

Everyday Activities as Sources of Language Learning Opportunities for Infants, Toddlers, and Preschoolers

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The purpose of the research synthesis described in this paper was to evaluate the relationships between young children's participation in everyday family and community activities and the children's receptive and expressive language development. The use of everyday family and community activities as sources of interest-based child learning opportunities to promote children's communication and language competence has been the focus of investigation by staff at the *Center for Everyday Child Language Learning (CE-CLL)*; Dunst, Trivette, & Raab, 2008a, 2008b). Everyday activities are one of four components of the *CECLL* model shown in Figure 1. The four components include child interests, everyday family and community activities as contexts for language learning, methods and strategies for increasing child participation in interest-based everyday language learning activities, and the use of caregiver responsive teaching for supporting and strengthening children's communication and language competence in everyday activities.

Everyday activities include many different kinds of experiences and opportunities afforded young children as part of daily living, child and family routines, family rituals, special events and outings, and family and community celebrations and traditions (Dunst, Hamby, Trivette, Raab, & Bruder, 2000). The learning opportunities that happen as part of child participation in everyday activities have been found to be important contexts for children's learning in general (Dunst et al., 2001; Kellegrew, 1998; Rogoff, Mistry, Göncü, & Mosier, 1993) and children's communication and language development more specifically (e.g., Duchan, 1995; Kaiser & Hester, 1996; Roper & Gurley, 2006). The focus of this research synthesis was the nature of the relationships between child participation in different kinds of everyday activities and young children's language development. The research foundations for practices in other *CE-CLL* components are reported in other *CECLL* reports (Raab, Dunst, & Hamby, 2013; Raab, Dunst, Johnson, & Hamby, 2013; Trivette, Dunst, Simkus, & Hamby, 2013).

The relationships between child participation in everyday family and community activities and the children's expressive and receptive language were examined in 26 studies including more than 6,000 infants, toddlers, and preschoolers. Results showed that participation in typically occurring family and community activities was associated with better language outcomes and that the sizes of effect were similar for children with or without disabilities or delays. Implications for practice are described.

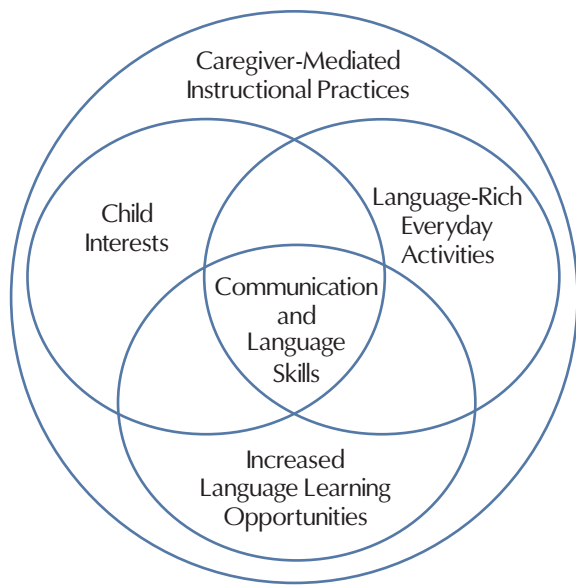


Figure 1. Four major components of the caregiver-mediated everyday language intervention model for facilitating early communication and language skill acquisition.

Search Strategy

Studies were located using *activity* OR *activities* OR *routine* OR *routines* (and more than 50 specific activity setting terms) AND *child language* OR *verbal communication* OR *speech development* OR *verbal ability* OR *oral comprehension* OR *expressive language* OR *receptive language* (and more than 25 other language terms) AND *infant** OR *infancy* OR *toddler* OR *preschool** OR *kindergarten* as search terms. PsychInfo, ERIC, MEDLINE, Education Research Complete, and Academic Search Premier were searched for studies. These were supplemented by Google Scholar, Scirus, Ingenta Connect, and Google searches as well as a search of an EndNote library maintained by our Institute. Hand searches of the reference sections of all retrieved journal articles, book chapters, books, dissertations, and unpublished papers were examined to locate additional studies. Studies were included if the majority of children were six years of age or younger and the correlations between the activity setting measures and the children's language development were reported by the investigators.

Search Results

Twenty-six studies were located that included 6013 children. Appendix A includes the background characteristics of the study participants. The average age of the children was 44 months (Range = 1 to 83). Fifty-one percent of the children were male. Nine studies included children without disabilities or delays, eight studies included children who were at-risk for poor outcomes for socioeconomic reasons, and two studies included children with identified disabilities or delays. (Child condition was not reported in seven studies.)

Most of the studies (15) were conducted in the United States whereas 11 studies were conducted in other countries.

Selected characteristics of the everyday activities that were the focus of the investigation are shown in Appendix B. The activities included, but were not limited to, shared reading, rhyming activities, library or bookstore visits, family meal times, and family outings. The activities were categorized as either literacy-related (e.g., shared reading, alphabet activities) or family/community (e.g., family meal times, library visits) activity settings for purposes of the analyses presented in this paper. The largest majority of investigations used frequency of participation in the activities as the activity setting measures. The language outcome measures included different scales and instruments (Bayley, 2006; Dunn & Dunn, 2007; Zimmerman, Steiner, & Pond, 2002) and investigator-coded child communication and language behavior. The different outcome measures in the studies were categorized as either expressive language measures or receptive language measures.

The weighted average correlation coefficients between child participation in the everyday activities and the study outcomes were used as the sizes of effect for the relationships between the activity setting measures and the language outcomes. Appendix C lists the everyday activities, language outcomes, and effect sizes for the relationships between the measures. The 95% confidence intervals for the average effect sizes were used for substantive interpretation of the relationships among measures. The Z-test was used to estimate the strength of the relationships between the activity setting measures and the children's expressive and receptive language development.

Synthesis Findings

The average weighted correlation for the relationship between the activity setting measures and child expressive language was $r = .18$ (95% CI = .16-.20), $Z = 19.92$, $p = .0000$. The average weighted correlation between the activity setting measures and child receptive language was $r = .19$ (95% CI = .16-.22), $Z = 13.23$, $p = .0000$. In both cases, more frequent participation in everyday activities was associated with better language abilities.

Figure 2 shows the relationships between child participation in the two categories of everyday activities and both the expressive and receptive language development. In all four analyses, frequency of participation in the different kinds of activities was associated with better language outcomes as evidenced by both the sizes of effect and confidence intervals not including zero. The Z-tests for the relationships among the activity setting and language outcomes ranged between 5.37 and 19.23, $p_s = .0000$. The effect sizes for the literacy related outcomes were nearly identical for both the expressive and receptive language outcomes, whereas the effect size for the family and community activities were larger for the expressive compared to the receptive language outcomes.

The relationships between the everyday activity measures and child language outcomes at different child ages are

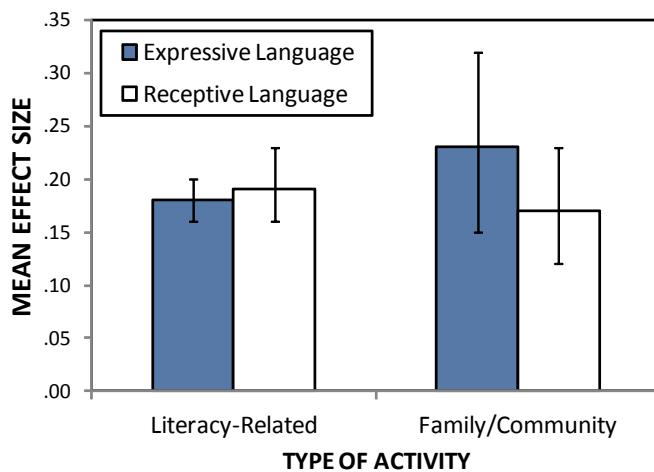


Figure 2. Average effect sizes and 95% confidence intervals for the relationships between participation in everyday activities and child expressive and receptive language development.

shown in Table 1. The average effect sizes all were statistically significant at the $p = .0000$ level. The sizes of effect ranged between .14 (48-59 months) and .24 (14-23 months). At each of the child ages, more frequent participation in everyday activities was associated with better language outcomes.

The studies in the research synthesis included children without disabilities or delays and children who were at-risk for poor outcomes for socioeconomic reasons or had identified disabilities or delays. The average effect size for the typically developing children was $d = .15$ (95% CI = .12 - .16), $Z = 12.96$, $p = .0000$, and the average effect size for the children with differing conditions was $d = .23$ (95% CI = .20 - .25), $Z = 18.72$, $p = .0000$. In both analyses, more frequent participation in everyday activities was associated with better language outcomes regardless of child condition.

Discussion

Results from the research synthesis described in this paper indicated that frequency of child participation in everyday family and community activities was related to better expressive and receptive language development in a manner

consistent with the expected relationships central to the *CE-CLL* model. Everyday activities are viewed as the contexts in which meaningful language learning takes place. The analysis reported in this paper provides credence to the contention that the language development of young children with or without disabilities or delays is likely to be strengthened when language learning occurs in everyday activities.

Studies of young children’s language learning have yielded evidence that some if not most of the first words learned by infants are contextually bound and setting specific (e.g., Dihoff & Chapman, 1977). Studies of toddlers and older preschoolers also indicate that language learning is often tied to specific events and activities (e.g., Hart & Risley, 1999). This research synthesis adds to this evidence by demonstrating that participation in different kinds of everyday activities at different ages all have positive effects on young children’s language development, and that the effects were similar for children with and without disabilities or delays.

The findings reported in this paper have implications for early childhood intervention practices in general and for how the *CECLL* intervention model is used to promote child language learning. Everyday activities can provide language rich learning opportunities when used in conjunction with language facilitating instructional practices and interactional styles that encourage and support children’s learning. As a number of researchers and practitioners have noted, everyday activities provide young children abundantly more learning opportunities that do more formal, highly structural interventions (e.g., Mahoney & MacDonald, 2007; McWilliam, 2000). Embedding language learning opportunities into everyday activities can easily occur throughout a child’s day and provide him or her large numbers of experiences to acquire contextually meaningful language abilities.

Conclusion

The particular component of the *Center for Everyday Child Language Learning* intervention model that was the focus of the research synthesis described in this paper was the use of everyday activities as sources of communication and language learning opportunities. Results from the research synthesis indicated that frequent opportunities to participate in everyday activities were associated with better expressive and receptive language abilities.

Table 1
Average Effect Sizes and 95% Confidence Intervals (CI) for the Relationship Between the Everyday Activity Measures and the Language Outcomes at Different Child Ages

Child Age (months)	Number		Mean Correlation	95% CI	Z-test	p-value
	Studies	Effect Sizes				
14	23	3	.27	.20-.33	8.23	.0000
24	35	5	.21	.17-.25	10.09	.0000
36	47	5	.24	.21-.28	12.87	.0000
48	59	11	.14	.12-.16	14.10	.0000
60	66	6	.17	.13-.21	8.21	.0000

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Appendix A

Characteristics of Study Participants

Study	Number	Child's Age		Child's Gender		Country	Condition
		Mean	Range	Male	Female		
Burgess (1997) Burgess (2002)	97	61	48-70	NR	NR	United States	NR
Byrne et al. (2006) Samuelsson et al. (2005)	1254	59	47-71	574	680	U.S., Australia, Norway, Sweden	Typically developing
Collins (2010)	80	54	48-64	42	38	United States	At-risk
Crain-Thoreson & Dale (1992)	25	24	NR	9	16	United States	Typically developing
Davidse et al. (2010)	174	54	51-57	NR	NR	Netherlands	NR
Dunn (1981)	40	63	57-69	25	15	United States	NR
Dunst et al. (2001)	63	38	1-72	19	44	United States	Disability or delay
Dunst et al. (2000); (2002)	1603	42	0-72	NR	NR	United States (Puerto Rico and Micronesia)	Disability or at-risk
Forget-Dubois (2009)	693	19	NR	NR	NR	Canada	NR
Foster et al. (2005)	325	59	42-76	164	161	United States	At-risk
Gonzales & Uhing (2008)	48	52	41-58	23	25	United States	At-risk
Kalia (2007)	24	44	40-49	NR	NR	India	NR
Kelman (2006)	91	54	36-72	39	52	United States	Typically developing
Lyytinen et al. (1998)	108	24	NR	62	46	Finland	Typically developing
Payne et al. (1994)	236	54	45-66	130	106	United States	At-risk
Richman & Colombo (2007)	45	NR	10-17	NR	NR	United States	NR
Roberts et al. (2005)	66	18	NR	NR	NR	United States	At-risk
Rush (1999)	39	59	52-66	19	20	United States	At-risk
Senechal et al. (1996) Study1	117	52	40-69	63	54	Canada	Typically developing
Senechal et al. (1996) Study 2	47	49	33-70	31	16	Canada	Typically developing
Share et al. (1983)	543	61	49-83	NR	NR	Australia	NR
Tomopoulos et al. (2006)	44	18	NR	28	16	United States	At-risk
Torppa et al. (2007) Sample 1	96	24	NR	46	50	Finland	At-risk
Torppa et al. (2007) Sample 2	90	24	NR	50	40	Finland	Typically developing
Wells et al. (1984)	32	NR	NR	16	16	United Kingdom	Typically developing
Williamson (2008)	33	51	47-66	18	15	United States	Typically developing

Appendix B

Characteristics of the Everyday Activities That Were the Focus of Investigation

Study	Activity Description	Activity Measure	Assessment Procedure	Type	Setting
Burgess (1997)	Shared reading	Duration	Parent survey	Social	Home
Burgess (2002)	Shared reading	Frequency	Parent survey	Social	Home
Byrne et al. (2006)	Shared reading	Frequency	Parent survey	Social	Home
Samuelson et al. (2005)	Alphabet/reading activities	Frequency	Parent survey	Social/Non-social	Home
Collins (2010)	Shared reading	Frequency	Parent survey	Social	Home
Crain-Thorenson & Dale (1992)	Shared reading	Frequency	Parent survey	Social	Home
Davidse et al. (2010)	Shared reading	Frequency	Parent survey	Social	Home
Dunn (1981)	Shared reading	Frequency	Parent log	Social	Home
	Educational tv	Frequency	Parent log	Non-Social	Home
Dunst et al. (2001)	Verbal play	Frequency of participation	Parent survey	Social	Home/Community
Dunst et al. (2000); (2002)	Literacy activities	Frequency of participation	Parent log	Social/Non-social	Home/Community
Forget-Dubois (2009)	Shared and individual reading	Frequency	Parent interview	Social/Non-social	Home
Foster et al. (2005)	Shared reading	Frequency	Parent interview	Social	Home
	Community outings	Number of activities	Parent interview	Social	Community
	Home learning activities	Number of activities	Parent interview	Social	Home
Gonzales & Uhing (2008)	Library visits	Frequency	Parent survey	Social	Community
Kalia (2007)	Library visits	Frequency	Parent survey	Social	Community
Kelman (2006)	Library or Bookstore visits	Frequency	Parent survey	Social	Community
Lyytinen et al. (1998)	Shared reading	Frequency	Parent survey	Social	Home
	Shared reading	Frequency	Parent survey	Social	Home
Payne et al. (1994)	Shared reading	Duration	Parent survey	Social	Home
	Shared reading	Frequency	Parent survey	Social	Home
	Library visits	Frequency	Parent survey	Social	Community
Richman & Colombo (2007)	Shared reading	Frequency	Parent survey	Social	Home
Roberts et al. (2005)	Shared reading	Frequency	Parent interview	Social	Home
Rush (1999)	Meals	Frequency (percent of intervals)	Observation	Social	Home
	Shared reading	Frequency (percent of intervals)	Observation	Social	Home
Senechal et al. (1996) Study1	Shared reading	Frequency	Parent survey	Social	Home
	Looks at books alone	Frequency	Parent survey	Non-social	Home
	Library visits	Frequency	Parent survey	Social	Community
Senechal et al. (1996) Study 2	Shared reading	Frequency	Parent survey	Social	Home
	Library visits	Frequency	Parent survey	Social	Community
Share et al.(1983)	Shared reading	Frequency	Parent survey	Social	Home
Tomopoulos (2006)	Shared reading	Frequency	Parent interview	Social	Home
Torppa et al. (2007) Sample1	Shared reading	Frequency and duration	Parent survey	Social	Home
Torppa et al. (2007) Sample2	Shared reading	Frequency and duration composite	Parent survey	Social	Home
Wells et al. (1984)	Shared reading	Frequency	Parent interview	Social	Home
Williamson (2008)	Vacations, occurrence, routine	Frequency	Parent survey	Social	Community
	Weekends, routine attendance	Frequency	Parent survey	Social	Home/Community

Appendix C

Effect Sizes for the Relationships Between the Everyday Activity Measures and Language Outcomes

Study	Everyday Activities		Outcome Measures		Effect Size
	Activity	Age (months)	Language Measures	Age (months)	
Burgess (1997)	Shared reading (frequency)	61	Receptive language	61	0.27
		61	Expressive language	61	0.23
Burgess (2002)	Shared reading (duration)	61	Receptive language	61	0.05
		61	Expressive language	61	0.10
Byrne et al. (2006) Samuelson et al. (2005)	Alphabet/reading activities	59	Verbal ability	59	0.16
		59	Verbal fluency	59	-0.15
	Shared reading	59	Verbal ability	59	0.31
		59	Verbal fluency	59	0.09
Collins (2010)	Shared reading	54	Vocabulary comprehension	54	0.56
		54	Receptive language	54	0.31
		54	Expressive language	54	0.36
Crain-Thoreson & Dale (1992)	Shared reading	24	Receptive language	24	0.09
		24	Mean length utterance	24	0.10
Davidse (2010)	Shared reading	54	Receptive vocabulary	54	0.06
Dunn (1981)	Shared reading	63	Verbal skills	63	0.26
		63	Oral comprehension	63	0.11
		63	Verbal ability	63	-0.15
		63	Receptive language	63	0.26
	Educational TV	63	Verbal ability	63	0.20
		63	Oral comprehension	63	0.38
		63	Verbal ability	63	0.14
		63	Receptive language	63	0.37
Dunst et al. (2001)	Verbal play	38	Expressive language	42	0.34
Dunst et al. (2000);(2002)	Literacy activities	42	Expressive language	42	0.23
Forget-Dubois (2009)	Shared reading	19	Expressive language	32	0.25
Foster et al. (2005)	Shared reading	59	Receptive language	59	0.12
	Home learning activities	59	Receptive language	59	-0.01
	Community outings	59	Receptive language	59	0.02
Gonzales & Uhing (2008)	Library visits	52	Expressive and receptive language	52	0.39
Kalia (2007)	Library visits	44	Receptive language	44	0.19
		44	Complex syntax	44	0.43
		44	Narrative complexity	44	0.17
Kelman (2006)	Library/bookstore visit	54	Receptive language	54	0.23
Lyytinen et al. (1998)	Shared reading	24	Expressive language	24	0.13
		24	Vocabulary production	24	0.20
		24	Use of suffixes	24	0.15
		24	Max sentence length	24	0.17
	Shared reading	24	Expressive language	24	0.19
		24	Vocabulary production	24	0.28
		24	Use of suffixes	24	0.22
		24	Max sentence length	24	0.23

Appendix C, continued.

Study	Everyday Activities		Outcome Measures		Effect Size
	Activity	Age (months)	Language Measures	Age (months)	
Payne et al. (1994)	Shared reading (Frequency)	54	Receptive language	54	0.23
		54	Expressive language	54	0.27
	Shared reading (Duration)	54	Receptive language	54	0.08
		54	Expressive language	54	0.21
	Library visits	54	Receptive language	54	0.25
		54	Expressive language	54	0.16
Richman & Colombo (2007)	Shared reading	14	Receptive language	17	0.35
		14	Expressive language	17	0.41
Roberts et al. (2005)	Shared reading	30	Receptive language	36	0.10
		30	Receptive language	60	0.21
		30	Receptive language	48	0.18
		30	Receptive language	60	0.13
		30	Expressive language	48	0.25
		30	Expressive language	60	0.24
Rush (1999)	Meals	59	Expressive language	59	0.26
		59	Receptive language	59	0.26
	Shared reading	59	Expressive language	59	0.19
		59	Receptive language	59	0.07
Senechal et al. (1996) Study 1	Shared reading	52	Receptive language	52	0.24
	Child looks at books alone	52	Receptive language	52	0.15
	Library visits	52	Receptive language	52	0.37
Senechal et al. (1996) Study 2	Shared reading	49	Receptive language	49	0.10
	Library visits	49	Receptive language	49	0.37
	Shared reading	49	Expressive language	49	0.27
	Library visits	49	Expressive language	49	0.48
Share et al. (1983)	Shared reading	61	Expressive/receptive language	61	0.15
	TV watching	61	Expressive/receptive language	61	-0.03
Tomopoulos (2006)	Shared reading	18	Receptive language	21	0.24
Torppa et al. (2007) Sample 1	Shared reading	24	Expressive language	42	0.34
		24	Expressive language	66	0.30
		24	Receptive language	42	0.30
		24	Receptive language	60	0.35
		48	Expressive language	42	0.37
		48	Expressive language	66	0.41
		48	Receptive language	42	0.29
		48	Receptive language	60	0.26
		60	Expressive language	66	0.43
		60	Receptive language	60	0.37
Torppa et al. (2007) Sample 2	Shared reading	24	Expressive language	42	0.21
		24	Expressive language	66	0.12
		24	Receptive language	42	0.10
		24	Receptive language	60	0.18
		48	Expressive language	42	0.23
		48	Expressive language	66	0.12

Appendix C, continued.

Study	Everyday Activities		Outcome Measures		Effect Size
	Activity	Age (months)	Language Measures	Age (months)	
Torppa et al. (2007) Sample 2, continued.	Shared reading	48	Receptive language	42	0.09
		48	Receptive language	60	0.15
		60	Expressive language	66	0.30
		60	Receptive language	60	0.25
Wells et al. (1984)	Shared reading	60	Receptive language	60	0.33
		60	Oral Comprehension	60	0.33
Williamson (2008)	Vacations, Occurrence, Routine	51	Receptive language	51	-0.47
	Weekends, Occurrence, Routine	51	Receptive language	51	0.10