Acceptability and Importance of Adaptations to Early Literacy Learning Practices for Young Children with Disabilities

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Fifteen Center for Early Literacy Learning practice guides that describe adaptations that make it easier for young children with disabilities to participate in and benefit from early literacy learning experiences was the focus of analysis. Eleven early childhood intervention professionals with extensive experience in developing adaptations evaluated each practice guide and made social validity judgments about the importance and acceptability of the adaptations. Results showed that the practice guides were judged as both important and acceptable. Results also confirmed that the adaptations would be useful to parents and practitioners and produced expected child effects. Implications for intervention are described.

The extent to which a practice is likely to be adopted and used by practitioners and parents depends on how important and acceptable the practice is viewed by these consumers and end-users. Previous evaluations of the social validity of evidence-based practice guides and tool kits found that the more the practice guides and tool kits were judged important and acceptable, the more they were adopted and used by both practitioners and parents (Dunst, Pace, & Hamby, 2007; Dunst & Raab, 2007; Trivette & Dunst, 2007; Trivette, Dunst, Hamby, & Pace, 2007).

A previous *CELLpaper* included findings from a study of the social validity of more than 60 practice guides for promoting the pre-, emergent, and early literacy behavior of infants, toddlers, and preschoolers (Trivette, Dunst, Masiello, Gorman, & Hamby, 2009). These practice guides, which can be viewed at www.earlyliteracylearning.org, are designed to be used with young children with or without disabilities or delays. Findings showed that the practice guides were judged as socially valid (i.e., important and acceptable) by more than 85% of 200 study participants, and that parents and practitioners who used the practice guides with young children rated the guides as more socially valid compared to those who only reviewed, but did not use the practice guides.

The purpose of the study described in this *CELLpaper* was to ascertain the social validity (Foster & Mash, 1999) of the *Center for Early Literacy Learning* practice guides that describe adaptations that make it easier for young children with disabilities to participate in and benefit from early lit-

eracy learning activities and opportunities. Fifteen practice guides have been developed, five each for infants, toddlers, and preschoolers. The methods and procedures described in *CARA's Kit* (Campbell, Milbourne, & Wilcox, 2008; Milbourne & Campbell, 2007) were used as guidelines for developing the adaptations. The practice guides include adaptations for promoting child vocal and verbal behavior, listening to and participating in book reading, rhyming and sound awareness, symbol and letter recognition, and drawing and writing. The practice guides are all written between a 5th to 6th grade level which would make them fairly easy to read and understand (Dunst, Meter, Trivette, & Masiello, 2010).

METHOD

Participants

The participants were 11 early childhood professionals with extensive experience in early intervention and preschool

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special education for young children with disabilities; developing adaptations and modifications to curricula, learning materials, and preschool environments; and conducting research and/or implementing practices with specific populations of children with disabilities (e.g., visual impairments, hearing impairments, physical disabilities). The experts had either masters or doctoral degrees, and were university faculty, practitioners, or researchers. The participants were selected because of their knowledge, understanding, and skills in developing and adapting practices for different populations of young children with disabilities.

Procedure

Each participant was asked to evaluate 15 practice guides, five each for infants, toddlers, and preschoolers. They were told that the practice guides, and the adaptations they included, were intended to make it easier for children with disabilities to participate in and benefit from the early literacy learning activities described in the practice guides. They were also told that the practice guides included simple adaptations that parents could use as part of everyday activities to help their children learn oral communication, print awareness, listening and book reading, early drawing and writing, and rhyming and sound awareness.

Feedback Form

Each participant completed 15 feedback forms, one for each practice guide. The feedback form included two sections. The first section included eight social validity statements that respondents were asked to "indicate how true each statement is in terms of the adaptations described in the practice guides." Each statement was rated on a 5-point scale ranging from *not-at-all true* to *very much true*. A rating of 4 or 5 on the 5-point scale was used as the criterion for consid-

ering an indicator socially valid. The indicators assessed both the *acceptability* and *importance* of both the practices and the expected benefits of the practices (Foster & Mash, 1999; Kazdin, 1977; Miltenberger, 1990).

The second section of the feedback form asked participants to provide any additional information about the practice guides and the adaptations. This information was used to make changes to the practice guides before they were posted on the *CELL* website.

Results

Table 1 shows the results for the percent of indicators meeting the predetermined criterion level. In every case except one, 85% of both the acceptance and importance indicators received a rating of either 4 or 5. Ninety five percent of the 120 indicators were rated a 4 or 5. The findings show that the adaptations were considered easy to use, worth endusers' time and effort, acceptable to end-users, and would be effective for promoting the early literacy abilities and skills included on the practice guides.

The extent to which the social validity ratings differed as a function of the age-level of the practice guides was determined by a series of 3 Between Type of Practice Guide (Infant vs. Toddler vs. Preschooler) ANOVAs with the social validity ratings as the dependant measures. The differences in the ratings were assessed by orthogonal contrasts and Cohen's *d* effect sizes for pair-wise comparisons. The results are shown in Table 2.

There were significant between group differences for only two validity indicators. The orthogonal contrasts and sizes of effect for the pair-wise comparisons found that the preschool practice guides were rated as somewhat more socially valid than the infant practices guides, and to a lesser extent than the toddler practice guides. The same was the

Table 1
Percentages of Respondents Judging the Practice Guide Adaptations as Socially Valid

	Pi	ractice Guid	All Three Ages			
Social Validity Indicators	Infant	Toddler	Preschool	Combined		
Acceptance						
Adaptations are acceptable to users	93	98	98	96		
Would be easy to implement	93	87	91	90		
Worth time and effort to use them	95	100	98	96		
Easily used in everyday activities	93	95	93	93		
Importance						
Includes a variety of adaptations	82	86	83	84		
Would promote targeted skills	89	98	96	94		
Targeted skills are age-appropriate	91	95	96	94		
Likelihood of being effective is high	94	91	98	94		

Table 2
Means, Standard Deviations, F-Test Results, and Cohen's d Effect Sizes for the Between Age Comparisons

	Practice Guides					Overall	Orthogonal						
	Infant (I)		Toddler (T)		Preschooler (P)		Between Group	Contrast F-tests		Effect Sizes			
Indicator	Mean	SD	Mean	SD	Mean	SD	F-test	I vs. T	I vs. P	T vs. P	I vs. T	I vs. P	T vs. P
Acceptable	4.44	0.69	4.63	0.52	4.69	0.51	2.85	2.72	4.84*	0.39	.31	.41	.12
Easy to use	4.38	0.68	4.38	0.76	4.57	0.66	1.23	0.00	2.02	1.80	.00	.28	.27
Worth time	4.56	0.66	4.67	0.47	4.74	0.49	1.37	0.98	2.40	0.46	.19	.31	.15
Fits schedule	4.47	0.69	4.51	0.60	4.68	0.61	1.61	0.09	2.82	1.66	.06	.32	.28
Variety	4.27	0.76	4.38	0.83	4.40	0.77	0.40	6.25**	3.57*	0.40	.14	.17	.02
Promote skills	4.47	0.79	4.78	0.46	4.72	0.53	3.10*	3.17*	5.56**	0.35	.48	.37	12
Age appropriate	4.36	0.80	4.60	0.65	4.68	0.61	3.03	2.86	5.29**	0.42	.33	.45	.13
Effective	4.37	0.65	4.54	0.72	4.68	0.55	3.08*	1.58	7.02**	1.32	.25	.51	.22

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

case for the toddler practice guides compared to the infant practice guides. Despite those differences, the mean scores for nearly all the practice guides were 4.5 or higher on the 5-point scale.

DISCUSSION

The results showed that the adaptations were judged as both important and acceptable by the study participants, but that there were some difference in how socially valid the practice guides were judged as a function of child age (infant vs. toddler vs. preschooler). The fact that the social validity ratings varied somewhat as a function of child age deserves comment because it has implications for which kinds of adaptations make sense for which kinds of practices. As part of research and practice on adaptations for young children with disabilities, Campbell and her colleagues (Campbell, McGregor, & Nasik, 1994; Campbell, Milbourne, Dugan, & Wilcox, 2006; Campbell, Milbourne, & Wilcox, 2008) as well as others (Crawford & Schuster, 1993; Hsieh, 2008; Lane & Mistrett, 1996; Mistrett, Lane, & Goetz, 2000), found that the kinds of adaptations that are appropriate for very young children are rather simple and straightforward (e.g., toys activated by simple switches) whereas those for older preschoolers tend to be somewhat more high tech (e.g., computer-assisted writing). Therefore the range of adaptations would be expected to be more varied as children become older.

The practice guides that were the focus of investigation in this *CELLpaper* are one of three types being developed at *CELL*. The first type are those that include practices that are likely to be universally beneficial to young children with or without disabilities (Tier I). The practice guides with adaptations are designed to promote children with disabilities participation in early literacy learning activities in a manner that enhances their literacy-related capabilities (Tier II). The

third set of practice guides, which are in the process of being prepared, are ones designed to engage children with specific types of special needs (e.g., the use of communication devices with children who do not speak) in literacy learning activities (Tier III).

Several different types of practice guides are being prepared so that a range of options are available to parents and practitioners: Written practice guides in both English and Spanish, PowerPoint presentations (with video examples), DVDs, and Podcasts illustrate how different practices are implemented. The content of all the practice guides and the ways in which the practices are implemented are informed by the best available research. The research syntheses that are used to identify the evidence-based characteristics of a practice focus on unpacking and unbundling what matters most in terms of explaining the relationship between a practice and its consequences (Dunst & Trivette, 2009). This is being done for the Tier I, II, and III practices and is the foundation for ensuring the *CELL* practice guides are evidence-based.

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