gathered through family service agencies providing in-home services using the Family Development Matrix (FDM) combined with public child welfare agency data. The data analyzed represent the only know dataset combining repeated measures of the FDM model 20 core indicators with individual child welfare data. Significant relationships among FDM indicators and fewer referrals to public child welfare were found. Results indicate a pattern of reduced frequency of referrals to public child welfare following participation in the FDM model. Implications for practitioners using the FDM model for in home services are discussed.

Keywords: In home services, public child welfare, child protective services, Family

Development Matrix, strengths-based practice, family centered practice,

The Family Development Matrix Model of In Home Services for Public Child Welfare

In home services are generally defined as services that help keep families intact who have

been referred to public child welfare for suspected child maltreatment, or help reunite families

when children reside in out-of-home placement. The Family Development Matrix (FDM) model

has been adapted throughout the United States in a variety of programs including in home

services programs provided by family support agencies (e.g., family resource centers,

community centers, Head Start). It is employed extensively by agencies serving the public child

welfare system in California. A recent review of in-home services in child welfare found that

agencies supported by the California public child welfare system using the FDM model were

operating in more than 20 counties with services provided to more than 12,000 families (Endres,

Navarro, Sherman, & Richardson, 2012). Although not implemented as extensively as in

California, the FDM model has been reported in Nevada, Texas, Ohio, Florida, New Jersey and

New York. However, despite the long history of research on in home and family preservation

services (Nelson & Landsman, 1992; Kirk, 2000), the widespread use of the FDM model and

reports of results since the late 1990s, there have been no empirical studies testing the effect of

the model or demonstrating evidence supporting the contention that the approach is effective.

Reports have included improvements in health and well-being, risk reduction of

maltreatment, out-of-home placement, reducing negative psychological impacts associated with

child welfare system involvement and reduction in referrals (e.g., Endres, Richardson &

Sherman, 1999; Richardson, Hayashi & Wells, 2014; Richardson & Hayashi, 2014; Khawaji, et

al. 2014; Endres, 2014). To date, child welfare data have not either not been available or not included in any analysis because FDM data and public child welfare data are maintained in separate systems. The purpose of this study is to utilize the only known dataset which combines FDM model data with public child welfare data to test whether in home services using the FDM model reduces child welfare system involvement. These data come from a set of programs serving one county with matched data from the FDM data system and the public child welfare data system. Thus the current study presents a unique opportunity for analysis of a combined dataset containing data elements from both the FDM data system and the public child welfare data system.

Literature

In home services have been provided by community based agencies, supported by the California Office of Child Abuse Prevention, since 2005 using the FDM model with families at-risk or who have reports of child maltreatment. In home services programs using the FDM model have been described as focused on family strengths and protective factors (Schorr, & Marchand, 2007; Center for the Study of Social Policy, 2007; Bruner, 2004; Dunst, 2002), using a case management approach and providing services to families in historically under-served, ethnically and culturally diverse communities (Endres et al., 2015). The model involves tracking results through repeated measurement of indicators and providing services either directly or through referrals (Endres & Navarro, 2013; Endres, Richardson & Sherman, 1999; Endres & Simmons, 2007). The process of scoring indicators in interaction with the family was reported to be a central element of the FDM model. According to Navarro (2015) reports from the field have indicated that the rating process is a time when strengths and needs are identified and strategies for promoting family strengths and protective factors are identified. The scoring

process with families was reported to contribute to engagement and the indicators were also used to guide the development of a plan where goals are identified by the family with the worker using the Pathway to the Prevention of Child Abuse and Neglect interventions (Schorr & Marchand, 2007).

In addition to facilitating engagement, the FDM model of in-home services was reported to focus the family and the worker on the strengths of the family, improving safety and well-being and contributing to keeping the family intact. The FDM data system also provides simple illustrations of scores at each assessment and these were reported by workers to be important for a strengths-based approach. Providing families with graphical representation of their indicators at each assessment provided visual evidence of progress which was reported to further increase engagement. Other studies have found that multiple component programs involving support similarly enhanced adherence (Thomson, et al., 2015) and that outcomes tracking reduced the time to family reunification (Jivanjee, 1999; Tam & Ho, 1996), involvement with the courts (Karski, 1999) and increased referrals and use of supportive services (Jones, 1978).

Atkinson and Butler (1996) reported that in court cases, where parents might otherwise had their parental rights terminated, those who were judged to be more active in services were also judged to demonstrate progress, be more involved in visits with their children and were found to have increased rates of reunification (Davis, Landsverk, Newton, & Granger, 1996; Fanshel, 1975; Hess, 1987). Greater parental involvement in treatment planning has also been shown to result in fewer subsequent reports for child maltreatment (Littell, et al. 2001).

The FDM measures used included 20 core indicators that have been developed to measure important life domains (e.g., shelter, family relations, substance abuse). Other measurable indicators have also been used; however, the 20 core indicators of the FDM have

undergone the most refinement and are used by all programs supported by the California Office

of Child Abuse Prevention. Earlier FDM indicators used ratings of *In-crisis, At-risk, Stable* and

Self-sufficient as definitions for the indicator categories; the 20 core indicators have specific

operational definitions for each response category to achieve reliability of the indicators (Endres,

2015; use of specific definitions on a five point scale has been reported elsewhere; e.g. Khawaja,

et al., 2014). Using the housing indicator as an example, the following process illustrates

instructions on how to work with a family to arrive at score:

"1) Have the client describe their living arrangements. Do they rent or own? Are they

living with others, such as family or friends? Are they living in a shelter?

2) Is the house in which the client lives safe and secure? Do the doors and windows lock?

Is the house in disrepair? Are there exposed wires? Does the family feel safe and

secure?

3) Does the client receive any sort of subsidy to assist with their housing payment? Does

the client live in public housing? Does the client receive Housing Choice Voucher

Program assistance? Is the client receiving any sort of financial assistance for their rent

from any other source (trustee, church, social service agency, etc.)?

4) Have the client describe the housing payment history for the past six months. Have the

bills been paid on time? Is there a balance carried forward some months? If so, what is

the balance? Are there any eviction or foreclosure notices?

A family is homeless if they have no housing, particularly if they are living on the streets or in a

homeless shelter. Temporary housing is living in transitional housing or with family or friends.

The family is vulnerable if they are renting or own a home but are significantly behind in rent or

mortgage payments or have received eviction or foreclosure notices. A family is stable if they

receive some form of regular assistance with their rental payments. This is typically through public housing or the Housing Choice Voucher Program (formerly Section 8), but also includes any assistance from other organizations the family depends on." (CANI, 2004).

The FDM model of prevention and intervention in child welfare in California is implemented in the context of differential response. Differential response differs from traditional child protective services response to child maltreatment reports. Differential response is intended to reduce the use of investigative procedures and work more with families in a supportive manner helping parents to learn and demonstrate improvements in safety for their children. Nationally, differential response varies by location but generally creates at least two tracks (e.g., assessment or investigation). The California differential response pathways involve: (a) voluntary participation in services where families seek assistance and the reason may not be documented, (b) reports that are "screened out" and referred to community agencies for services, (c) reports of suspected child maltreatment that receive assessment, and (d) reports involving cases consider more severe and result in a child maltreatment investigation (involving the collection of evidence to prove abuse or neglect). Investigation is sometimes referred to as the "more traditional response" to reports of maltreatment and follows the legal mandate through the Child Abuse Prevention and Treatment Act (CAPTA) of 1974. This act legally requires CPS to engage in a series of specific procedures including investigation and, if needed, out of home placement to ensure the safety of at risk children. The FDM model in California is sometimes used in cases involving investigation; however, it is used extensively for in home services with families in the non-investigative tracks based on research that has shown investigation to be intrusive and adversarial which may lead to more problematic outcomes for families (Kaplan & Merkel-Hollguin, 2008). Where cases are judged to be amenable to risk reduction by support

services increasing safety, caregiver knowledge of positive parenting and child development, families are referred to agencies using the FDM model by CPS through the DR pathways (i.e., voluntary, referral or assessment). Other factors such as the age of the child involved, the characteristics of the maltreatment reported, the willingness of the parents to participate in services and the number of previous referrals are also used to determine which path is used (Kaplan & Merkel-Holguin, 2008).

Hypotheses

Based on our review of the model, the context in which it is implemented in California and the available data, we hypothesize that families in the *voluntary* differential response category will have fewer referrals to public child welfare than families in the *referred* category. Families assigned to the *assessment* track are hypothesized to have more referrals than either the voluntary or referred categories. The relationship between baseline FDM indicator scores and prior referrals and follow-up FDM indicator scores (after intervention) and subsequent referrals will be explored along with the relationship between change on FDM indicators and subsequent referrals. Baseline FDM indicator scores may be hypothesized to have a negative association with previous referrals to CPS and follow-up indicator scores may be hypothesized to have a negative association with subsequent referrals. Positive change in FDM scores from baseline to follow-up on FDM indicators is hypothesized to be negatively associated with referrals after intervention.

Methods

Data and Variables

To examine the effect of the FDM model of in home services on reducing involvement with the public child welfare system, FDM indicator data and child welfare data collected in one

county were analyzed. FDM indicator data at intake and follow-up conducted after three months were provided along with referral data. Referral dates were used to code referrals into those that occurred before the baseline FDM (*prior referrals*) and those that occurred after the first FDM (*subsequent referrals*). Other data included differential response pathway, demographic information for 250 children (age, number of children in the household, ethnicity, gender, age of caregiver) and maltreatment type (e.g., physical, sexual, denial of critical care).

The FDM included 20 core indicators measuring the following domains: 1) access to transportation, 2) child development, 3) budgeting, 4) child care, 5) child health insurance, 6) clothing, 7) community resource knowledge, 8) emotional well-being, 9) employment, 10) family interaction, 11) health services, 12) home environment, 13) nurture, 14) nutrition, 15) parenting skills, 16) substance abuse, 17) risk of emotional or sexual abuse, 18) stability of shelter, 19) supervision of children, and 20) support system. Responses were coded from 1 to 4 where; 1=*In-crisis*, 2=*At-risk*, 3=*Stable* and 4=*Safe and self-sufficient*.

To create change scores for each indicator, baseline scores were subtracted from follow-up scores. Change scores could range from -3 to +3 with positive scores reflecting improvement on an indicator and negative scores reflecting increased vulnerability on an indicator.

Data Analysis

To test the hypothesis that differential response path is related to the number of previous referrals to the public child welfare system, correlational analysis will be performed between prior referrals to CPS and differential response path coded as 1=*voluntary*, 2=*referred* and 3=*assessment*. Correlations between baseline FDM indicators and referrals prior to the baseline assessment and correlations between follow-up indicator scores and referrals after the beginning of intervention will be examined. To test the relationships among available information (e.g.,

demographics, pathway), change occurring during the intervention, measured as change in FDM indicators, and the relationship with subsequent referrals, multiple regression analysis will be performed.

Results

The dataset comprised 250 cases served in one county in California during a recent one year period of time. The ethnicity of children was 27 percent African American, 53 percent Latino, 15 percent Asian, four percent white and 10 not identified. The number of referrals to public child welfare associated with the cases prior to the initial FDM assessment ranged from 0 to 15. Following the initial FDM assessment, the number of subsequent referrals ranged from 0 to 5. Table 1 presents the number of prior and subsequent referrals. For those in the voluntary and in the screened out and referred paths 53 percent had prior referrals while 62 percent of those in the assessment path had previous referrals. During the follow-up period, 41 percent of those in the voluntary path had referrals, 35 percent of those in the screened out and referred path had subsequent referrals and 49 percent of those in the assessment path had subsequent referrals.

There is a significant correlation between referrals prior to involvement with the FDM model and the number of subsequent referrals (after initial involvement with the FDM model) for all cases ($r = .34$; $p. \leq .001$). However, this correlation is only significant under Pathway 3, assessment ($r = .53$; $p. \leq .001$); for Pathway 1 and 2 the correlation is small and not significant.

Table 2 and Table 3 present the distributions for each of the FDM indicators along with their means and standard deviations for baseline and follow-up, respectively. Those in crisis ranged from 33.3 percent on *Employment* to 0 percent on *Supervision* at baseline and from 21.4 percent on *Employment* to 0 percent on *Support System*, *Supervision*, Risk of *Emotional or Sexual Abuse, Parenting Skills, Nutrition, Nurturing, Health Services, Emotional Well Being, Child health insurance, and Access to Transportation* at follow-up.

Table 4 presents the correlations for baseline and follow-up FDM indicators with prior and subsequent referrals. Knowledge of A*ppropriate development* (r = -.26; *p.* ≤ .05), *Employment* (r = -.13; *p.* ≤ .10), *Risk of emotional or sex abuse* (r = -.20; *p.* ≤ .05), *supervision* (r = -.16; *p.* ≤ .05) *and support system* (r = -.22; *p.* ≤ .05) indicators measured at baseline were significantly correlated in the negative direction with the number of prior referrals to public child welfare. This means that families that scored higher on these indicators are associated with fewer referrals in the past than those that scored lower on these indicators. Ratings on *Stability of home/shelter* (r = .13; *p.* ≤ .10), and *Health services* (r = .15; *p.* ≤ .05) were positively correlated with the number of previous referrals.

On the follow-up FDM, higher scores on *Access to Transportation* (r = -.20; *p.* ≤ .05), *Appropriate Development* (r = -.26; *p.* ≤ .05), *Budgeting* (r = -.26; *p.* ≤ .05), *Employment* (r = -.20; *p.* ≤ .05), *Presence of Substance Abuse* (r = -.17; *p.* ≤ .05) and *Support System* (r = -.29; *p.* ≤ .05) were negatively associated with the number of prior referrals; more referrals were associated with lower scores on these indicators.

Subsequent referrals (i.e., child welfare referrals that occurred after participation in the FDM model began) were negatively correlated with baseline FDM indicator scores on *Home*

environment (r = -.14; p. ≤ .10), *Presence of substance abuse* (r = -.14; p. ≤ .10) and *Supervision*

(r = -.12; p. ≤ .10). Subsequent referrals were positively associated with the FDM baseline

indicators *Community Resource Knowledge (r = .21; p. ≤ .05)* and Health services *(r = .14; p. ≤*

.10). This means that more subsequent referrals were correlated with higher scores on *community*

resource knowledge and *health services*.

On the follow-up FDM, indicators obtaining significant negative correlations with

subsequent referrals included *Emotional Well Being (r = -.12; p. ≤ .10), Employment (r = -.15;*

p. ≤ .05), Family Communication Skills (r = -.15; p. ≤ .10), and *Risk of emotional or sex abuse*

(r = -.24; p. ≤ .05). Nurturing (r = .18; p. ≤ .05) was the only significant follow-up indicator

that was positively correlated with subsequent referrals.

To examine the effect on subsequent referrals of positive changes in each of the

indicators, analysis was performed using difference scores (follow-up assessment minus baseline

assessment). Significant negative correlations were found with subsequent referrals on *Change in*

Transportation (r = -.13; p. ≤ .10), Change in Community Resource knowledge (r = -.27; p. ≤

.01, Change in Employment *(r = -.17; p. ≤ .05),* and *Change in Health services (r = -.13; p. ≤*

.10) and Change in Nutrition (r = .14; p. ≤ .10) was the only significant follow-up indicator that

was positively correlated with subsequent referrals.

Multiple regression analysis of the effect on subsequent referrals of changes on the FDM

indicated that only Change in Community resource knowledge obtained significance (β = -.20; *p*

≤ .01). Adding *prior referrals* (β = .32; *p* ≤ .01) as an explanatory variable results in a reduction

of 25 percent in the direct effect of Change in Community resource knowledge (β = -.20; *p* ≤ .01)

and increases the explained variation from four percent (R^2 = .04; p. ≤ .01) to 14 percent (R^2 =

.14; p. ≤ .01).

Discussion

The hypothesis that referrals would be significantly different by differential response path was refuted. The assessment path had the highest percentage of cases with either prior referrals (62%) or subsequent referrals (49%); however, the difference was not significant. In fact, the percentage of those with subsequent referrals in the voluntary path (41%) was higher than those in the screened out and referred path (35%).

Lower baseline FDM indicator scores were hypothesized to be negatively associated with previous referrals to public child welfare because they would indicate more vulnerability. In contrast, higher scores at baseline and at follow-up are indicative of protective factors and, therefore; higher scores should correspond negatively with referrals. Indeed, most of the significant correlations were in the negative direction which supports the general protective factors theory. However, at baseline health services and stability of home or shelter were found to have positive correlations with prior referrals. Although it might be expected that accessing health services and qualifying for housing assistance, which would result in higher scores for those indicators, could be indicative of self-sufficiency but could also lead to an increase in contacts with mandatory reporters which could increase the probability of referral to the public child welfare system. This could explain why community resource knowledge at baseline was also associated with subsequent referrals and at follow-up the direction of the association changed to negative, though the magnitude was not significant, suggesting that knowledge of community resources can be protective once involved in a supportive, family centered and strengths based program.

Among the follow-up indicators, all significant correlations were negatively related to subsequent public child welfare referrals with the exception of nurturing. The present dataset

does not provide information to test whether nurturing could be different among children in the family which could account for a positive correlation with referrals. Other instruments (e.g., PICCOLO, Parenting Interactions with Children: Checklist of Observations Linked to Outcomes) designed specifically for this construct can assess nurturing or attachment for each child and would be more sensitive to differences. At the family level, the indicator may also not be sensitive to family situations where parents may be very nurturing at times but not at other times.

The results from the analysis of the present study indicate that specific indicators in the FDM are significantly associated with the likelihood of subsequent referrals. It is important to focus attention on gathering accurate information for all indicators because they have all been determined to be important areas for exploring with families, measuring progress and setting goals. One important goal is of course mitigating future child welfare involvement. The data show significant relationships among indicators at initial assessment as well as at follow-up assessment to be associated with future child welfare referrals.

Positive change in FDM indicator scores from baseline to follow-up, reflecting results of intervention with families, was also hypothesized. On average, 18 of the 20 indicators were higher at follow-up. Two exceptions were noted; there were very small negative changes on substance abuse risk and change in shelter. These results suggest that the indicators are sensitive to change among families served using the FDM model and that positive change in family functioning occur in the context of the intervention.

Implications for In-Home Services

Based on the empirical results, paying attention to the levels of those indicators shown to have a significant effect, and the directionality in which the indicators are associated with subsequent referrals, can be informative for case management purposes. Findings suggest that

strengths based, family centered and community based services using tracking tools can be effective for vulnerable families who have, or are at-risk of, reports of maltreatment to the public child welfare system. While history of involvement is a strong and robust predictor, the analysis indicates that the FDM model can effect and measure changes in indicators of family functioning. These indicators are measures of protective factors associated with fewer reports of child maltreatment to the public child welfare system among those with higher scores. This finding is important because while the results showed modest but significant effects, the results are encouraging given the substantial body of work that has found that not only previous involvement with the child welfare system, but involvement with government systems in general, can be risk factors for involvement with the public child welfare system through reported maltreatment.

At risk families involved with public child welfare systems face multiple intersecting problems deeply rooted in demographic, geographic, psycho-social, and emotional characteristics and experiences. The multiple and intersecting disadvantages faced by families provide policymakers, funders, researchers and evaluators, and practitioners with formidable challenges when working to intervene on behalf of those in need. Importantly, providing an effective intervention into the damaging and persistent cycle of disadvantage is one of the most important tools practitioners have for addressing these significant social problems.

While this study is not conclusive, it provides evidence that the FDM approach, in use over the last three decades, shows promise as a practice incorporating ongoing measurement which includes family input during in home service addressing outcomes for the public child welfare system. The process of reviewing measures and re-assessing status periodically has been

reported elsewhere to be important for engagement of families. Reviewing measures may also help in focusing on priorities established through interaction with families.

Limitations and Future Research

The current analysis is based on secondary data which were limited in scope and duration. The FDM model typically involves more than two assessments; however, given the year long period of time in which the data were assembled, only baseline and one follow-up set of measures were available in sufficient numbers for comparison. While the effort to combine child welfare and FDM data should be recognized as a challenging and important step, the available data do not include other information that would be helpful explaining change such as family characteristics and demographic information, additional information about referrals or other important child welfare information (e.g., injuries, placements, child well-being).

Further research is needed to explore additional outcomes (e.g., safety, well-being) and to further understand the relative effects of the FDM model and the associated indicators on outcomes. With the number of families being served, it is also important to further understand the relationship between the FDM model and engagement as well as fidelity. Although the level of difficulty associated with a randomized controlled trial is high, to definitively study effects would require an RCT design. A similar design would also be needed to separate the effect of the measurement process and the practice elements.

To adequately study the scope of desirable outcomes in addition to referral to child welfare (e.g., safety, permanency, well-being, subsequent child maltreatment) additional data will be required. The use of parallel instruments, would be helpful to refine the core indicators. For example, in the present study the *nurturing* indicator was an inconsistent predictor and the

use of a parallel instrument to inform the rating and refine the categories could help address the issue.

Predictive validity is fundamentally an issue of gathering important outcome information over a sufficient period of time to determine the short and long term effects on or associations with criterion variables (outcomes). While the present study is limited to the available outcome of subsequent referrals, child welfare agencies gather information about a variety of out-of-home placements, service utilization, extensive case history information and other details about referrals that, when combined with the FDM, over a sufficient period of time could yield empirical results about the outcomes of the work by agencies using the FDM model.

These activities would provide robust evidence for the effectiveness of the overall model in use in California and across the U.S. and elsewhere. Utilizing more exhaustive information where child welfare and FDM data can be combined will provide a study context which would allow research on a variety of important propositions for child welfare. Further documenting the intervention approach and developing fidelity measures is also necessary to address the process.

Clearly, implementation of all the recommendations for future research would provide the most solid evidence as would developing an overall theory for testing using more sophisticated statistical techniques (e.g., SEM)). However, availability of resources to conduct such research is always a concern; therefore, decisions about which elements of the need for future research will need to be prioritized.

There remains a paucity of research examining the effectiveness of approaches and measurement properties of life or family functioning domain scales in general as well as the FDM model in particular. In use since the mid-90s, the FDM is one of few remaining from the burst of instruments and approaches developed during the early response to GPRA. Additional

attention is needed to this area of research for in home services that seek to build on strength and

demonstrate the effectiveness of services to keep families together while improving safety,

permanency and well-being. As has been written most succinctly in more popular published

work, while the research to date is imperfect, it is the best there is at the moment:

> But the law of large numbers suggests that when a measurement is too imperfect
> for our tastes, we should not stop measuring. Quite the opposite – we should
> measure again and again until the niggling imperfections yield to the onslaught of
> data." (Gilbert, 2006, p. 77)

The present research is useful as a first demonstration of the effect of the FDM model and

its role for in home services and child welfare interventions for families, agencies and public

child welfare agencies that sponsor in home services. Even though there are some limitations in

measurement and data collection, further collection and analysis is important to understand and

refine interventions, and more importantly, for understanding how families can benefit the most

from in home services.

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Table 1.

Number of CPS Referrals Before (Prior) and After (Subsequent) Initial FDM Assessment

After> Before	0	1	2	3	4	5	Total
0	76	25	5	1	0	0	107
1	30	18	5	4	0	0	57
2	11	4	3	3	0	0	21
3	15	3	0	2	0	1	21
4	6	4	0	0	1	0	11
5	4	0	0	0	0	0	4
6	4	3	2	0	0	0	9
7	2	2	1	0	0	0	5
8	3	0	1	3	0	1	8
9	2	0	0	0	1	1	4
10	1	0	0	0	1	0	2
15	0	0	0	1	0	0	1
Total	154	59	17	14	3	3	250

Table 2: Distribution of status levels by indicator (1st assessment)

Indicator	In Crisis %	At Risk %	Stable %	Self Sufficient %	Mean	Std. Dev
Access to transportation	1.6	1.2	32.0	65.2	3.61	.600
Appropriate development	2.8	16.0	29.2	52.0	3.30	.838
Budgeting	4.4	18.8	52.0	24.8	2.97	.783
Childcare	7.7	9.8	52.1	30.3	3.05	.842
Child health insurance	1.6	0.8	20.8	76.8	3.73	.558
Clothing	7.7	21.9	33.2	37.2	3.00	.950
Comm. resources knowledge	14.4	24.4	30.8	30.4	2.77	1.04
Emotional wellbeing/ life value	2.8	11.2	69.6	16.4	3.00	.624
Employment	33.3	8.1	53.6	5.0	2.30	.990
Family communication skills	4.4	20.4	27.2	48.0	3.19	.910
Health services	1.2	5.2	50.4	43.2	3.36	.638
Home environment	1.6	8.8	36.8	52.8	3.41	.718
Nurturing	0.0	8.0	35.2	56.8	3.49	.641
Nutrition	0.0	4.4	28.4	67.2	3.63	.568
Parenting skills	0.4	12.4	46.4	40.8	3.28	.688
Presence of (substance) abuse	1.2	7.2	29.2	62.4	3.53	.683
Risk of emotional or sex abuse	1.2	9.1	16.0	73.7	3.62	.702
Stability of home shelter	8.0	2.0	11.2	78.8	3.61	.873
Supervision	0.0	0.8	13.6	85.6	3.85	.381
Support system	4.4	23.6	52.4	19.6	2.87	.771

Table 3: Distribution of status levels by indicator (2nd assessment)

Indicator	In Crisis %	At Risk %	Stable %	Self Sufficient %	Mean	Std. Dev
Access to transportation	0.0	5.1	22.7	72.2	3.67	.570
Appropriate development	0.6	6.3	28.4	64.8	3.57	.637
Budgeting	1.1	9.1	58.5	31.3	3.20	.642
Childcare	0.6	4.2	43.7	51.5	3.46	.609
Child health insurance	0.0	0.0	21.0	79.0	3.79	.409
Clothing	1.7	17.6	34.7	46.0	3.25	.804
Comm. resources knowledge	2.3	10.2	36.4	51.1	3.36	.759
Emotional wellbeing/ life value	0.0	4.5	68.2	27.3	3.23	.518
Employment	21.4	3.5	65.9	9.2	2.63	.922
Family communication skills	0.6	14.6	42.0	43.8	3.29	.718
Health services	0.0	5.1	46.6	48.3	3.43	.591
Home environment	0.6	8.0	30.7	60.8	3.52	.667
Nurturing	0.0	1.1	36.4	62.5	3.61	.511
Nutrition	0.0	1.1	30.3	68.8	3.68	.493
Parenting skills	0.0	2.3	46.6	51.1	3.49	.545
Presence of (substance) abuse	1.7	6.8	33.5	58.0	3.48	.701
Risk of emotional or sex abuse	0.0	1.1	9.7	89.1	3.88	.359
Stability of home shelter	8.0	2.8	16.5	72.7	3.54	.887
Supervision	0.0	0.0	11.4	88.6	3.87	.323
Support system	0.0	15.9	57.4	26.7	3.11	.646

Table 4: Correlations of FDM indicators with referrals to CPS before and after intervention

| | Baseline | | Follow-up | |
Indicator	Prior	Subsequent	Prior	Subsequent
Access to transportation	-.07	.04	-.20**	-.07
Appropriate development	-.26**	-.69	-.26**	-.11
Budgeting	.01	-.08	-.26**	-.07
Childcare	.06	.01	.05	-.04
Child health insurance	.02	.08	-.11	.05
Clothing	-.08	.05	-.09	.07
Comm. resources knowledge	.08	.21**	-.12	-.07
Emotional wellbeing/ life value	-.02	-.02	-.07	-.12*
Employment	-.13*	-.02	-.20**	-.15**
Family communication skills	.03	-.10	-.07	-.15*
Health services	.15**	.14*	.07	.02
Home environment	-.13*	-.14*	-06	-.02
Nurturing	.02	.080	.08	.18**
Nutrition	-.04	.08	-.04	-.06
Parenting skills	-.06	.08	.06	.01
Presence of (substance) abuse	.00	-.14*	-.17**	-.08
Risk of emotional or sex abuse	-.20**	-.06	-.07	-.24**
Stability of home/shelter	.13*	.02	.19**	.06
Supervision	-.16**	-.12*	-.01	-.01
Support system	-.22**	-.02	-.29**	-.14

** p ≤ .05 * p ≤ .10