

Cumulative Evaluation of Empowering Families

Prepared by Dr. Joanne Roberts¹
Wellesley Centers for Women
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I. Overview

Empowering Families was focused on infusing the Providence Public School District (PPSD) elementary schools with an intervention centered on the Mind in the Making (MITM) training, designed to build the capacity of families, teachers, and schools to understand how children's executive function impacts social-emotional and cognitive growth. The MITM protocol included 8-modules with 16-hours of training for parents; and an intensive multi-day training for educators. The seven essential skills associated with MITM included: Focus and Self-Control; Perspective Taking; Communicating; Making Connections; Critical Thinking; Taking on Challenges; and Self- Directed, Engaged Learning.

The evaluation of *Empowering Families* was conceptualized as three distinct studies to assess the impacts of the intervention on: PreK parents; K-3 parents; and Educators. The studies included:

- *Empowering Families* with preK Families: The intervention conducted 8-weeks of MITM training for families with preschool-aged children. Children were typically entering kindergarten within the PPSD in the next academic year.
- *Empowering Families* with Families of children in Grades K – 3: During the school year, multiple sessions of *Empowering Families* were offered to families of children grades K3, within participating schools. The sessions occurred in all 22 elementary schools across the various intervention years, with 7-8 schools participating each year. In the final year of the project, the intervention was offered within 6 elementary schools in the District although any interested families across all of the schools could participate
- *Empowering Families* with School Educators grades K-3: K-3 educators were offered the opportunity to participate in the *Empowering Families* through a summer training institute and training sessions offered throughout the school year, during the designated intervention year for their schools. Participation in *Empowering Families* was voluntary and provided educators with professional development credits required as part of their PPSD employment. Educators in all 22 elementary schools were offered the chance to participate in *Empowering Families* by the end of the project. Educators offered the training included: classroom teachers, special education teachers and support staff; administrators; teaching specialist; assistant teachers and teacher aides; and teaching specialists. The final year of the project, the intervention was offered to any interested educator.

II. Research Questions

The evaluation was guided by the following research questions.

- **Q1:** What is the effect of *Empowering Families* on preK parents' beliefs about parenting and school involvement?
- **Q2:** What is the effect of *Empowering Families* on K-3 parents' beliefs about parenting and school involvement?
- **Q2:** What is the effect of *Empowering Families* on K-3 educators' attitudes and practices towards parent involvement?
- **Q1:** What is the effect of *Empowering Families* on student outcomes?

III. Participants and recruitment

Participants comprised 3 groups: preK families, K-3 families and K-3 Educators.

PreK Families

Families for the preK study were initially recruited exclusively from the PPSD kindergarten registration in the months prior to Kindergarten entry. After year one of the intervention, PPSD changed its kindergarten registration process, making the recruitment of preK families at registration more challenging. As such, in addition to using the registration office as a site for recruitment, R2LP staff also made connections with community-based preK and parent programs to recruit families for the preK study. This included the active recruitment of families at local libraries, early care and education programs, churches, housing groups and other communitybased organization. During the preK family sessions, meals and child care were provided.

Extended family members, beyond children's mothers and fathers, were welcomed to attend any and all sessions. Extended families of children included: aunts, uncles, grandparents and older siblings.

K-3 Families

For the K-3 study, families were recruited based on the schools their children attended and the intervention year that their children's schools participated in *Empowering Families*. The school ambassadors facilitated the recruitment of families by informing families about the intervention and answering any questions that families might have about the program. MITM parent sessions typically took place in a dedicated space within the child's school during the evening or on weekends. Morning sessions were also available. Both child care and food were provided for families. Similar to the preK family participants, extended family members and family friends were encouraged to attend the sessions.

K-3 Educators

As part of the educators' on-going professional development opportunities, *Empowering Families* was offered to educators at selected schools throughout the intervention. *Empowering Families* was one of many options offered to educators during the summer and school year to

meet PPDS professional development requirements. As a result, participation in *Empowering Families* was not required for educators but many educators opted to engage with the training.

School Participation Schedule

Schools for participation were selected on a rolling basis. In the first year, 8 schools participated in the pilot of *Empowering Families*. Year 2 and Year 3 cohorts were comprised of the 14 remaining elementary schools that were matched based on racial composition, ELL status of students, rates of special education and the numbers of students eligible for free and reduced lunch. In a fourth, no cost extension year, six principals opted into a second year of participation, although the training was open to all educators and families from across the District who were interested in attending *Empowering Families*. The intervention schedule by school is provided below in Table A.

Table A. Participating Schools by Intervention Year

Year 1 Schools (Pilot year)	Year 2 Schools	Year 3 Schools	No cost extension year—All schools, K-3 parents offered the opportunity
Bailey	Willam D'Abate	Mary E, Fogarty,	Young/Woods
Carnevale	Vartan Gregorian	Robert Kennedy	Veazie St
Fortes	Martin Luther King	Veazie Street	Kizirian
Carl Lauro	Asa Messer	Reservoir	Leviton Dual Language
Lima	George J. West	Harry Kizirian	Alan Shawn Feinstein at Broad St
Pleasant View	Webster Avenue	Leviton Dual Language	Webster Ave
Sackett	Spaziano	Alan Shawn Feinstein at Broad Street	
Young/Woods.			

IV. Data Collection

Pre- and post-surveys were collected for preK families, K-3 families and educators before and after participation in the MITM sessions. The surveys were designed to assess changes in attitudes and behaviors related to parental engagement in schooling. Additionally, the family survey included a parent modernity scale and an assessment of children’s social emotional development. This allowed researchers to assess the potential impact of the intervention on attitudes toward parental involvement, parenting and perceptions of children’s development. Teacher surveys also included the Teacher Beliefs and Practice Scale-Adapted (Charlesworth,

1998; Kim & Buchanan, 2009). Table B provides a list of measures, constructs and the assessment schedule employed by the project evaluation.

Table B. Evaluation Measures for *Empowering Families*

Measure	Construct	Implementation
PreK Family Study		
Devereux Early Childhood Assessment Preschool Program, 2 nd Edition (DECA-P2, LeBuffe & Naglieri, 2012).	Parental ratings of children social emotional development and needs	Pre-post intervention
Parent Modernity Scale (Schaefer & Edgerton, 1985)	Parenting beliefs in terms of traditional, authoritarian beliefs versus progressive, democratic beliefs.	Pre-post intervention
Parent Involvement Process Questionnaires: Parent (HooverDempsey & Sandler (1995, 1997, 2005, 2010)	Parental Motivations for Involvement; Parental Learning Mechanisms for Involvement.	Pre-post intervention
INVOLVE Parent (Incredible Years, 2004)	Importance placed on involvement	Pre-post intervention
Family Demographics	Highest level of education, home language, relationship to PPDS child	Pre survey
K-3 Family Survey		
Devereux Student Strengths Assessment (DESSA) (LeBuffe, Shapiro & Naglieri, 2014).	Parental ratings of children social emotional development and needs	Pre-post intervention
Parent Modernity Scale (Schaefer & Edgerton, 1985)	Parenting beliefs in terms of traditional, authoritarian beliefs versus progressive, democratic beliefs.	Pre-post intervention
Parent Involvement Process Questionnaires: Parent (HooverDempsey & Sandler (1995, 1997, 2005, 2010)	Parental Motivations for Involvement; Parental Learning Mechanisms for Involvement.	Pre-post intervention
INVOLVE Parent (Incredible Years (2013)	Importance placed on involvement	Pre-post intervention

Family Demographics	Highest level of education, home language, relationship to PPDS child	Pre survey
K-3 Educator Survey		
Parent Involvement Process Questionnaires: Teachers (Hoover-Dempsey & Sandler (1995, 1997, 2005, 2010)	Invitations for involvement	Pre-post intervention
Beliefs and Practice Scale Adapted (Charlesworth, Hart & Burts, 1991; Kyung & Buchanan, 2009)	Developmentally appropriate Teacher and inappropriate teaching practices and beliefs	Pre-post intervention
Teaching characteristics	Years of teaching experience, teaching role, grades taught, highest level of education	Pre Intervention
PPDS Administrative child data	Attendance rates, chronic absenteeism, IEP status and standardized assessments	Aggregated data from 2012-2018 & collected annually for participants' children

Measures

The measures included:

Devereux Early Childhood Assessment Preschool Program, 2nd Edition (DECA-P2; LeBuffe, & Naglieri, 2012).

The Devereux Early Childhood Assessment Preschool Program, 2nd Edition, is a strength-based assessment system designed to assess the social emotional strengths and needs of preschool-aged children, ages 3 through 5. The measure provides an overall score for: Protective Factors and Behavioral Concerns. In addition it offers subscale scores related to: Initiative, Self-Control and Attachment.

Devereux Student Strengths Assessment-Second Steps Edition (DESSA; LeBuffe, Shapiro & Naglieri, 2014).

The Devereux Students Strengths Assessment (DESSA) is a standardized, strength-based behavior rating scale used by parents to measure the social-emotional competence for children in grades K-8. DESSA provides an overall composite score as well as scores for the following subscales: Emotional Management; Skills for Learning; Empathy and Problem Solving.

Parent Modernity Scale (Schaefer & Edgerton, 1985).

The Parental Modernity Scale identifies beliefs about parenting in a 30-item questionnaire. The measure assesses the level of a parents' traditional, authoritarian parental beliefs and parents' progressive, democratic beliefs, with a score computed for each domain. Each item is rated on a 5-point scale ranging from 1 = strongly disagree to 5 = strongly agree.

Parent Involvement Process Questionnaires: Parent (Hoover-Dempsey & Sandler (1995, 1997, 2005, 2010).

This set of surveys is based on the model of the Parent Involvement Process as developed by Hoover-Dempsey & Sandler (1995, 1997, 2005 & 2010). For the purpose of the *Empowering Families* evaluation, researchers assessed families' personal motivations and the learning mechanisms to be involved in children's schooling. Personal motivations included measures of parental efficacy and role construction. Measures of the learning mechanisms used by families included: Encouragement, Modeling, Instruction and Reinforcement.

Teacher Beliefs and Practice Scale-Adapted (Charlesworth, Hart & Burts, 1991; Kyung & Buchanan, 2009).

This survey involves the assessment of teachers' beliefs and practices related to teaching activities in the classroom. The levels of Developmentally Appropriate and Developmentally Inappropriate practices and beliefs are measured, with independent scores determined for each construct.

V. Fidelity of the Intervention

As part of measuring the fidelity of the intervention, attendance logs, implementation logs and facilitator evaluations were collected. Throughout the multiple years of the intervention, *Empowering Families* exhibited strong fidelity for both parent and educator participants. Fidelity indicators included: number of participants (intervention reach), attendance of participants (depth of intervention); facilitator logs (fidelity of the MITM intervention protocol) and participant ratings of facilitators (quality of the implementation).

Quality and Fidelity of the Implementation.

Facilitator logs indicated that training cohorts completed all sessions of MITM and included all components of the MITM training protocol. Additionally, participant ratings of facilitators were overwhelmingly positive. The vast majority (86%) of participants strongly agreed that they were able to understand the training. This is important given that the majority of the training was done in Spanish and that the level of education of participating families was primarily below or at the high school completion level. Additionally, the majority of participants (86-87%) strongly agreed that the training helped improve their skills and that they learned new information. Most of the participants rated the facilitators as very good to excellent regarding content knowledge, facilitation and trustworthiness (86% -91%). This data represents high fidelity for the implementation of the MITM protocol and the quality of the intervention.

Reach and depth.

Based on attendance records, *Empowering Families* reached approximately 2447 families who attended at least one session of MITM. Based on pre-study fidelity goals, this number exceeds study benchmarks of reaching at least 1000 family members for the study and represents high fidelity. It is noteworthy that in total, *Empowering Families* provided at least 26, 839 hours of training and support to families. On average, families attended 11 hours of training. Only about 14% of these family participants attended only one session. Over three-fourths of the family participants attended more than half of the sessions (5 or more sessions); about 43% attended at

least 7 of the 8 sessions and about one-fourth (24%) attended all of the MITM sessions. This represents high fidelity with the vast majority of families attending at least three-fourths of the sessions. It should be noted that this type of attendance is not typical for a voluntary parenting intervention with low-income families. Interestingly, about one-third (32%) of the family members were from the same family and therefore multiple adults represented one child enrolled within the PPSD. As such although 2447 family caregivers were reached, this sample of families represents about 1630 children within or about to enter the PPSD.

Empowering Families reached approximately 346 educators, across all 22 elementary schools. In total, *Empowering Families* provided approximately 5209 hours of educator professional development to PPSD educators. The educator training protocol changed throughout the study but the vast majority of teachers (85%) completed the training hours offered for each cohort year. Educators represented a range of positions including: classroom teachers, special educators, assistant teachers and aides, special education teaching supports and administrators. Table C summarizes enrollment in *Empowering Families* and attendance by study year.

Table C. Reach and Hours of Attendance by Year of *Empowering Families*.

	Number of Family Caregivers	Average numbers of hours attended
Study School Year 1	490	10.0
Study School Year 2	786	11.0
Study School Year 3	949	11.0
Study School Year 4	222	12.9
	Average Number of Teachers	Average numbers of hours attended
Study School Year 1	45	15.1
Study School Year 2	85	15.9
Study School Year 3	158	13.8
Study School Year 4	58	13.6

VI. Year 1 Pilot Year

Empowering Families began immediately after the awarding of the grant, with Year 1 serving as a pilot year to inform both the implementation of MITM within the PPSD, as well as, to refine the evaluation protocols. For the purpose of this portion of the study, a convenience sample of 8 schools, selected based on need as determined by PPSD, received the *Empowering Families* intervention. The evaluation of *Empowering Families* was primarily limited to measures associated with the Hoover-Dempsey Model of the Parent Involvement Process (Hoover, Dempsey & Sandler, 1995, 1997, 2005 & 2010) which theorizes parental involvement as a multilayered process that include parental motivations, school/teacher invitations, parental expectations and involvement as well as instructional behaviors for learning used by the parents. For year one, researchers focused specifically on parental views of efficacy and instructional behaviors as two potential constructs that may be influenced by participation in *Empowering*

Families. Similarly, the evaluation also focused on teachers' views of parent efficacy regarding parent supports for children's learning.

Year 1 Pilot Findings

PreK family data indicated that the intervention had a significant and positive impact on parental views of efficacy for helping their children succeed in school ($t=-2.49$, $p<.05$) and on parental reports of instructional behaviors with children ($t=-14.3$, $p<.01$). No significant differences between the pre and post surveys were found in parental report of children's social emotional development or on parents' instructional behaviors. Educators' pre and post surveys did not indicate a significant shift in their perceptions of parental efficacy.

Conclusion.

In response to the findings, researcher worked with IES-appointed evaluation project officers and technical assistance providers at Abt Associates to redesign a more robust evaluation to capture the potential impact of *Empowering Families*, without over-burdening families and educators. Given the limited data collection, year 1 data was not included in the cumulative analyses due to high level of missing data as a result of significant changes made to the pre-post surveys and the re-conceptualization of study into the three distinct areas of preK parents; K-3 parents; and educators.

VII. Cumulative Study of preK Family *Empowering Families* Intervention

The following highlights the research samples and analyses used to assess the impacts of *Empowering Families* on preK families.

Cumulative Analytic Sample preK Family Sample

Across years 2-4 of the study, 400 preK family pre-post surveys were collected. Participants averaged 13.3 hours of MITM training with 98% of the respondents attending over half of the sessions and 52% present attending 7-8 sessions. This sample represented approximately 273 PPSD children, since about 32% of the respondents were additional family members of one target preK child. About 57% of the respondents were mothers, 18% were fathers, 10% were grandparents and about 7% were aunts. The remaining percent (8%) was comprised of uncles, older siblings, family friends and other caretakers. No significant differences were found between relationship to child and attendance, suggesting that family members may have repeatedly come together to the *Empowering Families* sessions. It should be noted that the intervention reached a significant number of low-income fathers, who consistently attended sessions with an average attendance of 13.4 hours. About 56% of the fathers attended 7-8 sessions.

The preK family group was generally a low-education group with about 34% having not completed high school and 29% having only a high school diploma or GED. About 14% reported attending some college; 6% reported having a vocational degree and 6% indicated having earned a college degree. The remaining 12% had some education beyond a college degree. The preK families were primarily from Hispanic speaking at home, with 73% reporting Spanish as their primary language and 10% indicating that their household was an English/Spanish bi-lingual household. About 16% reported being a predominantly English

speaking household and about 2% reported speaking a language other than English or Spanish as their dominant household language. It should be noted that for Spanish speaking families, the *Empowering Families* intervention was offered completely in Spanish, including associated materials.

Findings

Analyses were focused on pre-post differences of key constructs between participants’ start of the *Empowering Families* intervention and the end of the intervention, while controlling for key demographics. Specifically, multilevel models were constructed using Stata 14.0 with time points (pre-post) nested within family caregivers to examine changes in outcomes.

Parental motivators: Role Construction and Parent Efficacy

Within the Hoover-Dempsey & Sandler model of the Parental Involvement Process (HooverDempsey & Sandler, 1995, 1997, 2005, 2010), parents’ perceived efficacy and role construction are seen as key personal motivators to parental involvement. No significant pre-post differences were found for the preK sample regarding parental role construction. Results, however, did indicate significant pre-post differences within the sample of preK families view of parental efficacy (e.g., I know how to help my child do well in school; I know how to communicate effectively with my child’s teacher), in multi-level analytical models; Wald Chi square= 55.3, p<.01). The multi-level model is presented below in Table D.

Table D. Analytic Model for Pre-post differences in parental efficacy: PreK family sample

<i>Parent efficacy</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.21	.11	1.92	0.06 [^]
Parent to target child	-.85	.42	-2.01	0.05*
English-speaking household	-1.04	.49	-2.10	0.04*
English/Spanish bilingual household	1.15	.59	1.94	0.053 [^]
Non-English, nonSpanish speaking household	-2.55	1.42	-1.80	0.07 [^]
Hours of attendance of intervention	.059	.08	0.74	0.46
Pre-post differences				
Pre-post efficacy	1.66	.28	5.96	0.00**

[^]p<.10, *p<.05, **p<.01

As indicated in the chart, preK families overall showed significant gains in efficacy post intervention, suggesting that they felt more confident in their ability to support children’s

learning in school after participating in *Empowering Families*. In addition, the parent-child relationship was also significantly related to pre-post difference in parent efficacy, with individuals in non-parenting roles showing higher growth in efficacy and their ability to influence children’s academic progress. Hispanic-speaking families also exhibited greater growth pre-post in parenting efficacy. Educational level was approaching significance with education related to greater gains in efficacy.

Learning Mechanisms Used by Parents

As part of the Hoover-Dempsey Sandler (1995, 1997, 2005, and 2010) model, the study examined changes to family learning mechanisms as part of parent involvement in schooling activities. This is based on the concept that parents influence student attributes necessary for student success through activities such as: encouragement, modeling, and instruction.

Encouragement

The study examined differences in strategies employed by preK families to encourage their children in school and in their approach to problem solving (e.g., we encourage our child...be interested in schoolwork; to ask other people for help when something is hard; stick with problems until he/she solves it). Multi-level models indicated significant pre-post differences in families’ reported encouragement of children’s work in school and problem solving (Wald Chi square= 33.03, p<.01). The model is resented below in Table E.

Table E. Analytic Model for Pre-post differences in Academic Encouragement: PreK family sample

<i>Academic Encouragement</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.29	.09	3.19	0.001**
Parent to target child	.35	.34	1.01	0.31
English-speaking household	.34	.40	0.85	0.39
English/Spanish bilingual household	1.06	.48	2.18	.029*
Non-English, nonSpanish speaking household	-2.51	1.15	-2.17	.030*
Hours of attendance of intervention	.05	.06	0.75	0.46
Pre-post differences				
Pre-post academic encouragement	.56	.17	3.37	0.001**

^p<.10, *p<.05, **p<.01

As indicated in the table, significant and positive differences pre-post are evident in families' encouragement of children academically, with families indicating higher levels of encouragement after participating in *Empowering Families*. Similar to the above, pre-post differences were also related to educational levels of family caretakers with higher education related to greater pre-post gains.

Modeling

Modeling was also examined as part of parents' learning mechanisms to support involvement in children's schooling. Table F presents the analytic results.

Table F. Analytic Model for Pre-post differences in Modeling: PreK family sample

<i>Modeling</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.14	.062	2.30	0.002**
Parent to target child	.35	.34	1.01	0.31
English-speaking household	.19	.28	0.72	0.47
English/Spanish bilingual household	1.01	.33	3.05	0.002**
Non-English, nonSpanish speaking household	-1.45	.79	-1.82	0.07^
Hours of attendance of intervention	.042	.04	0.95	0.34
Pre-post differences				
Pre-post modeling differences	.59	.15	3.96	0.000**

^p<.10, *p<.05, **p<.01

Significant differences were found pre-post *Empowering Families* in modeling academic support for preK families (Wald Chi square= 35.58, p<.01). Consistent with the above findings educational level was also a significant predictor of pre-post gains in the model.

Instruction

In addition to modeling and encouragement, pre-post significant differences were found for instruction levels as reported by families (e.g., We teach our child...how to get along with others in his or her class; to talk with the teacher when he or she has questions; to keep trying when he or she gets stuck; Wald Chi square = 29.79, p<.01; see Table G).

Table G. Analytic Model for Pre-post differences in Instruction: PreK family sample

<i>Instruction</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.28	.10	2.73	0.006**
Parent to target child	-.33	.39	-0.85	0.39
English-speaking household	.12	.46	0.27	0.79
English/Spanish bilingual household	1.76	.55	3.21	0.001**
Non-English, nonSpanish speaking household	-2.13	1.31	-1.63	0.11
Hours of attendance of intervention	-.01	.07	-0.08	0.932
Pre-post differences				
Pre-post Instruction differences	.74	.25	2.93	0.003**

[^]p<.10, *p<.05, **p<.01

Paralleling findings from the other parental learning mechanisms of modeling and encouragement, significant pre-post gains suggest significantly higher rates of reported encouragement related to schooling post intervention. Similarly, educational level was also significantly related to pre-post instructional gains.

Importance of Parental Involvement

In addition to the Hoover-Dempsey & Sandler model of the parent involvement process, the study included the Importance subscale of the Incredible Years Project: Involve Parent survey (Incredible Years, 2012). These questions are divided into 3 subsets: general importance placed on schooling (e.g., How important is it that: your child does well in school; that your child reads and looks at books); the importance placed on parental supports of schooling (e.g., How important is it that you: Show interest in your child’s school activities; Read to your child); and the importance of parent engagement activities on children (How important do you think it is for your child.... That you talk with your child about things other than school on a regular basis; That you be present at your child’s non-school events (like sports, music). Analytic models for the overall importance placed on parent involvement are presented in Table H.

Table H. Analytic Model for Pre-post differences in Importance of Parent Involvement: PreK family sample

<i>Importance of Parent Involvement</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
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Demographic/individual covariates				
Education level	.75	.22	3.36	0.001**
Parent to target child	.70	.86	0.81	0.42
English-speaking household	1.37	.99	1.38	0.17
English/Spanish bilingual household	4.92	1.22	4.03	0.000**
Non-English, nonSpanish speaking household	1.96	2.70	0.73	0.468
Hours of attendance of intervention	.05	.16	0.31	0.76
Pre-post differences				
Pre-post Importance of parent involvement	2.01	.47	4.30	0.000**

^p<.10, *p<.05, **p<.01

Analyses show a significant shift in pre-post views of the importance placed on parent involvement in children’s schooling (Wald Chi square= 50.91, p<.01), suggesting families are placing a greater importance on involvement activities post intervention. Similar to other analyses with the preK family sample, education level was also significantly related to pre-post gains in the importance placed on parent involvement activities.

Parental Modernity

The study examined changes in parenting attitudes as a potential outcome to the *Empowering Families* intervention (Schaefer& Edgerton, 1985). The Parental Modernity Scale, identifies ideas about parenting across two subscales: Traditional, authoritarian parental beliefs and Progressive, democratic beliefs. Analyses indicated significant pre-post differences in parental Progressive democratic beliefs (Wald Chi square =35.61, p<.01, see Table I). No significant differences were found in pre-post shifts in Traditional, authoritarian parental beliefs.

Table I. Analytic Model for Pre-post differences in Progressive democratic parenting views: PreK family sample

<i>Progressive, democratic parenting views</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.45	.13	3.38	0.001**
Parent to target child	-.85	.50	-1.70	0.09^

English-speaking household	.58	.59	0.99	0.32
English/Spanish bilingual household	.33	.71	0.47	0.635
Non-English, nonSpanish speaking household	.14	1.68	-0.08	0.933
Hours of attendance of intervention	.03	.09	0.30	0.761
Pre-post differences				
Pre-post Progressive, parenting views	1.26	.29	4.40	0.000**

^p<.10, *p<.05, **p<.01

Analytic models revealed parents exhibited higher levels of Progressive, democratic parenting views post intervention in comparison to at the start of the intervention. Education was also significantly related to pre-post differences in Progressive, democratic parenting views. As can be seen, the differences in pre-post shifts in Progressive, democratic parenting views by relationship to the child (parent versus non-parent were) was approaching significance. To further explore differences in parenting views related to participation in *Empowering Families*, a subsample of family caretakers was analyzed examining pre-post differences in parenting views for mothers and fathers only.

Parental Modernity Mothers

A subsample of mothers (n=216) and fathers (n=69) was examined to further explore pre-post differences in parenting views as measured by the Parental Modernity Scale (Schaefer& Edgerton, 1985). When looking at changes in Progressive, democratic parenting view, analytic models were only significant for mothers (Wald chi square = 21.06, p<.01, see Table J).

Table J. Analytic Model for Pre-post differences in Progressive democratic parenting views: PreK Mothers only

<i>Progressive, democratic parenting views: Mothers only</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.52	.18	2.80	0.005**
English-speaking household	.50	.83	0.61	0.54

English/Spanish bilingual household	.35	1.00	0.35	0.73
Non-English, nonSpanish speaking household	-3.19	2.432554	-1.31	0.19
Hours of attendance of intervention	.03	.14	0.830	0.830
Pre-post differences				
Pre-post Progressive, parenting views	1.231639	.37	3.33	0.001**

^p<.10, *p<.05, **p<.01

Data indicated that mothers showed a significant increase in Progressive, democratic parenting views post intervention. Education was also related to significant increases in Progressive, democratic parenting views among mothers, pre-post *Empowering Families*.

As noted above, no significant differences were found in pre-post shifts in Traditional, authoritarian parental beliefs for the preK family sample, as a whole. When examining pre-post differences in Traditional, authoritarian parent beliefs specific to fathers and mothers, models indicated no significant differences pre-post for mothers. Analytic models, however, did designate significant pre-post differences among fathers, with fathers exhibiting significantly fewer Traditional, authoritarian beliefs post intervention. Education of the fathers was a significant predictor in this model (Wald chi square=11.84, p<.05, see Table K).

Table K. Analytic Model for Pre-post differences in Traditional authoritarian parent views: preK Fathers only

Traditional, authoritarian parent beliefs: <i>Fathers only</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	-1.51	.94	-1.60	0.11
English-speaking household	-5.83	3.41	-1.71	0.09 [^]
English/Spanish bilingual household	.96	4.06	-0.24	0.81
Non-English, nonSpanish speaking household	-9.14	11.10	-0.82	0.41

Hours of attendance of intervention	-.39	.58	-0.69	0.49
Pre-post differences				
Pre-post Progressive, parenting views	-2.30	1.16	-1.98	0.04*

^p<.10, *p<.05, **p<.01

This finding suggests that *Empowering Families* positively impacted the parenting views of mothers and fathers of preK children but in different ways. Mothers reported significant increases in their Progressive, democratic views pre-post intervention; whereas, father reported a significant reduction in Traditional, authoritarian parent beliefs post intervention. For both mothers and fathers education was positively related to these shifts.

Parental Ratings of Child Outcomes

Impacts of the intervention on parents’ ratings of child outcomes were conducted on a subset of the sample. This was done since multiple family members rated the same child. Data techniques employed for this study assumes data points represent independent cases; subsequently the same child cannot serve as the outcome measure across different respondents. Consequently, multiple assessments of the same child were dropped, with a priority given to assessments completed by the mothers, since most of the sample had a social emotional assessment completed by the mother.

Using multilevel models run with Stata 14.0 with time points (pre-post) nested within children, changes on DECA-P2 ratings by parents from pre to post intervention were examined on a total of 273 preK children. No significant differences were found pre-post on DECA-P2 parental ratings for Overall Protective Factors and Behavioral Concerns. Additionally, no significant differences in the preK parent ratings on DECA-P2 subscales for Initiative and Attachment were observed. There was a significant difference found between pre and post parental ratings on the Self Control Subscale of the DECA-P2 (Wald chi square=22.85, p<.01, see Table L).

Table L. Analytic Model for Pre-post differences in DECA-P2 Self Control: preK parental ratings

<i>Self-Control Subscale of the DECA-P2</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	-1.19	.67	-1.77	0.07^
Parent to target child	1.03	3.72	-0.28	0.78
English-speaking household	-8.74	2.99	-2.92	0.003**

English/Spanish bilingual household	-6.51	3.41	-1.91	0.06 [^]
Non-English, nonSpanish speaking household	-10.97	9.47	-1.16	0.25
Hours of attendance of intervention	.51	.49	1.06	0.29
Pre-post differences				
Pre-post Progressive, parenting views	1.02	.45	2.27	0.02*

[^]p<.10, *p<.05, **p<.01

Results indicate that significant pre and post differences in parental ratings of on the Self-Control Subscale of the DECA-P2, with parental ratings higher post intervention regarding children’s self-control. Models also, indicate that Spanish speaking households were more likely to report significant differences, in comparison to other language groups. Parent education was approaching significance in predicting pre-post gains in self-control.

VIII. Cumulative Study of K-3 Family *Empowering Families* Intervention

The following highlights research samples and analyses used to assess the impacts of *Empowering Families* on K-3 families.

Cumulative Analytic Sample K-3 Family Sample

Across years 2-4 of the study, 1083 K-3 pre-post family surveys were collected. Participants averaged 13.5 hours of MITM training with 99% of the respondents attending over half of the sessions and 59% present attending 7-8 sessions. This sample represented approximately 753 PPSD children, since about 30% of the respondents were extended family members of one target K-3 child. About 55% of the respondents were mothers, 15% were fathers, 10% were grandparents and about 12% were aunts. The remaining percent (8%) was comprised of uncles, older siblings, family friends and other caretakers. No significant differences were found between relationship to child and attendance, suggesting that family members may have attended *Empowering Families* sessions together. It should be noted that the intervention reached a significant number of low-income fathers, who consistently attended sessions with an average attendance of 13.4 hours. About 56% of the fathers attended 7-8 sessions.

The K-3 family sample was generally a low educational attainment group with about 42% having not completed high school and 27% having only a high school diploma or GED. About 13% reported attending some college; 7% reported having a vocational degree and 3% indicated having earned a college degree. The remaining 8% had some education beyond a college degree. The K-3 family caregivers were primarily Hispanic speaking at home, with 77% reporting

Spanish as their primary language and 6% indicating that their household was an English/Spanish bi-lingual household. About 16% reported being a predominantly English speaking household and about 1% reported speaking a language other than English or Spanish as their dominant household language. It should be noted that for Spanish speaking families, the *Empowering Families* intervention and materials were offered in Spanish.

Findings

Similar to the preK sample, analyses for the K-3 family sample were focused on pre-post differences of key constructs between the start of the *Empowering Families* intervention and the end of the intervention, while controlling for key demographics. Specifically, multilevel models were constructed using Stata 14.0 with time points (pre-post) nested within families to examine change in outcomes from pre to post.

Parental motivators: Role Construction and Parent Efficacy

Based on the Hoover-Dempsey & Sandler (1995, 1997, 2005, 2010) model for the parental involvement process, the study examined the potential influence of participation in *Empowering Families* on the parental role construction (e.g., I believe it is my responsibility to... stay on top of things at school ; talk with my child about the school day) and views of efficacy (e. g. I know how to help my child do well in school; I make a significant difference in my child’s school performance). Analytic models considering individual parental covariates (e.g., home language, education, relationship to child, intervention dosage) indicated significant pre-post differences in parent role construction (Wald Chi square= 56.81, p<.01, see Table M) and views of parental efficacy after participation in *Empowering Families* (Wald chi square= 29.53, p<.01, see Table N).

Table M. Analytic Model for Pre-post differences in parent role construction: K-3 family sample

<i>Parent role construction</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.14	.10	1.38	0.17
Parent to target child	.18	.35	0.51	0.61
English-speaking household	-.54	.4356374	-1.25	0.21

English/Spanish bilingual household	.02	.72	0.03	0.98
Non-English, nonSpanish speaking household	-1.64	1.575368	-1.04	0.29
Hours of attendance of intervention	-.04	.07	-0.64	0.53
Pre-post differences				
Pre-post Role construction	1.69	.23	7.29	0.00**

^p<.10, *p<.05, **p<.01

Findings showed significant pre-post difference in the emphasis K-3 families placed on their role in promoting children’s schooling, with an increased meaning placed on families’ involvement in children’s schooling post intervention. None of the individual co-variates were related to prepost differences. This finding is different from the preK sample, in which no significant pre-post differences were found in the families’ role construction, regarding the school involvement. This may be due to the fact, that unlike the preK parents, these parents currently had a targeted child enrolled in the PPSD and therefore had a stronger reference point for parent involvement in children’s schooling and the significance placed on that role.

Table N. Analytic Model for Pre-post differences in parent efficacy: K-3 family sample

<i>Parent efficacy</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.28	.08	3.40	0.001**

Parent to target child	-.16	.27	-0.56	0.57
English-speaking household	.22	.34	0.63	0.53
English/Spanish bilingual household	.33	.57	0.57	0.57
Non-English, nonSpanish speaking household	-3.23	1.24	-2.63	0.009**
Hours of attendance of intervention	-.01	.06	-0.25	0.81
Pre-post differences				
Pre-post efficacy differences	.56	.17	3.25	.001**

^p<.10, *p<.05, **p<.01

Paralleling the above, findings indicated significant pre-post difference in parent efficacy, with families reporting increased efficacy post intervention. Similar to the preK sample, parent education was related to shift in pre-post differences. English and Spanish speaking families (including bi-lingual) families were also more likely to report gains in efficacy. This finding should be interpreted with caution as some the numbers non-English and non-Spanish dominant households represents only about 1% of the sample.

Learning Mechanisms Used by K-3 Parents

The study also examined pre-post changes to the learning mechanisms used by K-3 family members as part of parent involvement in schooling activities. This is based on the idea that parents influence student success through activities such as: encouragement, modeling, and instruction. Pre-post significant differences were found for encouragement (Wald chi square= 12.53, p<.01, see Table O). No pre-post significant differences were found regarding encouragement and modeling of academic behaviors by families of the K-3 group.

Table O. Analytic Model for Pre-post differences in Instruction: K-3 family sample

<i>Instruction</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level				
Parent to target child	-.01	.28	-0.04	0.97
English-speaking household	.03	.35	0.08	0.940
English/Spanish bilingual household	.89	.58	1.52	0.13
Non-English, nonSpanish speaking household	-2.16	1.28	-1.69	0.09 [^]
Hours of attendance of intervention	.013	.06	0.23	0.82
Pre-post differences				
Pre-post Instruction differences	.44	.17	2.54	.01*

[^]p<.10, *p<.05, **p<.01

Data designates significant pre-post differences, with an increase in families' reported level of instruction related to children's schooling and learning. No individual family covariates were significant. The other language covariate, representing Non-English and/or Spanish speaking families, was approaching significance. Again, this group of families represents only about 1% of the sample and therefore, this finding should be interpreted with caution.

Importance of Parental Involvement

In addition to the Hoover-Dempsey & Sandler model of parent involvement processes, the study included the Importance subscale of the Incredible Years Project: Involve Parent survey. The questionnaire is designed to assess the amount and quality of a parents' involvement with their child's education at home and at school. The Importance subscale questions are divided into 3 subsets: general importance placed on schooling (e.g., How important is it that: your child does well in school; that your child reads and looks at books); importance placed on parental supports of schooling (e.g., How important is it that you: Show interest in your child's school activities; Read to your child); and the importance of parent engagement activities on children (How important do you think it is for your child.... That you talk with your child about things other than school on a regular basis; That you be present at your child's non-school events (like sports, music). Analyses indicated a significant model with (Wald Chi square=62.43, p<.01, see Table P).

Table P. Analytic Model for Pre-post differences in Importance of Parent Involvement: K-3 family sample

<i>Importance of Parent Involvement</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.47	.15	3.23	0.001**
Parent to target child	.25	.49	0.52	0.61
English-speaking household	1.75	.61	2.88	0.004**
English/Spanish bilingual household	2.24	.99	2.24	0.03*
Non-English, nonSpanish speaking household	-2.376356	2.18	-1.09	0.276
Hours of attendance of intervention	.01	.09	0.11	0.91
Pre-post differences				
Pre-post Importance of parent involvement	1.61	.28	5.72	0.000**

^p<.10, *p<.05, **p<.01

A significant shift in pre-post views of the importance placed on parent involvement in children’s schooling was found with K-3 families placing an increased importance on parental involvement, post the *Empowering Families* intervention. Similar to the preK sample, pre-post shifts in the importance placed on involvement were significantly related to parental education and language spoken in the home. This may suggest cultural difference in the impacts of *Empowering Families* on the importance placed on school involvement with families with more formal schooling and those with more knowledge of English, exhibiting the greatest pre-post differences.

Ratings of Child Outcomes

Impacts of the intervention on parents’ ratings of child outcomes were conducted on a subset of children. Similar to the preK sample, this was done to compensate for multiple family members rating the same child. Consequently, multiple assessments of the same child were dropped, with a priority given to assessments completed by the mothers, since most of the sample had a social emotional assessment completed by the mother. Using multilevel models run with Stata 14.0 with time points (pre-post) nested within children, changes on DESSA ratings by parents from

pre to post were examined on a subset of 754 K-3 children. Significant differences were found pre-post in the parental ratings of children’s overall social emotional development, as measured by the DESSA composite score (Wald chi square=43.41, $p < .01$, see Table Q).

Table Q. Analytic Model for Pre-post differences in DESSA Composite: K-3 parental ratings

<i>Composite score DESSA</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	-.18	.29	-0.60	0.55
Parent to target child	-.97477	1.14	-0.86	0.39
English-speaking household	-2.578755	1.16	-2.21	0.03*
English/Spanish bilingual household	-1.72	1.79	-0.96	0.34
Non-English, nonSpanish speaking household	-3.71	4.98	-0.74	0.46
Hours of attendance of intervention	-.49	.19	-2.56	0.01*
Pre-post differences				
Pre-post Progressive, parenting views	2.44	.56	4.38	0.000**

[^] $p < .10$, * $p < .05$, ** $p < .01$

Specifically, results indicate that significant pre-post differences in parental overall ratings of social emotional development as measured by the DESSA, with parents rating children significantly higher on social emotional development post intervention. Models also, indicate that non-English only speaking households more likely to report significant differences. Interestingly, hours of attendance were negatively associated with reported pre-post differences in overall social emotional ratings of the children. To further explore findings, all of the subscales of the DESSA were examined in analytic models (see Tables R, S, T).

Table R. Analytic Model for Pre-post differences in DESSA Learning Skills Subscale: K-3 parental ratings

<i>Learning Skills Subscale: DESSA</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	.21	.26	0.79	0.43
Parent to target child	-1.32	1.09	-1.21	0.23
English-speaking household	-2.49	1.12	-2.24	0.03*
English/Spanish bilingual household	-.22 -	1.74	0.13	0.89
Non-English, nonSpanish speaking household	-5.807031	4.85	-1.20	0.23
Hours of attendance of intervention	-.40	.18	-2.21	0.03*
Pre-post differences				
Pre-post, Learned Skills DESA	4.04	.52	7.75	0.000**

^p<.10, *p<.05, **p<.01

Table S. Analytic Model for Pre-post differences in DESSA Empathy Subscale: K-3 parental ratings

<i>Empathy Subscale: DESA</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	-.26	.26	-0.97	0.33
Parent to target child	-.23	1.09	-0.21	0.84

English-speaking household	-2.22	1.12	-1.98	0.04*
English/Spanish bilingual household	-.20	1.72	-0.12	0.91
Non-English, nonSpanish speaking household	-7.58	4.76	-1.59	0.11
Hours of attendance of intervention	-.31	.18	-1.68	0.09^
Pre-post differences				
Pre-post Empathy Subscale DESA	3.219717	.5197069	6.20	0.000**

^p<.10, *p<.05, **p<.01

Table T. Analytic Model for Pre-post differences in DESSA Problem Solving Subscale: K-3 parental ratings

<i>Problem Solving Subscale: DESA</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Education level	-.21	.28	-0.75	0.45
Parent to target child	-1.147082	1.14	-1.00	0.32
English-speaking household	-3.01	1.18	-2.55	0.02*
English/Spanish bilingual household	-.49	1.82	-0.27	0.79
Non-English, nonSpanish speaking household	-5.05	5.14	-0.98	0.33
Hours of attendance of intervention	-.44	.19	-2.32	0.02*
Pre-post differences				
Pre-post Problem Solving Subscale DESA	4.12	.55	7.52	0.000**

^p<.10, *p<.05, **p<.01

Significant pre-post differences across all three subscales of the DESSA: Learning Skills, Empathy and Problem Solving (Wald chi square ranges 42.01-77.1, $p < .01$) were found. This indicates that parents consistently rated children’s social emotional development higher post intervention, across all the subscales. Similar to DESSA composite score findings, associations were noted between language spoken in the home and hours of training hours, with non-English only speaking households more likely to report significant differences. Interestingly, hours of attendance were negatively associated with reported pre-post differences across the subscales.

IX. Cumulative Study of Educators *Empowering Families Intervention*

The following highlights research samples and analyses used to assess the impacts of *Empowering Families* on Educators.

Cumulative Analytic Sample Educators

The analytic sample of educators included a sample of 281 teachers across all 22 elementary schools for years 2-4. On average, educators in the study reported having 16.4 years of teaching experience. Educators had a range of roles that are presented below in Table U. Unexpectedly, most of the educator participants had specialized roles, typically in special education, in which they taught multiple grades of school.

Table U. Educator Analytic Sample Educator Roles

Grade	Number	Percent of Sample
PreK	37	13%
Kindergarten	44	16%
First	27	10%
Second	39	14%
Third	19	7%
Forth	2	1%
Fifth	2	1%
Mix of grades	72	26%
Missing	39	14%

About 38% of the sample were classroom teachers and 17% were special education teachers, who typically worked with a range of students and grades. In addition, about 7% were special educational support staff but did not hold the position of teacher. About 33% of the sample was comprised of assistant teachers or teacher aids and the remaining percent (4%) were school administrators, afterschool workers or health providers.

Findings

Multilevel models in Stata 14.0 with timepoints (pre-post) nested within teachers were used to examine change in key outcomes from pre to post. A total of 254 teachers were in the dataset. Using the Hoover-Dempsey & Sandler model (1995, 1997, 2005 & 2010), educators were asked a variety of questions related to invitations to parents for involvement in children’s schooling.

No significant differences pre-post were found between teachers' own views of efficacy and teachers' view of parental efficacy in supporting their children's learning. Models did show a significant pre-post difference in the importance placed by teachers in communicating information with families (e.g., Contacting parents when their children do something well or improve; Asking my students' parents to help the child with school work (Wald chi square=30.11, $p < .01$, see Table V).

Table V. Analytic Model for Pre-post differences in the Importance of Parental Communication: Educator Sample

<i>Importance of Communication</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Years of teaching	.085	.12	0.68	0.49
Highest levels of education	-.948037	.83	-1.15	0.25
Teacher grade preK-2	1.84	2.65	0.70	0.49
Teacher grade 3-5	-2.95	2.93	-1.01	0.32
Special educator	8.88	2.53	3.51	0.000**
Assistant teacher/aide	-1.39	4.74	-0.29	0.77
Other educator role	-.13	5.03	-0.03	0.98
Pre-post differences				
Pre-post Importance of communication	2.52	1.01	2.48	0.02*

^ $p < .10$, * $p < .05$, ** $p < .01$

As indicated in the Table V, educators had significant pre-post differences, with a post increase in the importance placed on activities specific to communicating with parents and invitations of parental involvement in children’s schooling evident. Special Educators also show significantly greater gains in pre-post in the importance placed on communication with families in comparison to other educators.

In addition to the Hoover-Dempsey & Sandler model (1995, 1997, 2005 & 2010) questionnaires, educators were given an adapted version of the Teachers Beliefs and Practices Scale (Charlesworth, Hart & Burts, 1991; Kyung & Buchanan, 2009) Beliefs and practices were divided into two types: Developmentally Appropriate Practices and Developmentally Inappropriate Practices. No significant differences were found pre-post in teachers’ beliefs and reported use of Developmentally Appropriate Practices. Analytic models did indicate a significant difference pre-post in educators’ beliefs and use of Developmentally Inappropriate Practices (Wald chi square=37.11, p<.01, see Table W).

Table W. Analytic Model for Pre-post differences in the Developmentally Inappropriate Practices: Educator Sample

<i>Teacher Developmentally Inappropriate Behavior</i>	β	<i>Standard Error</i>	<i>Z score</i>	<i>P value</i>
Demographic/individual covariates				
Years of teaching	.029	.10	0.29	0.78
Highest levels of education	-.92 -	.55	-1.69	0.09 [^]
Teacher grade preK-2	.75	1.99	0.38	0.71
Teacher grade 3-5	1.49	2.52	0.59	0.55
Special educator	-4.87	2.24	-2.18	0.03*
Assistant teacher/aide	.83	2.91	0.28	0.78
Other educator role	7.83	3.51	2.23	0.03*
Pre-post differences				
Pre-post DIP	-1.87	.66	-2.83	0.005**

[^]p<.10, *p<.05, **p<.01

As the Table exhibits, significant differences were found pre-post in Developmentally Inappropriate Practices, with beliefs and reported used of Developmentally Inappropriate Practices reducing post intervention. Interestingly, other educators (non-teachers and special educators) showed significantly smaller reductions in DIP and special educators showed the significantly greater reductions in DIP, in comparison to other educators in the sample.

X. District Analyses

In addition to the above analyses, researchers engaged in exploratory district analyses to examine if potential changes in key outcome variables were evident at the school- and district-level in relation to the implementation of *Empowering Families*. Researchers examined key variables such as attendance, chronic truancy and number of children with an IEP prior, during and after the implementation of the intervention. No differences were found across the years (prior, during and after the intervention implementation) in the levels of these key variables across individual schools and the district.

Throughout the years of the grant, PPSD changed the child assessments employed by the district to measure child outcomes. The measures used by PPSD included: the New England Common Assessment Program (NECAP; the Partnership for Assessment of Readiness for College and Careers (PARCC); and the STAR Early Literacy Assessment. Due to differences in the scales, scores across these assessments cannot be compared. Each of these measures does however, categorize outcomes of children into 5 levels: Urgent Intervention: Intervention needed; On watch; Approaching Benchmark; At benchmark and Above benchmark. Comparisons were made in the percent of children categorized into each of these groupings prior to, during and after the intervention across the different measures. No significant patterns were found in the categorization of the children by school or by district, as related to the implementation of the *Empowering Families*. This may be due to low saturation levels within schools and the district, as a whole. Analytic models were also constructed among the sample of participants to examine associations between parent dose of training and the key outcome variables of child attendance and Math and ELA assessment categorizations, while controlling for parent education. Analytic models were not statistically significant with no significant relationships found between dose of the *Empowering Families* intervention and child outcome measures.

XI. Summary of Findings and Conclusions

Empowering Families was implemented with high fidelity. The intervention met high quality standards for the implementation of the MITM; reached goals in terms of recruitment and recorded high levels of attendance across the various samples and implementation years. Noteworthy, *Empowering Families* reached 2447 family members and provided over 26,000 hours of parent training and support across participants. Importantly, the vast majority of this training was conducted in family members' home language.. *Empowering Families* also reached

346 educators across all Providence Public Elementary Schools and provided over 5200 hours of high-quality professional development to a range of educators.

The positive impacts of *Empowering Families* on families and educators were evident across all years of the study and across the various analytic samples.

Key preK Families Findings

- Significant gains were found pre-post in preK families' view of their own efficacy in supporting children academically
- Significant gains were evident pre-post in preK families' reported use of Learning Mechanisms including significant gains and reported use of encouragement, modeling, and instruction.
- Significant gains were indicated in preK families' views of the Importance placed on family involvement, pre-post the *Empowering Families* intervention.
- Significantly higher levels of Democratic, progressive parenting views, were found post intervention across the preK family sample.
- Significantly more Democratic, progressive parenting views, post intervention for preK mothers was designated by analytic models.
- Significantly less Authoritative, traditional parenting views, post intervention for preK fathers was indicated by models.
- Significantly higher ratings by parents post intervention on the Self-Control subscale of the DECA-P2 were observed.

Key K-3 Families Findings

- Positive gains in the parental involvement motivators of Parental role construction and Parent efficacy were found post intervention.
- Significant gains were evident pre-post in K-3 families' reported use of instruction as a Learning Mechanisms to support children's schooling.
- Significant gains were indicated in K-3 families' views of the Importance placed on family involvement, pre-post the *Empowering Families* intervention.
- Significant differences in children's social emotional outcomes, as assessed by parents using the DESSA composite score, were observed post intervention.

- Significant differences were found in the parental pre-post ratings of children's social emotional development across all subscales of the DESSA including: Learning Skills, Empathy and Problem Solving.

Key Educator Findings

- Significant differences pre-post were found in the importance that educators placed on communicating with parents, with an increased importance placed on parent communication post intervention.
- A significant reduction in beliefs related to Developmentally Inappropriate Practices was observed among educators.

Conclusions

As outlined in the Hoover-Dempsey & Sandler (1995, 1997, 2005 & 2010) model of the Parent Involvement Process, family involvement is a multi-level dynamic process, incorporating multiple parent and teacher constructs. *Empowering Families* appears to positively impact multiple factors included in this model of parental involvement. This includes factors such as parental motivations (e.g., efficacy and role construction); parental learning mechanisms (e.g., encouragement, modeling, instruction and reinforcement) and the importance placed on communication with parents by educators (e.g., invitation for involvement). In addition, *Empowering Families* also significantly predicted the importance parents placed on parent engagement activities in terms of multiple aspects: general importance placed on schooling (e.g., How important is it that: your child does well in school; that your child reads and looks at books); importance placed on parental supports of schooling (e.g., How important is it that you: Show interest in your child's school activities; Read to your child); and the importance of parent engagement activities on children (How important do you think it is for your child.... That you talk with your child about things other than school on a regular basis; That you be present at your child's non-school events (like sports, music). Significant differences in child outcomes post intervention were found as assessed by parents, particularly for the K-3 sample in which significant differences in parent pre-post ratings of children's social emotional development was found for the DESSA overall composite score and across all subscales. As a result, *Empowering Families* appears to be strong model for promoting parent engagement with some evidence of its potential impact on child outcomes. It should be noted that impacts appear to have some relationship to parent education and culture/language. This is not surprising given that many of the families were from a low-educational and immigrant background, with families having limited experience in formal schooling within the US and the PPSD. Data supports the continued implementation and evaluation of *Empowering Families* and the MITM training as a means of supporting family engagement in the schooling and education of children grades preKthird.

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