

Early Childhood Practitioner Judgments of the Social Validity of Performance Checklists and Parent Practice Guides

Carl J. Dunst

Correspondence: Carl J. Dunst, Orelena Hawks Puckett Institute, 128 S. Sterling St., Morganton, NC, 28655, USA.

Received: January 18, 2017 Accepted: February 16, 2017 Online Published: February 20, 2017

doi:10.11114/jets.v5i3.2162 URL: <https://doi.org/10.11114/jets.v5i3.2162>

Abstract

Findings from three field tests evaluations of early childhood intervention practitioner performance checklists and three parent practice guides are reported. Forty-two practitioners from three early childhood intervention programs reviewed the checklists and practice guides and made (1) social validity judgments of both products, (2) judgments of the compatibility of the checklists and practice guides, and (3) suggestions for improving the intervention products and materials. Results showed that practitioner feedback and suggestions yielded valuable information for improving the products where changes made in response to the practitioners' social validity ratings and suggestions from the first field test had discernible effects on judgments and feedback of revised products. The importance of striving to develop intervention products and materials that are judged as socially important and acceptable is described.

Keywords: social validity, performance checklists, practice guides, practitioner appraisals, product improvement

1. Introduction

The extent to which intervention practices in general, and early childhood intervention practices in particular, are judged positively by practitioners and the parents with whom they work is dependent, in part, on the perceived importance and value of the practices (Kazdin, 1999). The social importance and acceptability of intervention practices in turn would be expected to be related to practitioner use of the practices with fidelity (Foster & Mash, 1999). The importance and acceptability of intervention practices are described as social validity (Turan & Meadan, 2011). Social importance is most often assessed in terms of consumer or end-user judgments of the utility of both intervention practices and the intended outcomes of the practices (e.g., Using this practice would be worth my time and effort), whereas social acceptance is most often assessed in terms of judgments of how well an intervention practice can improve everyday life (e.g., This practice can easily be used to improve my child's behavior). As noted by Strain et al. (2012), no practice, no matter its evidence base, is likely to be used by practitioners or parents if the practice itself is not viewed as socially valid and worth the time and effort to adopt and use.

1.1 Purpose

The purpose of the field tests evaluations described in this paper was to obtain early childhood intervention practitioner social validity judgments of performance checklists and parent practice guides developed at the Early Childhood Technical Assistance (ECTA) Center (ectacenter.org/decrp). Recently revised early intervention and early childhood special education recommended practices were used as the foundations for developing the checklists and practice guides (Division for Early Childhood, 2014). Early childhood intervention includes the provision of different types of supports and resources to young children birth to 6-8 years of age and their families to improve child, parent, and family functioning (Shonkoff & Meisels, 2000). The term *early childhood intervention* encompasses early intervention for infants and toddlers with identified disabilities or developmental delays (Dunst & Espe-Sherwindt, in press), early childhood special education for preschoolers with identified disabilities (Reichow, Boyd, Barton, & Odom, 2016), early years education for infants, toddlers, and preschoolers who are at-risk for poor developmental outcomes due to family circumstances (Burger, 2010), and early childhood education for all young children birth through eight years of age (Copple & Bredekamp, 2009).

1.2 Recommended Early Childhood Practices

There are eight Division for Early Childhood (DEC) recommended practices topic areas (assessment, environment, family, instruction, interaction, leadership, teaming and collaboration, transitions) where each topic area includes between 2 and 13 practices that differ considerably in their formatting, specificity, and internal coherence. Content

analyses of the recommended practices for each topic area were used to identify internally consistent sets of practice characteristics for each topic area where the characteristics were used to develop operationalized sets of intervention practice indicators. For example, the five DEC interaction practices were used to develop four checklists (adult-child interactions, child social-communication interactions, child social-emotional competence, child-child interactions) where each checklist (e.g., adult-child interactions) was designed to promote and strengthen child interactional behavior (e.g., using social games to promote turn taking skills).

1.3 Performance Checklists

The performance checklists were developed using a conceptualization-operationalization-measurement framework (Dunst, Trivette, & Raab, 2015) for operationalizing the DEC recommended practices (Division for Early Childhood, 2014). The checklists are all formatted in the same way to facilitate practitioner understanding and use of the operationalized practice indicators. Research indicates that material organized and formatted in similar ways facilitates learning, memory, and recall (Crowder, 2015; B. L. Schwartz, 2014). Revisiting and repeated use of the material (i.e., checklists and practice guides) improves the efficiency of learning, remembering, and internalization content of the material (Bransford et al., 2003; Druckman & Bjork, 1994).

Appendix A shows the performance checklist for promoting family capacity to provide a child everyday learning opportunities for promoting his or her development. Each checklist includes: (1) a brief description of the purpose of a checklist and how it can be used to plan or evaluate interventions, (2) an internally consistent set of operationalized practice characteristics, (3) a rating scale for assessing how much or how well the practice characteristics were able to use by a practitioner, and (4) space for recording notes. The instructions on each checklist state the purpose of the intervention and expected outcome or benefit, how a practitioner can use the checklist to affect changes in parent or child behavior, and how practitioners can use the checklist indicators to monitor their use of the checklist indicators. The checklist indicators include different elements or key characteristics of a practice that, taken together, operationally define an evidence-based or evidence-informed intervention (Dunst, 2016). The rating scale for assessing the use (adherence) of the checklist indicators ranges from *seldom or never* (was able to use the checklist indicator) to (was able to use the checklist indicators) *most of the time*.

The checklists are used on either an *a priori* basis to review key practice characteristics and serve as a mnemonic device for remembering important procedural steps or on a *post hoc* basis to determine how well one was able to use the checklist practice characteristics. Gawande (2009) described these as *Read-Do* and *Do-Confirm* uses respectively. The checklists that were the focus of the field-test evaluations described in this paper all include behavior indicators that “serve as concrete reminders of the tasks that need to be performed” to implement a practice with fidelity (Wilson, 2013).

Both practitioner and parent practice guides have been developed for each checklist. Each practice guide is formatted in the same way. Appendix B shows a practice guide that was developed using the *Family Capacity-Building Practices Checklist* indicators. Each practice guide includes: (1) a description of the purpose and importance of a particular type of practice, (2) 5 or 6 ideas, examples, and suggestions for how to implement the practice, (3) a vignette of a practitioner or parent using the practice, (4) short video clips of parents or practitioners using the practice, (5) outcome indicators for determining if the practice had expected child benefits, and (6) an external link to additional resources for similar types of practices. There are both web-based and mobile versions of each practice guide.

1.4 Social Validity Research

Practitioner and parent social validity judgments of early intervention practice materials have been found useful for informing changes and improvements in different types of intervention materials (e.g., Dunst, Masiello, Meter, Swanson, & Gorman, 2010; Dunst, Pace, & Hamby, 2007; Dunst, Trivette, Gorman, & Hamby, 2010; I. S. Schwartz, 1996). Dunst et al. (2013), for example, used parents’ judgments of the social validity of four socially interactive robots to select the one robot that parents found most acceptable and judged most likely to be engaging to their children. The robot in turn was found effective for promoting young children’s early communication and language development (Dunst, Hamby, Trivette, Prior, & Derryberry, 2013a, 2013b).

Social validity judgments have also been traced to a number of parent, practitioner, and child outcomes. In a study of Head Start teachers, practitioner social validity ratings of practices constituting the focus of professional development were found to be related to how engaged the practitioners were in the professional development (Trivette, Raab, & Dunst, 2014). In another study of parents’ judgments of the social validity of interest-based child language learning practices, results showed that social validity was not only directly related to the parents’ fidelity of use of the practices with their children but indirectly related to the rates of changes in child language development mediated by the frequency of child engagement in interest-based language learning activities (Dunst, Raab, & Hamby, 2016). Foster and

Mash (1999), Strain, Barton, and Dunlap (2012), and Wainer and Ingersoll (2013) as well describe how social validity judgments are related to the fidelity of use of intervention practices and outcomes of interest.

Results from the field tests evaluations of three different practitioner performance checklists and three different parent practice guides are reported in this paper. Findings from the first field test were used to make changes and improvements in the checklists and practice guides subsequently evaluated in the second and third field tests. The changes made in response to practitioners' social validity ratings and suggestions and recommendations were expected to be related to between field test differences for the first vs. second and third field test. We also expected to find: (1) changes in the practitioners' social validity judgments for between field test comparisons and (2) fewer repeated suggestions for improving the checklists and practice guides.

2. Method

2.1 Participants

The field test participants were 42 practitioners from early childhood intervention programs in two states and an Early Head Start Program in a third state in America. The investigator has collaborated with the directors from all three programs on different initiatives, including a number of evidence-based studies. The program practitioners are knowledgeable about a wide variety of state-of-the-art and contemporary early childhood intervention practices and were considered excellent candidates for objectively evaluating the ECTA Center performance checklists and practice guides.

Table 1 shows the background characteristics of the participants. The majority of participants had bachelors or masters degrees. Most participants had degrees in early childhood education, early childhood special education, and special education, whereas the other practitioners reported their professional disciplines as speech and language pathology, child and family specialists, or early interventionists. The practitioners' years of experience varied considerably ranging from less than one year to more than 20 years. None of these background characteristics are related to the practitioners' social validity judgments (Dunst & Hamby, 2017).

Table 1. Background Characteristics of the Field-Test Participants

Respondent Characteristics	Number	Percent
Education Degree		
Associates Degree	8	19.0
Bachelors Degree	14	33.3
Masters Degree	16	38.1
Doctorate Degree	2	4.8
Not Reported	2	4.8
Professional Discipline		
Early Childhood	24	57.1
Early Childhood Special Education/Special Education	10	23.8
Other ^a	6	14.3
Not Reported	2	4.8
Years of Experience		
< 1	1	2.4
2-5	10	23.8
6-10	11	26.2
11-15	6	14.3
16-20	7	16.7
21+	5	11.9
Not Reported	2	4.8

^a Speech and language pathology, child and family specialists, and early interventionists.

2.2 Field-test Evaluation Survey

Foster and Mash's (1999) framework for developing social validity indicators for assessing the importance and acceptability of intervention practices, and the intended outcomes of the practices, was used to develop the field test survey items. The social validity items for both the intervention practices and expected outcomes of the practices were adopted from those used in other studies (e.g., Dunst et al., 2007; Dunst, Trivette, et al., 2010; Trivette, Dunst, Masiello, Gorman, & Hamby, 2009).

The field test surveys each included three sections with each section including four social validity items. The first section included social validity questions about the performance checklist (e.g., the checklist items are easy to understand and follow); the second section included social validity questions about the practice guides (e.g., the practice guide would be worth the time and effort to use); and the third section included social validity questions about how well the checklist characteristics were incorporated into the practice guides (e.g., the majority of the checklist characteristics

are included in the practice guide activities). Participants rated each social validity item on a 5- point scale ranging from *Do Not Agree At All* to *Agree A Great Deal* with each social validity statement. Each participant's social validity responses were totaled to obtain a summated score for each survey section (Spector, 1992).

The respondents were also asked open-ended questions about both the checklists and practice guides. The open-ended checklist questions asked for suggestions to improve the: (1) checklist instructions, (2) checklist indicators, (3) self-evaluation scale, and (4) any other suggestions to improve the checklists. The open-ended practice guide questions asked for suggestions to improve the: (1) practice guide format, (2) practice guide activities, (3) child outcomes, (4) video examples, and (5) any other suggestions to improve the practice guides. The participants' responses to each open-ended question were coded as no response or no suggestions (0), responses without a specific suggestion to improve the checklist or practice guide (e.g., the practice guide video included good examples of social games) (1), or responses with a specific suggestion to improve a checklist or practice guide (e.g., video captions of the activities would make the examples easier to follow) (2). The field test surveys were completed online using Qualtrics Survey Software.

2.3 Procedure

Each field test entailed an email invitation sent to the Program Director of each participating program which included information about a performance checklist, practice guide, the field test survey, and instructions for how to review the products and complete the survey. A URL link to the survey was embedded in the email. The Program Directors were asked to forward the invitation to their staff to decide if they wished to participate in the field test. Participation in the field test was voluntary and no personal identification information was requested in order to maintain anonymity and confidentiality. Results from the field tests were provided to the Program Directors in only an aggregate and not a program specific manner to conceal any information about a particular program. The field-test evaluations were considered exempt from human subjects review because they involved practitioner willingness to provide feedback on materials designed for routine, every-day early childhood intervention (U. S. Department of Health and Human Services, 2009).

Table 2 shows the checklists and parent practice guides that were the focus of practitioner judgments and suggestions. The *Adult-Child Interaction Checklist* included practice indicators for engaging a child in interactive episodes to promote child interactional competencies. The *Social Games* parent practice guide for the checklist included lap games (e.g., peek-a-boo, so-big) that parents could use to engage their children in your turn-my turn interactions. The *Natural Environment* checklist included practice indicators for using everyday activities and routines as sources of child learning opportunities. The *It's Natural* parent practice guide for the checklist included activities for how to increase child engagement in everyday learning activities. The *Naturalistic Instruction Checklist* included practice indicators for responding contingently to child behavior and encouraging elaborations in child behavior competencies. The *Learning Comes Naturally* practice guide for the checklist included activities a parent could use to (1) engage a child in everyday activities and (2) respond to child engagement in ways supporting and strengthening child competence.

Practitioners' judgments, comments, and suggestions from the first field test were used to make changes and improvements on both the checklists and practice guides which were the focus of practitioner feedback on the second and third field tests. The changes to the checklists included clarifying the fact that the checklists were intended to be used by practitioners and not by parents, improving the checklist instructions for doing a self- evaluation, the wording of the checklist practice characteristics (indicators) to improve understandability, and changing the terminology for the checklist characteristics to improve meaning and intent. The changes to the practice guides included adding captions to the video examples of the practices, adding additional activities to the practice guides, providing suggestions about adaptations to the activities and practices, and improving the specificity of the child outcomes.

Table 2. Performance Checklists and Practice Guides That Were the Focus of Practitioner Feedback and Suggestions

Field Test	DEC Topic Area	ECTA Center Products	
		Performance Checklist	Practice Guide
1	Interaction	Adult-Child Interactions	Social Games
2	Environment	Natural Environments	It's Natural
3	Instruction	Naturalistic Instruction	Learning Comes Naturally

2.4 Methods of Analysis

Three 3 Between Field Test ANOVAs with the summated social validity scores as the dependent measures were used to evaluate differences in the practitioners' ratings. Each ANOVA included *a priori* orthogonal contrasts comparing the second and third field test ratings to the ratings from the first field test in order to obtain the correct denominator term for computing the mean difference effect size for the between field test contrasts. Cohen's *d* effect sizes for the between field test contrasts were used as the primary metric to determine if the changes had discernible effects on the

practitioners' social validity judgments. Effect sizes rather than statistical significance were used for substantive interpretation because effect sizes and not p -values are the best estimates of the magnitude of the difference between two groups or comparisons (Coe, 2002). Effect sizes between .20 and .49 are considered small, effect sizes between .50 and .79 are considered medium, effect sizes between .80 and 1.19 are considered large, and effect sizes of 1.20 or higher are considered very large (Cohen, 1988).

The percent of indicators rated a 4 or 5 on the 5-point scale on the field test surveys were computed for ascertaining if the social validity ratings reached a generally agreed upon level (85%) of acceptability and importance (e.g., Carter, 2009; Finn & Sladeczek, 2001; Meadan, Ostrosky, Zaghawan, & Yu, 2009; Strohmeier, Mulé & Luiselli, 2014). The percent of indicators rated as acceptable and important were computed separately for the performance checklists, practice guides, and the compatibility of the checklists and practice guides. A consumer sciences perspective of social validity appraisals indicates that when at least 85% of items on a 5-point scale are rated a 4 or 5, those judgments are associated with continued use of a service, product, or practice (Bruder & Dunst, 2015; Dunst & Trivette, 2005; Reichheld, 2003).

A series of between field test chi-square analyses was used to evaluate the participants' suggestions to improve the checklists and practice guides. The dependent measure was the percent of participants who made suggestions for the four checklist questions and five practice guide questions. Fewer suggestions were expected on the second and third field tests compared to the first field test. Each chi-square analysis included a 2 Between Field Test (1 vs. 2 + 3) X 2 Response (Suggestion vs. No Suggestion) contrast where the chi-square test results were used to compute a Cohen's d effect size for between field test differences (Dunst & Hamby, 2012).

In addition to the effect size analyses, we computed the improvement indices for the changes on the checklists and practice guides for evaluating the practical importance of the changes (What Works Clearinghouse, 2014). This is a measure of the improvements in the checklists and practice guides as a result of the changes made in response to the participants' suggestions. An improvement index can vary from -50 to +50, where positive indices favoring the second and third field tests indicate that the changes made based on the results from the first field test improved the checklists and practice guides. $ZCalc$ was used to compute the improvement indices (Neill, 2006).

Both sets of quantitative results were supplemented by content analyses of the responses to the open-ended questions. This was done to determine: (1) if the suggestions made during the first field test were mentioned in the second and third field tests, (2) identify new suggestions not mentioned in the first field test, and (3) identify additional changes to further improve the ECTA Center performance checklists and practice guides.

3. Results

3.1 Social Validity Judgments

Table 3 shows the mean social validity ratings from the three field tests and Table 4 shows the results from the three between field test ANOVAs and the mean difference effect sizes, and improvement indices for the first field test vs. second and third field tests. The Cohen's d effect sizes were small to medium where all the metrics indicated that there were increases in the practitioners' social validity ratings as a function of changes made in response to the first field test results. Inspection of the mean scores for the three sets of ratings show, with the exception of the natural environment checklist mean scores, that the mean scores for the other two natural environment scores and all of the naturalistic instruction mean scores were larger than those for the first field test social validity scores. The differences were most pronounced in terms of changes in the social validity judgments for how well the checklist indicators were incorporated into the practice guides ($d = .44$) and the importance and acceptability of the practice guide activities ($d = .23$).

Table 3. Mean Social Validity Scores and Standard Deviations (SD) for the Interaction, Environment, and Instruction Performance Checklists and Practice Guides

	Between Product Descriptive Statistics					
	Interaction		Environment		Instruction	
Practitioner Ratings	Mean	SD	Mean	SD	Mean	SD
Performance Checklists (PC)	16.62	2.22	16.09	3.62	17.83	1.95
Practice Guides (PG)	17.51	2.89	17.98	2.03	17.94	2.29
PC/PG Relationship	16.39	2.18	17.49	2.23	17.02	2.71

Table 4. ANOVA Results, Effect Sizes and Improvement Indices for the Interaction (1) vs. Environment (2) and Instruction (3) Performance Checklists and Practice Guides

Practitioner Ratings	Between Field Test Comparisons		Field Test 1 vs. 2 + 3	
	F-test	p-value	Effect Size	Improvement Index
Performance Checklists (PC)	1.80	.178	.16	6
Practice Guides (PG)	0.15	.860	.23	9
PC/PG Relationship	.571	.572	.44	17

The improvement indices associated with the effect size differences ranged between 6% and 17% for the changes in the mean social validity scores. These results indicate that there were small but nonetheless practically significant improvements from the first to second and third field tests where the improvement indices were larger for the changes made to the practice guides and for how well the checklists and practice guides were conceptually and procedurally related. These findings indicate that the changes made in response to the first field test results were primarily limited to the participants’ judgment of the practice guides and how well the checklist indicators were incorporated into the practice guides.

Figure 1 shows the percent of social validity indicators that were rated a 4 or 5 for the first field test vs. second and third field tests. An acceptable level of social validity was reached on all six measures. Thus, despite small between field test differences (Table 3), the majority of practitioners making judgments of the checklists and practice guides rated the field test products as both socially acceptable and important as evidenced by the percent of items rated a 4 or 5 on the 5-point social validity scale.

3.2 Practitioner Suggestions

The percentage of practitioner suggestions for improving different features of the checklists and practice guides for the first field test vs. the second and third field tests are shown in Table 5. Eight of the nine chi-square results were statistically significant, where there were fewer suggestions for improvements after changes were made based on the first field test results. The Cohen’s *d* effect sizes for the between field test contrasts for all but two comparisons were large or very large. These results indicate that there were discernible improvements in the checklists and practice guides as evidenced by a fewer number of suggestions by the second and third field test participants.

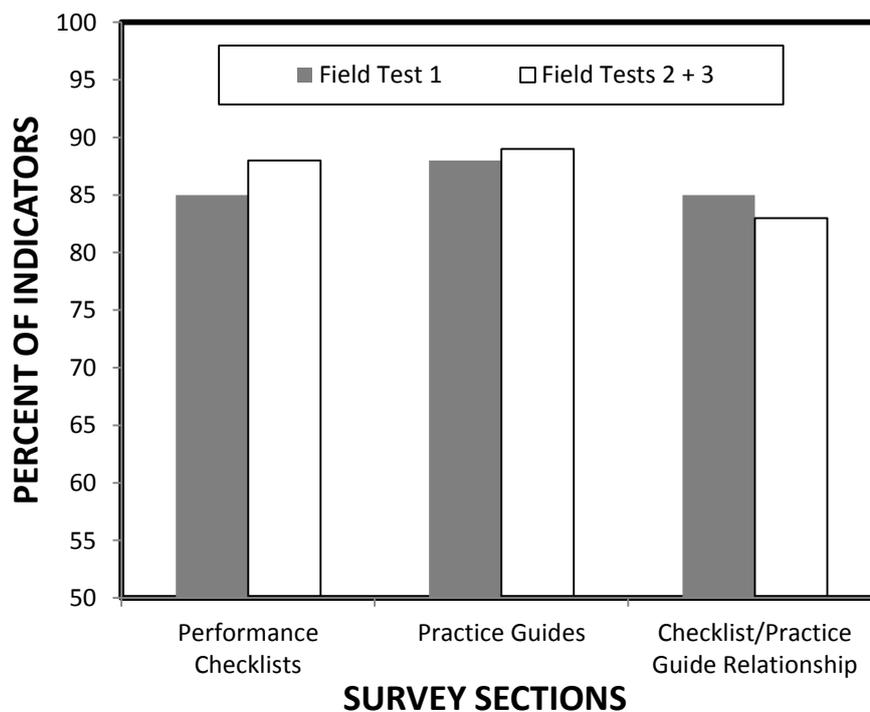


Figure 1. Percent of survey items rated as socially acceptable and important by the field test participants

The practical importance of the changes to the checklists and practice guides is shown in Table 5 in terms of the percent of fewer practitioner suggestions after changes made based on the first field test results. The improvement indices for the checklists ranged between 29% and 41%, and the improvement indices for the practice guides ranged between 25%

and 41% (except for the differences in the suggestions for improving the child outcome indicators). These results indicate that the practitioners participating in the second and third field tests made fewer suggested changes compared to the suggestions of the first field test practitioners.

Table 5. Percent of Field Test Respondents Who Made Suggestions for Improving the Performance Checklists and Practice Guides

Survey Items	Percent of Respondents		χ^2	p-value	Effect Size	Improvement Index
	Interaction	Env. + Inst. ^a				
Performance Checklists						
Checklist Instructions	67	14	8.23	.004	1.23	39
Checklist Indicators	67	24	3.86	.050	0.82	29
Checklist Rating Scale	44	9	5.43	.020	0.90	32
Other Suggestions	38	0	9.93	.002	1.34	41
Practice Guides						
Practice Guide Format	57	9	7.47	.006	1.18	38
Practice Guide Activities	58	8	11.65	.001	1.33	41
Practice Guide Videos	70	16	9.67	.002	1.24	39
Practice Guide Outcomes	20	12	0.37	.541	0.21	8
Other Suggestions	25	4	3.90	.068	0.48	25

^a Env. = Environment and Inst. = Instruction.

3.3 Open-Ended Responses

All of the open-ended questions asked respondents for suggestions to improve some specific aspect of the checklists and practice guides. There were, nonetheless, many different positive appraisals of both products without any suggestions for improvements. Of the total number of participant responses to the open-ended questions, 28% of the comments on the checklists included positive comments, and 17% of the comments on the practice guides included positive comments. The positive comments on the checklists included things such as “The checklist offers a wide variety of ways to observe and encourage adult-child interactions,” “The checklist items were concise, understandable, and to the point,” and “The rating scale allows for a self-evaluation of the practices.” The positive comments on the practice guides included things such as “I thought the format was well designed and easy to follow,” “The activities can be used anywhere and anytime with different families,” and “The videos are great...and the captions make it easy to see what the practices look like.”

There were, however, a number of suggestions on the second and third field tests that continued to be mentioned even after the changes that were made based on the first field test results. These included: (1) the fact that the checklists are intended to be used by practitioners and not by parents and (2) questions about the instructions for how to use the checklists. There were also repeated suggestions about the wording of the checklist practice characteristics (e.g., too wordy; simplify the language). One of the common suggestions on the second and third field tests was the terminology on the checklists. The most frequently mentioned concern was that the checklists included terminology (e.g., contingent responsiveness, natural consequences) that some practitioners might not understand.

A number of practice guide suggestions on the first field test were also made in the second and third field tests. These included the wording on the practice guides and not knowing that the “You’ll Know That it’s Working” section of the practice guides were the expected child outcomes of the practices. There were also a number of comments about the practice guide videos where a few respondents said the videos included content and examples that might not be understood by some parents.

4. Discussion

Practitioner social validity judgments of the ECTA Center performance checklists and parent practice guides, and suggestions for improving the checklists and practice guides, proved extremely valuable for making improvements in the early childhood intervention products and materials. Changes to the checklists and practice guides made in response to the findings from the first field test were reflected in the changes in social validity ratings and suggestions from the second two field tests as evidenced by the improvement indices for the between field test contrasts (What Works Clearinghouse, 2014). Results showed that a rather short field test survey which included both closed-ended and open-ended questions yielded information that was helpful in reworking the checklists and practice guides to improve their acceptability and likelihood of adoption and use (Foster & Mash, 1999). Results also showed that both prior to and after changes were made to the performance checklists and practice guides, the majority of social validity indicators were judged as acceptable and important for working with young children and their parents.

Despite the changes that were made in response to the first field test results, there were repeated as well as additional

suggestions for improving the checklists, and to a lesser degree for improving the practice guides on the second and third field tests. This feedback will be used to make additional changes to the ECTA Center products to improve their acceptability and usability. Additional changes will be made on revised checklists and practice guides as indicated from the results from the next round of field tests.

Although beyond the work scope of the ECTA Center, a logical next step would be to evaluate the relationship between practitioner social validity judgments of the checklists and practice guides and the fidelity of use of both products in a manner recommended by Strain et al. (2012). As noted by these investigators, social validity judgments are important because they will likely be correlated with the fidelity of use of an intervention practice. This type of “liking–implementation with fidelity relationship” (Strain et al., 2012, p. 197) was found in a study by Dunst et al. (2016), where the effects of parents’ social validity judgments of interest-based everyday activity child language learning intervention practices were related to parents’ fidelity of use of the practices and indirectly related to children’s rates of language development mediated by the fidelity of use of the intervention practices. Therein lies the importance of early childhood intervention practices being judged as socially valid, and the need to evaluate practitioners’ beliefs about the importance and acceptability of the practices. Despite the call for systematically including social validity measures in research and field-test studies (e.g., Carter, 2009; Leko, 2014; Turan & Meadan, 2011), this has not become routine practice despite its contributions to understanding the adoption and use of different kinds of intervention practices. Field-test studies like the one described in this paper serve as a model for informing improvements in early childhood intervention practices.

4.1 Implications for Practice

Performance checklists and practice guides like the ones described in this paper are simple yet effective tools for operationally defining different kinds of early childhood intervention practices which are easily used as part of routine, everyday interventions with young children and their families. Twenty-nine performance checklists and 67 (32 parent and 35 practitioner) practice guides have been developed for different early childhood intervention practices (www.ectacenter.org/decrp). The checklists each include key practice characteristics that serve as mnemonic tools for practitioners to understand and remember important steps or elements of the practices. The practice guides each include activities that have been found to be related to desired child or family outcomes.

Both the checklists and practice guides are intentionally formatted in the same way because information and material that is organized similarly “causes the learner to focus on the meaning of the material thus increasing the depth of processing” (B. L. Schwartz, 2014, p. 107). The checklists and practice guides seem especially needed in a field where the knowledge base has expanded so rapidly as is the case for early childhood intervention (see e.g., Reichow et al., 2016).

Acknowledgments

Conduct of the work reported in this paper was supported, in part, by funding from the U.S. Department of Education, Office of Special Education Programs (Grant # H326P120002) for the Early Childhood Technical Assistance Center awarded to the Frank Porter Graham Child Development Institute at the University of North Carolina-Chapel Hill. The opinions expressed, however, are those of the author and do not necessarily represent those of the Department, Office, University, or Institute. Special thanks to the staff of the Enola Group Early Head Start Program (Morganton, NC), Family Child Learning Center (Tallmadge, OH), and the Expanding Horizons Early Intervention Program (Johnson City, TN), for their valuable input and suggestions on the products and materials described in this paper.

References

- Bransford, J. D., Brown, A. L., Cocking, R. R., Donovan, M. S., Bransford, J. D., & Pellegrino, J. W. (Eds.). (2003). *How people learn: Brain, mind, experience, and school* (Expanded ed.). Washington, DC: National Academy Press. Retrieved from <http://files.eric.ed.gov/fulltext/ED440122.pdf>
- Bruder, M. B., & Dunst, C. J. (2015). Parental judgments of early childhood intervention personnel practices: A consumer sciences perspective. *Topics in Early Childhood Special Education, 34*(4), 200-210. <https://doi.org/10.1177/0271121414522527>
- Burger, K. (2010). How does early childhood care and education affect cognitive development? An international review of the effects of early interventions for children from different social backgrounds. *Early Childhood Research Quarterly, 25*(2), 140–165. <https://doi.org/10.1016/j.ecresq.2009.11.001>
- Carter, S. L. (2009). *The social validity manual: A guide to subjective evaluation of behavior interventions*. Burlington, MA: Academic Press.

- Coe, R. (2002, September). *It's the effect size, stupid: What effect size is and why it is important*. Paper presented at the Annual Conference of the British Educational Research Association, University of Exeter, England. Retrieved from <http://www.leeds.ac.uk/educol/documents/00002182.htm>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Copple, C., & Bredekamp, S. (Eds.). (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (3rd ed.). Washington, DC: National Association for the Education of Young Children (NAEYC).
- Crowder, R. G. (2015). *Principles of learning and memory* (Classic ed.). New York: Psychology Press.
- Division for Early Childhood. (2014). *DEC recommended practices in early intervention/early childhood special education*. Retrieved from <http://www.dec-sped.org/recommendedpractices>
- Druckman, D., & Bjork, R. A. (Eds.). (1994). *Learning, remembering, believing: Enhanced human performance*. Washington, DC: National Academy Press.
- Dunst, C. J. (2016). Role of research syntheses for identifying evidence-based early childhood intervention practices. In B. Reichow, B. A. Boyd, E. E. Barton, & S. L. Odom (Eds.), *Handbook of early childhood special education* (pp. 541-563). Switzerland: Springer International. https://doi.org/10.1007/978-3-319-28492-7_28
- Dunst, C. J., & Espe-Sherwindt, M. (in press). Contemporary early intervention models, research and practice for infants and toddlers with disabilities and delays. In J. M. Kauffman, D. P. Hallahan, & C. P. Pullen (Eds.), *Handbook of special education*. New York: Taylor & Francis.
- Dunst, C. J., & Hamby, D. W. (2012). Guide for calculating and interpreting effect sizes and confidence intervals in intellectual and developmental disabilities research studies. *Journal of Intellectual and Developmental Disability*, 37, 89-99. <https://doi.org/10.3109/13668250.2012.673575>
- Dunst, C. J., & Hamby, D. W. (2017). Predictors of the social validity judgments of early childhood intervention performance checklists and practice guides. *International Journal of Psychology and Educational Studies*, 4(1), 13-20. <https://doi.org/10.17220/ijpes.2017.01.002>
- Dunst, C. J., Hamby, D. W., Trivette, C. M., Prior, J., & Derryberry, G. (2013a). Effects of a socially interactive robot on the conversational turns between parents and their young children with autism. *Social Robots Research Reports*, Number 6. Retrieved from http://www.socialrobots.org/SocRobotRpt_6.pdf
- Dunst, C. J., Hamby, D. W., Trivette, C. M., Prior, J., & Derryberry, G. (2013b). Vocal production of young children with disabilities during child-robot interactions. *Social Robots Research Reports*, Number 5. Retrieved from http://www.socialrobots.org/SocRobotRpt_5.pdf
- Dunst, C. J., Masiello, T., Meter, D., Swanson, J., & Gorman, E. (2010). Technical assistance providers' evaluation of the Center for Early Literacy Learning practice guides. *CELLpapers*, 5(3), 1-4. Retrieved from http://www.earlyliteracylearning.org/cellpapers/cellpapers_v5n3.pdf
- Dunst, C. J., Pace, J., & Hamby, D. W. (2007). *Evaluation of the Games for Growing tool kit for promoting early contingency learning*. Asheville, NC: Winterberry Press.
- Dunst, C. J., Raab, M., & Hamby, D. W. (2016). Interest-based everyday child language learning. *Revista de Logopedia, Foniatria y Audiologia*, 36, 153-161. <https://doi.org/10.1016/j.rlfa.2016.07.003>
- Dunst, C. J., & Trivette, C. M. (2005). *Measuring and evaluating family support program quality*. Asheville, NC: Winterberry Press.
- Dunst, C. J., Trivette, C. M., Gorman, E., & Hamby, D. W. (2010). Further evidence for the social validity of the Center for Early Literacy Learning practice guides. *CELLpapers*, 5(1), 1-3. Retrieved from http://www.earlyliteracylearning.org/cellpapers/cellpapers_v5n1.pdf
- Dunst, C. J., Trivette, C. M., Prior, J., Hamby, D. W., & Embler, D. (2013). Parents' judgments of the acceptability and importance of socially interactive robots for intervening with young children with disabilities. *Social Robots Research Reports*, Number 1. Retrieved from www.socialrobots.org/reports.php
- Dunst, C. J., Trivette, C. M., & Raab, M. (2015). Utility of implementation and intervention performance checklists for conducting research in early childhood education. In O. N. Saracho (Ed.), *Handbook of research methods in early childhood education: Vol. 1. Research methodologies* (pp. 247-276). Charlotte, NC: Information Age Publishing.
- Finn, C. A., & Sladeczek, I. E. (2001). Assessing the social validity of behavioral interventions: A review of treatment acceptability measures. *School Psychology Quarterly*, 16, 176-206. <https://doi.org/10.1521/scpq.16.2.176.18703>

- Foster, S. L., & Mash, E. J. (1999). Assessing social validity in clinical treatment research issues and procedures. *Journal of Consulting and Clinical Psychology, 67*, 308-319. <https://doi.org/10.1037/0022-006X.67.3.308>
- Gawande, A. (2009). *The checklist manifesto: How to get things right*. New York: Metropolitan Books.
- Kazdin, A. E. (1999). The meanings and measurement of clinical significance. *Journal of Consulting and Clinical Psychology, 67*(3), 332-339. <https://doi.org/10.1037/0022-006X.67.3.332>
- Leko, M. M. (2014). The value of qualitative methods in social validity research. *Remedial and Special Education, 35*(5), 275-286. <https://doi.org/10.1177/0741932514524002>
- Meadan, H., Ostrosky, M. M., Zaghlawan, H. Y., & Yu, S. Y. (2009). Promoting the social and communicative behavior of young children with autism spectrum disorders: A review of parent-implemented intervention studies. *Topics in Early Childhood Special Education, 29*, 90-104. <https://doi.org/10.1177/0271121409337950>
- Neill, J. (2006). ZCalc: For converting a standardised mean effect size (ES) into a z score and in expressing various ways (Version 0.1). Retrieved from www.wilderdom.com/research/ZCalc.xls
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard Business Review, 81*(12), 46-54.
- Reichow, B., Boyd, B. A., Barton, E. E., & Odom, S. L. (Eds.). (2016). *Handbook of early childhood special education*. Switzerland: Springer International. <https://doi.org/10.1007/978-3-319-28492-7>
- Schwartz, B. L. (2014). *Memory: Foundations and applications* (2nd ed.). Los Angeles: SAGE.
- Schwartz, I. S. (1996). Reaction from the field: Expanding the zone: Thoughts about social validity and training. *Journal of Early Intervention, 20*, 204-205. <https://doi.org/10.1177/105381519602000302>
- Shonkoff, J. P., & Meisels, S. J. (2000). *Handbook of early childhood intervention* (2nd ed.). Cambridge, England: Cambridge University Press. <https://doi.org/10.1017/CBO9780511529320>
- Spector, P. E. (1992). *Summated rating scale construction: An introduction*. Newbury Park, CA: Sage. <https://doi.org/10.4135/9781412986038>
- Strain, P. S., Barton, E. E., & Dunlap, G. (2012). Lessons learned about the utility of social validity. *Education and Treatment of Children, 35*, 183-200. <https://doi.org/10.1353/etc.2012.0007>
- Strohmeier, C., Mulé C., & Luiselli, J. K. (2014). Social validity assessment of training methods to improve treatment integrity of special education service providers. *Behavior Analysis in Practice, 7*(1), 15-20. <https://doi.org/10.1007/s40617-014-0004-5>
- Trivette, C. M., Dunst, C. J., Masiello, T., Gorman, E., & Hamby, D. W. (2009). Social validity of the Center for Early Literacy Learning parent practice guides. *CELLpapers, 4*(1), 1-4. Retrieved from http://www.earlyliteracylearning.org/cellpapers/cellpapers_v4n1.pdf
- Trivette, C. M., Raab, M., & Dunst, C. J. (2014). Factors associated with Head Start staff participation in classroom-based professional development. *Journal of Education and Training Studies, 2*(4), 32-45. <https://doi.org/10.11114/jets.v2i4.449>
- Turan, Y., & Meadan, H. (2011). Social validity assessment in early childhood special education. *Young Exceptional Children, 14*(3), 13-28. <https://doi.org/10.1177/1096250611415812>
- U. S. Department of Health and Human Services. (2009). *Code of Federal Regulations, Title 45, Part 46: Protection of human subjects*. Washington, DC: Office of Human Research Protections.
- Wainer, A., & Ingersoll, B. (2013). Intervention fidelity: An essential component for understanding ASD parent training research and practice. *Clinical Psychology: Science and Practice, 20*(3), 335-357. <https://doi.org/10.1111/cpsp.12045>
- What Works Clearinghouse. (2014). *What Works Clearinghouse procedures and standards handbook*. Washington, DC: U. S. Department of Education, Institute of Education Sciences. Retrieved from http://ies.ed.gov/ncee/wwc/pdf/reference_resources/wwc_procedures_v3_0_standards_handbook.pdf
- Wilson, C. (2013). *Credible checklists and quality questionnaires: A user-centered design method*. Waltham, MA: Morgan Kaufman.

Appendix A

Family Capacity-Building Practices Checklist

This checklist includes practices for engaging parents and other family members in using child-level interventions to promote child learning and development in ways that strengthen parenting confidence and competence.

The capacity-building practices are used by a practitioner to promote a parent’s understanding and use of everyday activities and routines as sources of child learning opportunities.

The checklist can be used by a practitioner to plan intervention sessions with parents and other family members. The checklist also can be used to do a self-evaluation to determine if practitioner capacity-building practices actively involved parents in providing their children everyday learning opportunities.

Practitioner: _____ Child: _____ Date: _____

Please indicate which of the practice characteristics you were able to use as part of parent and family member involvement in providing child learning opportunities:	Seldom or Never (0-25%)	Some of the Time (25-50%)	As Often As I Can (50-75%)	Most of the Time (75-100%)	Notes
1. Describe the use and benefits of everyday activities as sources of child learning opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Illustrate or demonstrate child engagement in a variety of everyday activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Describe and illustrate the importance of child interests and preferences in promoting child learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Use an everyday activity checklist to have a parent select which activities would be easiest for the parent to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Together with the parent, engage the child in a familiar everyday activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Illustrate or demonstrate how adult responsiveness to child behavior is used to promote child learning in everyday activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Provide supportive guidance, feedback, and suggestions to the parent throughout the capacity-building activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Together with the parent, identify five or six everyday activities that will be used as child learning opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Engage the parent in conversations about which activities will be used for child learning and which parent responses will be used to promote learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

This checklist and other ECTA Center products are available at <http://www.ectacenter.org>. Copyright © 2017 Early Childhood Technical Assistance Center. Reprinted with permission.

Appendix B

Early Childhood Intervention Practice Guide

Everyday Learning Opportunities

Family capacity-building practices are used to support and strengthen parents and other caregivers' abilities to provide their children everyday learning opportunities. This is accomplished using a number of different strategies for supporting and strengthening parents' use of everyday activities to promote child learning and development.

Watch a video of this Learning Way

Learning Way: Family-Provided Child Learning Opportunities

- Parents are more likely to use intervention practices with their children if they understand the benefits of everyday child learning opportunities. Begin by explaining both the purpose and goal of the learning opportunities and the specific benefits to young children.
- Illustrate or demonstrate how to engage a child in everyday learning activities. Video vignettes of parents providing their children everyday learning opportunities generally work best. Be sure to point out the key characteristics of the practices.
- Engage the parents in real-life (authentic) activities to provide their children everyday learning opportunities. The more familiar and routine the activities are to parents, the more likely they will feel confident using the activities as sources of child learning opportunities.
- Focus on two important child and parent behaviors as part of everyday child learning opportunities. The first is the importance of **child interests and preferences** as factors increasing child engagement in everyday activities. The second is the role **parents' responsiveness to child behavior** in everyday activities plays in supporting child learning.
- Provide parents supportive guidance and feedback during and after parents' use of everyday learning opportunities with their child. Point out which characteristics of the practice were used by the parents and describe the child benefits of the practices.
- Engage the parents in conversations, discussions, or review of their confidence using the practices. Provide specific positive comments, feedback, and suggestions in response to parents' descriptions to reinforce their sense of confidence.
- Jointly identify four or five everyday activities that the parents can use to provide learning opportunities for their child. The best activities are ones that provide the child multiple opportunities to engage in interactions with people, toys, and other materials.
- Identify things you can do to provide the parents regular, ongoing support to encourage the continued use of the practices. It is important to plan to take time together to review and evaluate the learning opportunities to decide which activities should be continued, modified, and added.



A Quick Peek Felicity is a 3-year-old with multiple disabilities. Her mother, Emma, tells her daughter's speech therapist that Felicity is beginning to show increased interest in looking at other people and is making more sounds than usual. Mom asks the therapist about the best times to work on her daughter's speech. The therapist describes how there are many opportunities throughout the day that can be used to encourage Felicity to use sounds in interactions with mom, dad, and other family members. The therapist uses video she has stored on a tablet computer to show Felicity's mom and dad how other parents

have used everyday activities to encourage their young children to make sounds and "talk more." She points out the children's high level of interest in the activities and how the parents' imitation of their children's sounds gets the children to continue making the sounds. At the therapist's next visit, Emma says that Felicity now "talks up a storm" while she plays lap games with her daughter. The therapist asks Emma to show her what this looks like and suggests trying to do the same thing in a few more activities. It isn't long before Emma identifies more than a dozen activities during which she can encourage her daughter to make more sounds.

You'll know it's working if ...

- Parents use lots of everyday activities for child learning
- Parents are responsive to their children's behavior in the activities
- The children are interacting with people and objects in the activities

Learn more about helping families make use of everyday learning opportunities from online resources such as:

- [Tools and Guides to Facilitate Family Engagement](#) on the EI Excellence website

ECTA Center

Early Childhood Technical Assistance Center

www.ectacenter.org

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the [Creative Commons Attribution license](#) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.