

Intervention Fidelity and Its Relationship to Child Outcomes in a Field-Test Study of the Center for Early Literacy Learning Practices

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CELL Field Test Study

- **Purpose:** Determine the degree of practitioner support needed in order to promote adoption and use of CELL early literacy practices by parents and practitioners
- **Type and Location of Programs:** Part C, Part B(619), Early Head Start and Head Start programs in 5 States.
- **Comparative Conditions:** High intensity vs. low intensity of professional development and high fidelity vs. low fidelity of use of the CELL practices
- **Participants:** Classroom practitioners, early intervention providers, parents of preschool-aged children served in center-based or home-based programs

Projected Sample Sizes for the Field Test Study

Type of Program	Level of Intensity	# of Children	# of Adults
Part C	High	10	10
Part C	Low	10	10
Part B	High	10	5
Part B	Low	10	5
Early Head Start (Classroom)	High	10	5
Early Head Start (Classroom)	Low	10	5
Early Head Start (Home)	High	10	10
Early Head Start (Home)	Low	10	10
Head Start	High	10	5
Head Start	Low	10	5

Low and High Intensity Field-Based Groups

LOW Intensity

- Four hours of direct CELL training
- A monthly e-mail reminder of the key characteristics of one component of the CELL model

HIGH Intensity

- Four hours of direct CELL training
- A monthly e-mail reminder on the key characteristics of one component of the CELL model
- Four additional contacts with practitioners around CELL practices

Field Test Study Measures

- *Early Literacy Learning Practices Scale (Classroom Version)* or *Early Literacy Learning Practices Scale (Parent Version)*
 - Fidelity
 - Social validity
 - Child outcomes
- The Language Subscale of the *Developmental Observation Checklist System (DOCS)*
 - Child language outcomes

Administration Schedule

- The *Early Literacy Learning Practices Scale* and the *Developmental Observation Checklist System* language subscale are completed at the start of the field-test intervention, after 3 months of professional development, and at the completion of the intervention (6 months).
- Information on the *Early Literacy Learning Practices Scale* is used to assess intervention fidelity (quantity, quality, social validity)^a and relate variations in those measures to practitioner or parent judgments of children's early literacy competence.

^a Quantity measured at 1, 3, and 6 months, and quality and social validity measured at 3 and 6 months.

Name _____ Date _____
Location _____

The Center for Early Literacy Learning (CELL) is interested in knowing about the kinds of activities you do with the children you work with to help them learn the beginnings of talking, reading, and other early literacy skills. Please check all of the following things you have looked at or attended:

- Have seen or read the CELL Practice Guides
- Visited the CELL website (How many times? _____)
- Worked with a professional who helped me use CELL practices with the children
- Attended a CELL presentation
- Attended a CELL training workshop
- Other _____
- None of the above

How many times have you had follow-up training or conversations with the person who introduced or trained you to use the CELL materials?
 Never 1-2 times 3-4 times 5-6 times 7-8 times 9 or more times

How long have you been using CELL practices?
 Never 1-2 weeks 3-4 weeks 1-2 months 3-4 months 5-6 months

How many different CELL practice guides have you used with the children?
 None 1-2 3-4 5-6 7-8 9-10 More than 10

How many days per week were you able to use CELL practices with the children?
 None 1-2 days 3-4 days 5-6 days Every day

Please indicate how often you did each of the following activities with children during the last week.

	Never	Rarely	Sometimes	Frequently	Almost Every Day
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Provided the children with books and other reading materials	1	2	3	4	5
Gave the children opportunities to scribble or draw	1	2	3		
Followed the children's lead when "reading" a book to them	1	2	3		
Played sound or word games with the children	1	2	3		
Had "conversations" with the children	1	2	3		
Followed the children's lead when playing word games or singing songs	1	2	3		
Asked the children "What" and "Why" questions while looking at a book	1	2	3		
Played ABC games with the children	1	2	3		
Talked to the children about things they enjoy	1	2	3		
Drew or scribbled with the children	1	2	3		
Got the children to tell you what they wanted by pointing or showing	1	2	3		
Did fingerplays or rhyming activities with the children	1	2	3		
Used the children's interests to pick books or stories to read to them	1	2	3		

Thinking about the early literacy learning activities you do or have done with the children, please indicate how true each of the following statements is:

	Not At All True	A Little True	Somewhat True	Mostly True	Very True
The children got excited while involved in the learning activities	1	2	3	4	5
The children stuck with the learning activities a long time	1	2	3	4	5
The children smiled or laughed a lot during the learning activities	1	2	3	4	5
The children tried their hardest during the learning activities	1	2	3	4	5

Please tell us what you think about the CELL early literacy learning practices. Tell us how true each of the following statements is:

	Not At All True	A Little True	Somewhat True	Mostly True	Very True
Using the CELL activities with the children was worth my time and effort	1	2	3	4	5
I was easily able to fit the CELL activities into my daily schedule	1	2	3	4	5
The purpose or goal of the CELL activities made sense to me	1	2	3	4	5
The CELL activities are important for the children's early literacy learning	1	2	3	4	5
I would like to know more about other CELL activities I can do with the children	1	2	3	4	5
Most parents I know would be able to use the CELL activities	1	2	3	4	5

How often have the children done each of the following during the past month?

	Not at All	Very Little	Sometimes	Very Often
Looked at books on their own	1	2	3	4
Calmed themselves when overexcited	1	2	3	4
Marked, scribbled, or drawn on their own	1	2	3	4
Gotten along with you	1	2	3	4
Recognized signs, letters, or words	1	2	3	4
Explored new objects, people, or situations	1	2	3	4
Communicated or talked effectively with others	1	2	3	4
Tried to copy or repeat your actions	1	2	3	4
Said or played with different sounds or words	1	2	3	4
Gotten along with others	1	2	3	4

Early Literacy Learning Practices Scale

Please indicate the age of the children with whom you used the CELL practice guides. Mark all that apply.

0-12 months 13-24 months 25-36 months 37-48 months
 49-61 months 62-73 months 73+ months

Please check the services you provide the children:

Child Care Early Head Start Head Start Early Intervention (Part C)
 Preschool Preschool Special Education (Part B & 19) Speech therapy
 Occupational or Physical Therapy Home Visiting (for example Even Start, Parents as Teachers)
 Other (Please describe) _____

Please indicate the type of children you work with currently:

All of the children have an individualized Family Service Plan (IFSP) or individualized Education Plan (IEP).
 75% to 99% of the children have an IFSP or IEP.
 50% to 74% of the children have an IFSP or IEP.
 25% to 49% of the children have an IFSP or IEP.
 1% to 24% of the children have an IFSP or IEP.
 None of the children have an IFSP or IEP.

Please estimate the percentages of children you currently work with whose families are in the following socio-economic status (SES) levels (Total should equal 100):

____% Upper socio-economic class
 ____% Middle socio-economic class
 ____% Lower socio-economic class
 ____% Extreme poverty

Please indicate your current position:

Teacher Teacher Assistant Therapist Home Visitor
 Early Interventionist Service Coordinator Adult Educator
 Other (Please describe) _____

What is your age? Less than 19 Years 19-29 Years 30-39 Years
 40-49 Years 50-59 Years 60 Years or Older

The highest level of school you completed is: Grade school Middle school High school/GED
 2 year college or community college Bachelor degree Master degree Doctoral degree

Thank you for completing this scale!

Language Subscale of the *Developmental Observation Checklist System* (Copyright ©1994 by PRO-ED, Inc.)



Sistema de observación del desarrollo del niño Escala de medición del lenguaje

Sección I. Identificando la información

Nombre del niño _____ Sexo: Masculino ___ Femenino ___
 Fecha que se tomó el test _____
 Fecha de nacimiento _____
 Edad en el test _____
 Programa _____
 Nombre de la persona que responde _____
 Relación con el niño _____
 Nombre del profesional _____
 Título del profesional _____

Sección II. Condiciones de la administración

La escala de medición fue administrada en:
 Una sesión _____ Duración de la administración _____
 Dos sesiones _____ Duración de la administración _____
 Tres o más _____ Duración de la administración _____
 Lugar donde se tomó el test: _____
 Asistencia para leer la escala de medición: Sí ___ No ___
 ¿Cuánto tiempo hace que el profesional conoce al niño?: _____

Comentarios y anotaciones



Developmental Observation Checklist System Language Scale

Section I. Identifying Information

Child's name _____ Male ___ Female ___
 Date tested _____
 Date of birth _____
 Test age _____
 Program _____
 Respondent's name _____
 Relationship to child _____
 Examiner's name _____
 Practitioner's title _____

Section II. Administration Conditions

The Language Scale was administered in
 One session _____ Administration time _____
 Two sessions _____ Administration time _____
 Three or more _____ Administration time _____
 Place Tested _____
 Reading assistance provided Yes ___ No ___
 Length of time respondent has known child _____

Comments and Notes

Types of CELL Fidelity-Related Measures

Type	Construct	Measures
<i>Quantity</i>	Use of the CELL practice guides	Length of use, number of practice guides, and frequency of use
<i>Quality</i>	Development-enhancing characteristics of the CELL activities	Interest-based, engagement, enjoyment, and persistence
<i>Social Validity</i>	Participants' judgments of the CELL practices	Importance (practices and outcomes) and acceptability (practices and outcomes)

Early Literacy Learning Practices Scale
Quantity of the Use of the Intervention Practices

- How long have you been using CELL practices?
- How many different CELL practice guides have you used with the children you serve?
- How many days per week did you to use the CELL practices with the children you serve?

Early Literacy Learning Practices Scale
Quality of the Use of the Intervention Practices

- Children got excited while involved in the learning activities
- Children stuck with the learning activities a long time
- Children smiled or laughed a lot during the learning activities
- Children tried their hardest during the learning activities

Early Literacy Learning Practices Scale

Social Validity Indicators

- Using the CELL activities with the children was worth my time and effort
- I was easily able to fit the CELL activities into my daily schedule
- The purpose or goal of the CELL activities made sense to me
- The CELL activities are important for the children's early literacy learning
- I would like to know more about other CELL activities I can do with the children I work with

Early Literacy Learning Practices Scale (Literacy-Related Outcome Indicators)

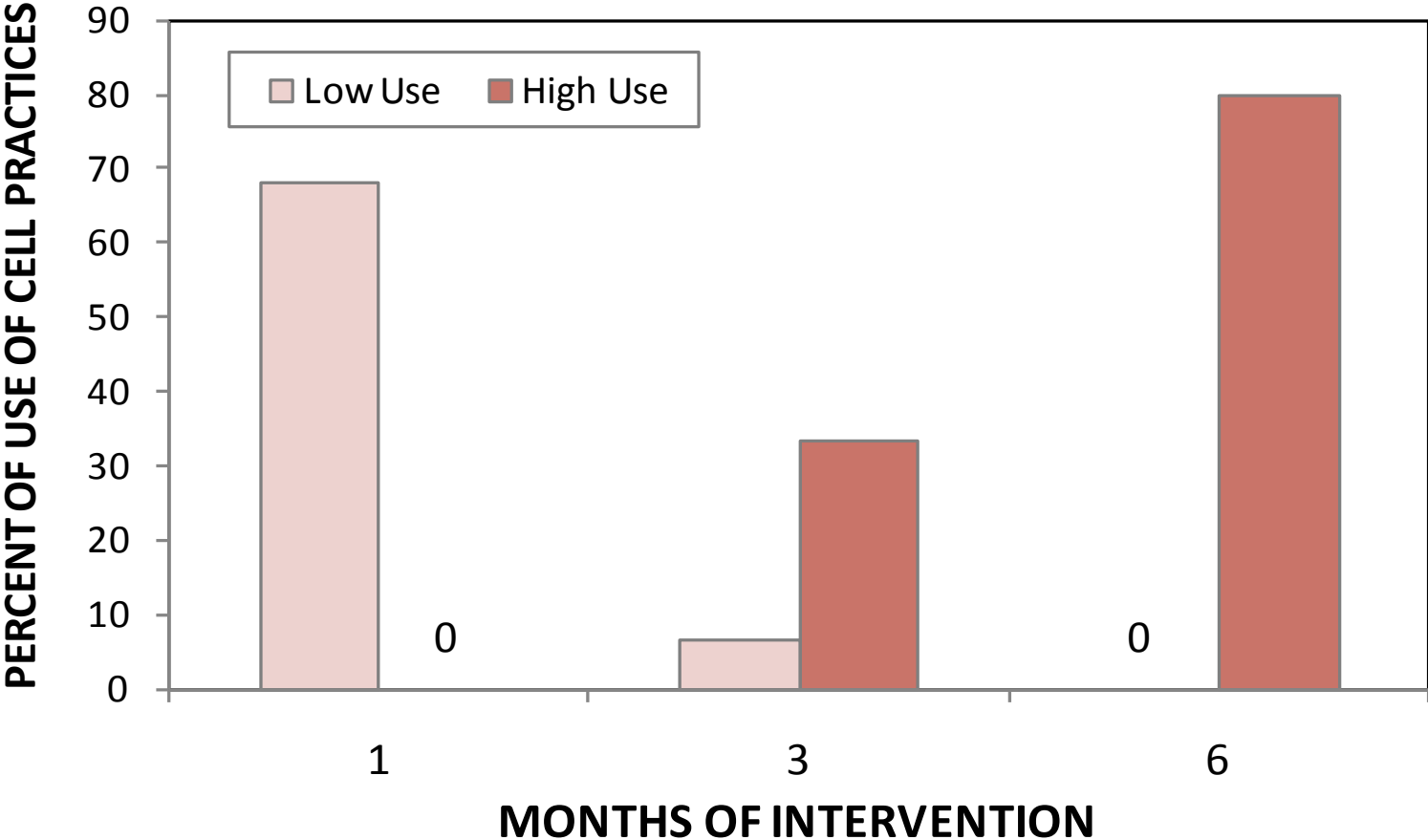
How often has your child done each of the following during the last month?

- Looked at books on his/her own
- Marked, scribbled, or drawn on his/her own own
- Recognized signs, letters, or words
- Communicated or talked effectively with others
- Said or played with different sounds or words

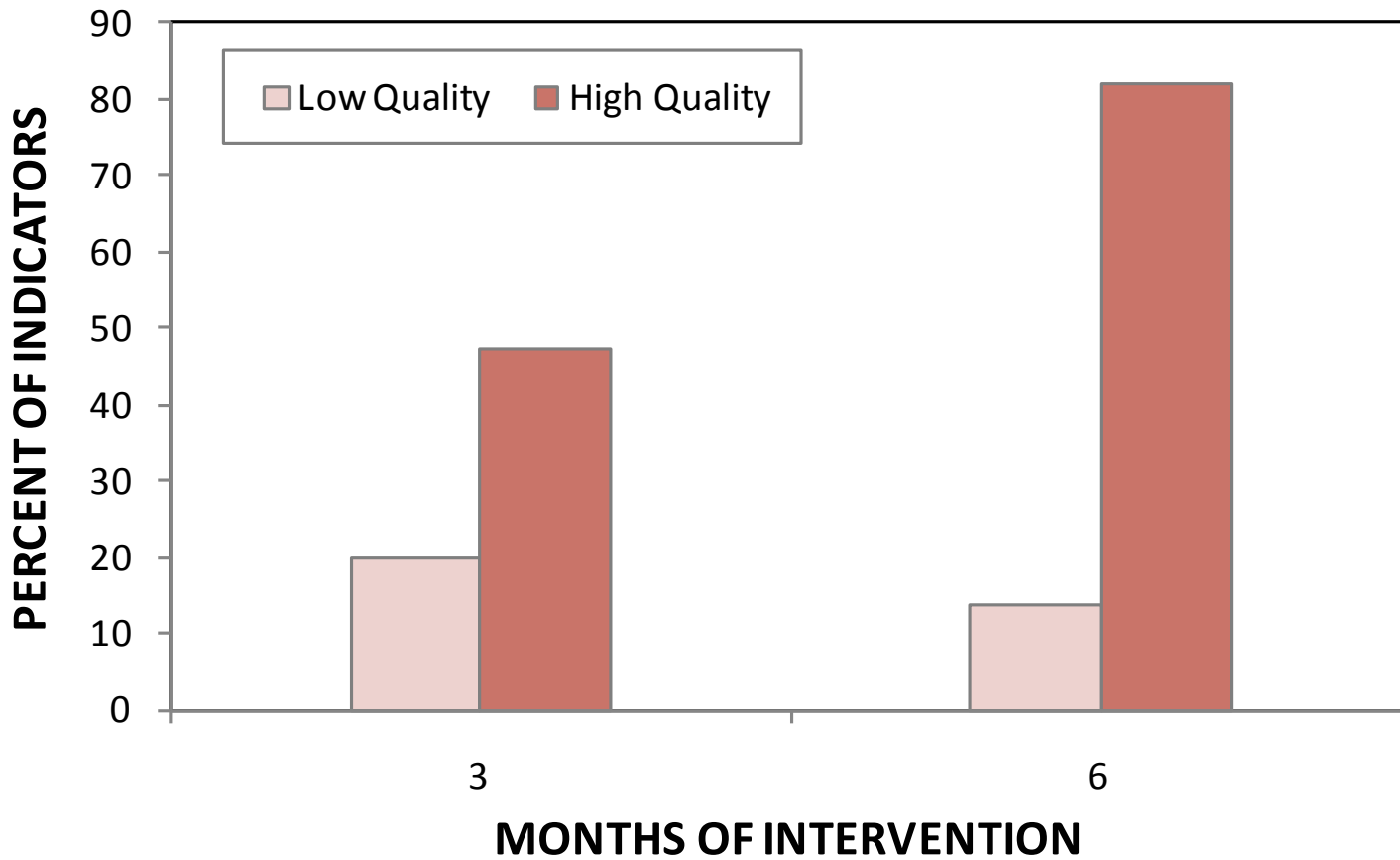
Preliminary Findings

- The field test study to date has been completed with 22 practitioners and 15 parents in 8 programs. The practitioner data is used to illustrate how intervention fidelity was measured and related to the child outcomes.
- Information on the *Early Literacy Learning Practices Scale* was used to conduct preliminary analyses to: (1) evaluate changes in intervention fidelity across time and (2) relate variations in fidelity to variations in practitioners' judgments of children's early literacy-related abilities.

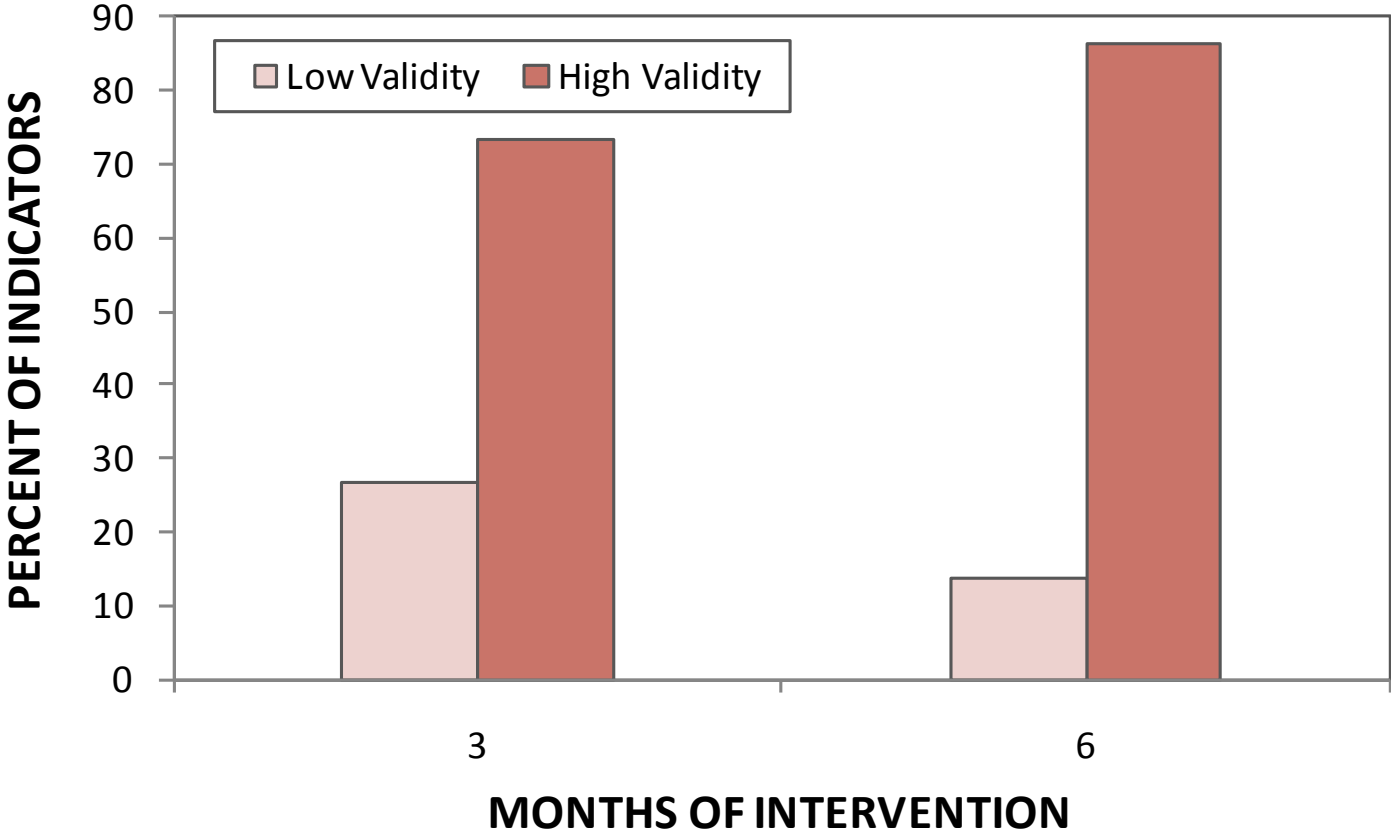
Changes in the Amount of Use of the CELL Practices



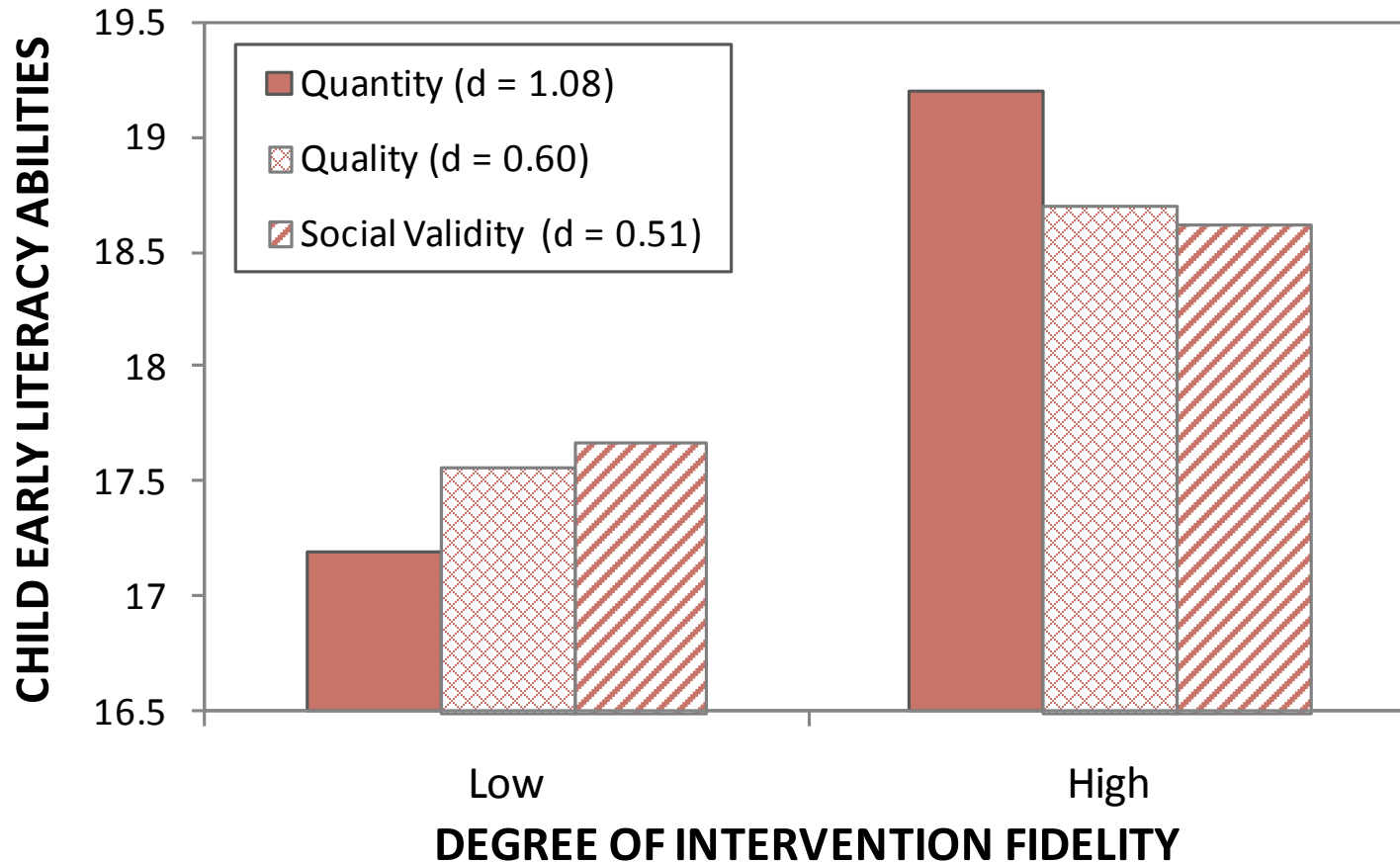
Changes in the Quality of Use of the CELL Practices



Changes in the Social Validity Rating of the CELL Practices



Relationship Between Variations in Fidelity and Practitioners' Judgments of the Children's Early Literacy Abilities



NOTE. *d* = Cohen's *d* effect size for the low vs. high fidelity comparisons.

Conclusions

- Results showed that an informal type of professional development was sufficient to obtain relatively high levels of intervention fidelity.
- Variations in fidelity were related to differences in children's early literacy abilities as assessed by the practitioners. Future analyses will determine whether similar results are found in an independent assessment of children's abilities using the children's DOCS language scores.
- At the completion of the field-test study, additional analyses will be performed to identify the conditions under which professional development (e.g., high vs. low intensity) influences fidelity and how fidelity influences child outcomes.