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Preschool Teachers' Perception of Their Competence and Implementation of Recommended Practices

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《 요 약 》

The current study examined preschool teachers' perceptions of implementation and competence of DEC's child-focused recommended practices(DECRP) in their classrooms. The information was gathered through surveys of 147 teachers from pre-kindergarten programs. Overall, most respondents felt competent implementing the child-focused practices and they believed that they frequently implemented the DECRP child-focused practices in their classrooms. A discussion of the limitations of the present study and directions for future research are suggested. Implications for practice, teacher preparation programs, and practitioners also are discussed.

주제어 : DEC recommended practices, Teachers' competence, Child-focused practice

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Ⅰ. INTRODUCTION

Since implementing effective instructional strategies is considered to be a critical teacher responsibility, teachers need to be able to apply a wide range of instructional strategies to meet the individual needs of young children. There is growing consensus that the single most important influence in the formal education of a child is a well-prepared, caring, and qualified teacher. Teachers' confidence and knowledge appear to be related to experiences in caring for children with special needs (Dinnebell, McInerney, Fox, & Juchartz-Pendry, 1998). Unfortunately, numerous studies have shown that many teachers do not think they are well prepared. Teachers often report that they are not competent in teaching students with disabilities; a finding often attributed to a lack of preservice preparation or professional staff development opportunities (Wallace, Shin, Bartholomay, & Stahl, 2001). While public criticism often portrays the special education system parbeing ineffective and inefficient (Gallagher, 1998), scholars have aWaueing inespecial education hparmade enormous strides towaWd developften porknowledge bpaetion sechnology necessary for educating students with special needs (Zigmoon & Baker, 1995). Oion s have argued that the shortcomings are largely due to a lack of implementation of the available knowledge and technology, and that due to the very nature of the knowledge base, it is more difficult to make applications compared to the hard sciences (Gallagher, 1998). This recurring debate over the gap between research and practice is a valid concern in the field of early childhood special education as well as special education in general, considering the enormous effort that stakeholders have put into improving the quality of personnel preparation and the quality of services that children with special needs and their families receive (Bailey, Simeonsson, Yoder, & Huntington, 1990).

Throughout the development of early childhood special education, professional organizations such as Council for Exceptional Children (CEC) and the Division for Early Childhood (DEC) have advocated for specific interests in terms of research, standards, and practice. For example, DEC identified and validated an extensive list of recommended practices based on a decade of study (i.e., DEC Task Force on Recommended Practices, 1993;

Odom & McLean, 1996; Smith et al., 2002). DEC has developed and disseminated recommended standards of practice and ethics. First in 1991, DEC organized work groups to develop a list of recommended practices and in 1993 the professional organization published 405 practices (DEC Task Force on Recommended Practices, 1993; Odom & McLean, 1996). In 1998 DEC and several collaborating university partners produced an updated list of the recommended practices through extensive syntheses of research and experience-based knowledge about EI/ECSE practices. The new list includes 240 recommendations for both direct services (for children and families) and indirect practices (i.e., personnel preparation, policy and systems change activities) (Sandall, Hemmeter, Smith, & McLean, 2005). The most recent list was compiled from syntheses of studies published between 1990 ~ 1998, from 48 peer-reviewed journals.

Therefore, it is important to investigate how competently teachers feel to implement DEC's recommended practices in their classrooms. The current study examined preschool teachers' perceptions of their competence to implement DEC's recommended practices, and their perceptions of implementation of selected recommended practices in their classrooms.

The current study focuses on teachers' perception on child-focused practices for it is primarily such practices, implemented by classroom teachers and other school personnel, that have more direct effects on children's outcomes (Fewell & Oelwein, 1990; Strain, 1990). Given that the quality of inclusive classes influences children's outcomes, the instructional organization within those classes and the practices used become important considerations (Wolery & McWilliam, 1998).

Especially as children spend more time with teachers in classroom, the teachers' daily instructions might become more influential. Further, this might have direct implication for early childhood special education in Korea as well. Teachers are the ones who are directly responsible for implementing the DEC "child-focused practices" which is based on research, while other personnel tend to be more responsible for other recommended practices (e.g., assessment for psychologist).

This specific research questions addressed in this study are:

1. To what extent do preschool teachers report that they implement the child-focused practices identified in DEC's recommended practices?

2. To what extent do preschool teachers agree that the child-focused practices identified in DEC's recommended practices are recommended practices for the field?
3. To what extent do preschool teachers report that they feel competent implementing the child-focused practices identified in DEC's recommended practices?
4. To what extent do selected demographic variables differentiate teachers' reported implementation in using DEC's child-focused practices?

Ⅱ. METHODOLOGY

The present study focused on an investigation of preschool teachers' implementation of child-focused interventions for children with special needs. The purpose of this study was to address the gap between research and application of the DEC recommended practices by examining preschool teachers' perceptions.

1. Procedures

A directory of preschool addresses and phone numbers was obtained from the Illinois State Board of Education website. This initial search for potential participants resulted in identifying 1,050. Public preschool teachers in charge of classrooms that included children with disabilities in public preschools were recruited (henceforth called lead teachers). Using SPSS random sampling, 108 programs, (10% of the total number of schools with preschool programs in Illinois) were selected. The researcher made phone calls to administrators of each preschool selected and explained the purpose of the study. He inquired about the number of preschool teachers who met the criteria of the study in each program. The administrators assisted the researcher with distributing surveys to all lead teachers in their schools. Interested participants completed the survey and returned it to the researcher using an enclosed self-addressed, stamped envelope.

2. Respondents

A total of 311 preschool teachers who had students with special needs (i.e., IEPs) were targeted from 108 public schools in Illinois. From the first round of survey distribution, 133 surveys were returned. Among them, four participants declined to complete the survey, and another seven participants did not meet the study criteria, (i.e., they did not teach preschoolers with IEPs). As a result,id ly 122 (39%) valid surveys were returned. Approxdiately 3 weeks after the initial distribution, a second round of surveys was mailed. O ly 32 surveys were returned; three surveys were returned with letters declin werearticipation, and four surveys were omitted becawit the respondents did not teach preschoolers with IEPs. Of the surveys received from the second mailing, d ly 25 surveys were valid and included for analysis. Thus, 165 (53%) of 311 surveys were returned; 147 (47%) surveys from 60 schools were valid. Two differen pkinds of demographic informveys frorr ththered: (a) teacher characteristics and (b) classroom characteristics (see <Table 1> for detailed demographic information).

1) Teachers' characteristics

The majority of the respondents were female (98.6%), which is very representative of the preschool teacher population. The majority of respondents were between 31 ~ 40 years old (34.7%). Approximately half of the respondents (49%) indicated that they had early childhood education teaching certificates, with 34.7% of respondents reporting that they held more than two types of teaching certificates. Sixty-six percent of respondents indicated that they had the Illinois early childhood special education approval.

<Table 1> Descriptive Statistics of Teachers' Characteristics

Demographic variable		Frequency	Percent
ECSE Approval (Early Childhood Special Education Teaching Certification)			
	Yes	97	66.0%
	No	49	33.3%
	Not answered	1	.7%
Gender			
	Female	145	98.6%
	Male	2	1.4%
Degree			
	Master's in ECSE	17	11.6%
	Bachelor's in ECSE	14	9.5%
	Master's in ECE	34	23.1%
	Bachelor's in ECE	46	31.3%
	Master's in other	23	15.6%
	Bachelor's in other	12	8.2%
	Not answered	1	.7%
Age			
	Under 30	39	26.5%
	31 ~ 40	51	34.7%
	41 ~ 50	24	16.3%
	51 ~ 60	30	20.4%
	61 and above	2	1.4%
	Not answered	1	.7%

The average total teaching experience was 12.3 years, within the same rage of years. The majority of the respondents (90.5%) were not DEC members. More than half of the respondents reported that they are not familiar with the DECRP (57.1%). Finally, approximately 73% of teachers reported that they participated in at least five in-service trainings in the past five years.

A Chi-square test assessed whether respondents from different classroom types differed in their possession of the Illinois ECSE approval. The results

indicated that there was a significant relationship between having an ECSE approval and the type of classroom in which respondents taught ($x^2(1)=11.7$, $p<0.001$), with a larger of proportion of respondents with the Illinois ECSE approval teaching in early childhood special education classrooms, and more respondents without the approval teaching in integrated/ blended classrooms.

2) Classroom characteristics

The average number of students per classroom was 25 ranging from a minimum of 5 to a maximum of 45 students, including morning and afternoon classes. The average ratio of students with Speech-only IEPs was 18.06% to all students and mean ratio of Full IEPs was 35.83%. Twenty-five percent of teachers described their classroom as early childhood special education and 74% of teachers described their classroom as integrated/blended.

<Table 2> Descriptive Statistics of Classroom Characteristics

Variables	Minimum	Maximum	*M*	*SD*	Variance
Student(s) with Speech IEP	0	16	3.19	3.66	13.38
Student(s) with Full IEP	0	23	6.34	6.23	38.77
Total Number of Students	5	45	25.13	10.75	115.62
Student(s) without IEP	0	41	16.01	12.75	162.48
Full IEP Ratio	0	100	35.83	38.43	1477.11
Speech IEP Ratio	0	56.25	11.69	12.52	156.84
Total IEP Ratio	0	61.25	18.06	11.47	131.48
Teachers per Classroom	1	4	1.10	.37	.13
Teaching Assistants per Classroom	0	3	1.55	.67	.46

Total number of respondents=147

The number of teachers in a classroom ranged from one to four (M=1.10); only one respondent indicated that she had no teaching assistant, but most teachers had between one or three teaching assistants (M=1.55). Approximately

3% of respondents (n=5) had no routine therapy services in their classroom, while 29% of the teachers indicated that SLP services were provided within their classes. In addition, 63% of the teachers reported that they have more than two therapists providing routine therapy.

3. Instrument

This study utilized survey methodology. The survey consisted of two major parts. Part I, the Early Childhood Practices Survey, was developed using the list of child-focused intervention strategies from the DEC-recommended practices in early intervention/early childhood special education (Sandall et al., 2005). The child-focused intervention strand consists of 27 strategies: (a) 11 strategies emphasize "adults design environments to promote children's safety, active engagement, learning, participation, and membership," (b) 5 strategies emphasize "adults individualize and adapt practices for each child based on ongoing data to meet children's changing needs," and (c) 11 strategies emphasize "adults use systematic procedures within and across environments, activities and routines to promote children's learning and participation."

Although the list of recommended practices was preserved for validity and reliability purposes, the survey was reviewed and revised several times by ECE/ECSE faculty members. In addition, the survey was reviewed by a survey researcher at the Survey Research Laboratory in the University of Chicago-affiliated office. After multiple revisions, the survey was pilot-tested with two ECSE graduate students who had completed two semesters of student teaching. Finally, five preschool teachers in Ohio participated in a pilot study, and provided feedback on clarity, format, and the amount of time needed to complete the survey. Based on these pilot studies and the dissertation committee members' suggestions, the survey was revised again. In particular, an appendix with detailed guidelines on each child-focused practice from DEC recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education(Sandall et al., 2005) was added to provide teachers with examples of each practice.

Further, Cronbach alphas were computed to check the reliability the questionnaires for all three sections of the survey. The validation questionnaire results indicated a high degree of internal consistency. The alpha coefficients ranged from .884 to .925 (see <Table 3>).

<Table 3> Cronbach Alpha Reliability Coefficients for Early Childhood Practices Survey

Scale	No. of cases	No. of items	*rxx*
Implementation	3969	27	.884
Best Practice	3969	27	.921
Competence	3969	27	.925

No.=number

4. Data Analysis

Each survey response was entered into SPSS for data analyses. These data were analyzed using a statistical software program, SPSS 14.0 for Windows. All data in Part I (except the responses to the three open-ended items) and Part II were descriptively analyzed. Percentages, standard deviations, and means were calculated to analyze respondents' answers to the first three research questions. To answer the last research question (i.e., To what extent do selected demographic variables differentiate teachers' reported implementation and competence of DEC's child-focused practices?), various statistical analyses were done.

Ⅲ. RESULTS

This chapter includes a description of the results of the current study by research question. The specific research questions addressed in this study were: (a) To what extent do preschool teachers report that they implement the child-focused practices identified in the DEC's recommended practices? (b) To what extent do preschool teachers agree that the DEC's child-focused practices are recommended practices for the field? (c) To what extent do preschool teachers report that they feel competent implementing the child-focused practices identified in DEC's recommended practices? And (d) To what extent do selected demographic variables differentiate teachers' reported implementation of and competence with DEC's child-focused practices? The study participants' responses to the open-ended survey questions are discussed at the end of this chapter.

In the survey, respondents were asked to rate the 27 child-focused practices the DEC recommended in terms of their (a) frequency of implementation, (b) agreement with the best practice, and (c) competence in implementing the practices. The child-focused intervention strand consists of 27 strategies which are grouped in three subcategories: (a) 11 strategies that emphasize "adults design environments to promote children's safety, active engagement,ltearning, participation, and membership (Environmental design)," (b) 5 strategies that emphasize "adults individualize and adapt practices for each child based on ongoing data to meet children's changing needs (Individualized practice)," and (c) 11 strategies that emphasize "adults use systematic procedures within and across environments, activities and routines to promote children's learning and participation (Systematic procedures)."

1. Respondents' Ratings of Survey

Descriptive statistics were used to analyze the data. The ratings of the individual respondents were aggregated into three categories corresponding to three survey questions (i.e., implementation, agreement with best practices,

and competence) to represent teachers' overall perceptions (see <Table 4>). These data were analyzed to examine relationships between the three subcategories (Environmental design, Individualized practice, and Systematic procedures) and demographic variables. In addition, the relationship between each individual practice and selected demographic variables was examined. Further, correlations were used to examine teachers' perceptions to the three of survey questions.

As shown in <Table 4>, overall ratings were high across the three survey categories as well as all subcategories. Respondents perceived that they were implementing the DECRP frequently (M=3.58, SD=.32), and that they agree they are best practices (M=3.69, SD=.31). Additionally, respondents felt very competent implementing the practices (M=2.61, SD=.32). Each subcategory under the three survey categories also were rated highly (see <Table 4>).

<Table 4> Descriptive Statistics of Survey Categories and Subcategories

Category		*N*	*M*	*SD*
Implementation*		147	3.58	.32
	Environmental design	147	3.65	.29
	Individualized practice	147	3.67	.38
	Systematic procedures	146	3.50	.42
Best Practice**		147	3.69	.31
	Environmental design	147	3.74	.28
	Individualized practice	147	3.77	.34
	Systematic procedures	146	3.61	.39
Competence***		147	2.61	.32
	Environmental design	147	2.69	.28
	Individualized practice	147	2.65	.38
	Systematic procedures	147	2.54	.40

* Mean Use: 1=Never, 2=Rarely, 3=Sometimes, 4=Frequently (4 point scale).
** Mean Agreement: 1= Strongly Disagree, 2=Disagree, 3 =Agree, 4=Strongly Agree (4 point scale).
*** Mean Competence: 1=Not Competent, 2=Somewhat Competent, 3=Very Competent (3 point scale)

2. Correlations among survey categories and subcategories

Individual respondent's ratings were computed as an aggregated total score to present an overall indication of total rating for each survey category (i.e., implementation, agreement, and competence). Then, the three categories were compared to examine correlations. <Table 5> displays correlations across the survey categories. There were very strong and significant correlations among the three categories.

As shown in <Table 5>, the correlation between implementation and competence was .84, the correlation between implementation and best practice was .79, and the correlation between best practice and competence was .67. It is very likely that respondents with stronger perceptions of competence believed that they implemented these DEC recommendecommendecos more frequently. In addition, respondents who agree the survey items are best practices were more likely to believe that they implemented these mmendecos more frequently. There also was a strong correlation between respondents' perceptions of competence and their agreement with these practices as best practice. Further when correlations among subcategories were examined, all correlations were statistically significant (range=.27 to .83).

<Table 5> Pearson's Correlations for Survey Categories and Subcategories

Category	Implementation			Best practice			Competence		
	ED	IP	SP	ED	IP	SP	ED	IP	SP
Implementation				.79**			84**		
Environmental design	1	.46**	.42**	.68**	.38**	.39**	.75**	.42**	.46**
Individualized practice		1	.62**	.33**	.70**	.46**	.47**	.78**	.60**
Systematic procedures			1	.32**	.48**	.77**	.41**	.56**	.83**
Best practice							.67**		
Environmental design				1	.52**	.51**	.58**	.27**	.32**
Individualized practice					1	.60**	.34**	.59**	.47**
Systematic procedures						1	.36**		
Competence							.67**		
Environmental design							1	.64**	.60**
Individualized practice								1	.73**
Systematic procedures									1

**p=0.01

3. Differences in Demographic Variables

Various statistical analyses were conducted in relation to the last research question which sought to examine the relationship between selected demographic variables and teachers' reported implementation of and competence in using DEC's child-focused practices. First, independent t tests were conducted to determine if the mean differences in the ratings of overall practices were statistically significant in regards to class type, ethnicity, ECSE Approval, and degree. Then, another series of independent t tests were conducted to determine if the mean differences in the ratings of subcategories were statistically significant in relation to those variables. Finally, independent t tests were conducted to determine if the mean differences in the ratings of individual practices were statistically significant in regards to selected demographic variables. Welch statistic also was used to test for equality of group means when the assumption of equal variance did not hold.

1) Early childhood special education and integrated/blended classrooms

<Table 6> displays the mean ratings of respondents in two different classroom types. Independent t tests were conducted to compare respondents' perceptions across survey categories (i.e., implementation, agreement of best practice, and competence) in regard to classroom type. No statistically significant differences existed among survey categories. However, when Independent t tests were conducted to compare respondents' perceptions across survey subcategories (i.e., Environmental design, Individualized practice, and Systematic procedures), statistical significance existed for three categories. Environmental design was significant for the implementation category [t(144) =-2.63, ctce09], the best practice category [t(143)=-2.08, ctce4], and the competence category [t(53)=-2.5e, ctce16]. These results indicatpeteat teeat te in integrated/blended classrooms believed teat they more frequently implement the practices in the subcategory of Environmental design (M= 3.70, SD=0.26) than did respondents who taught in segregated ECSE classrooms (M=3.50, SD=0.31). Also, ECSE teachers more strongly agreed that these practice were best practice (M=3.78, SD=0.27) than did participants

from integrated/blended classrooms (M=3.64, SD=0.28).

In addition, respondents' perceptions of competence with the Environmental design practices were statistically significant indicating that teachers from integrated/blended classrooms felt more competent implementing the practices (M=2.7, SD=0.26) than did respondents from the ECSE classrooms (M=2.59, SD=0.32).

<Table 6> Comparisons Between Early Childhood Special Education and Integrated/Blended Classrooms

Category	Classroom type						
	Early childhood special education		Integrated /blended classroom				
	M	*SD*	*M*	*SD*	*t*	*df*	*p*
Implementation	3.53	.29	3.6	.33	−1.27	144	.21
Environment design	3.50	.31	3.70	.26	−3.76	144**	.000
Individualize practice	3.67	.40	3.68	.37	−.144	144	.886
Systematic procedures	3.50	.38	3.51	.42	−.24	143	.813
Best Practice	3.63	.27	3.71	.35	−1.30	144	.193
Environment design	3.64	.28	3.78	.27	−2.63	144**	.009
Individualize practice	3.71	.34	3.80	.33	−1.27	144	.208
Systematic procedures	3.58	.37	3.63	.38	−.67	143	.506
Competence	2.53	.32	2.65	.32	−1.93	144	.056
Environment design	2.59	.32	2.7	.26	−2.50	53*	.016
Individualize practice	2.59	.39	2.67	.38	−1.02	144	.308
Systematic procedures	2.44	.38	2.58	.40	−1.76	143	.080

*p<.05, **p<.01

2) ECSE approval

Independent t tests were conducted to determine if the mean differences in the ratings for the survey questions between respondents with the Illinois ECSE approval and those without the ECSE approval were statistically significant. The results indicate that overall, teachers' ratings of implementation were statistically significant [t(144)=2.18, p=.031], with respondents who had the Illinois ECSE approval perceiving that they more frequently implemented the practices (M=3.62, SD=0.30) compared to respondents who did not have the ECSE approval (M=3.50, SD=0.35) (see <Table 7>).

<Table 7> Comparisons Between Respondents With and Without the Illinois ECSE Approval

Category	ECSE Approval						
	ECSE Approval		No ECSE Approval				
	M	*SD*	*M*	*SD*	*t*	*df*	*p*
Implementation	3.62	.30	3.50	.35	2.18*	144	.031
Environment design	3.65	.29	3.65	.28	.002	144	.998
Individualize practice	3.71	.38	3.59	.39	1.76	144	.081
Systematic procedures	3.56	.42	3.38	.40	2.42*	143	.017
Best practice	3.70	.29	3.66	.35	.73	144	.467
Environment design	3.73	.27	3.77	.28	−.65	144	.515
Individualize practice	3.78	.33	3.74	.35	.65	144	.518
Systematic procedures	3.62	.40	3.59	.36	.56	143	.578
Competence	2.64	.32	2.56	.32	1.40	144	.163
Environment design	2.70	.29	2.69	.27	.31	144	.754
Individualize practice	2.68	.38	2.57	.38	1.71	144	.089
Systematic procedures	2.56	.42	2.48	.37	1.07	143	.285

*p<.05, **p<.01

Further comparisons on subcategories revealed a statistically significant difference in ratings under the subcategory of 'systematic procedures' [t (143)=2.42, p=.017]. Results indicate that respondents with an Illinois ECSE Approval reported that they implemented the Systematic procedures more frequently (M=3.56, SD=0.42) than did respondents without the ECSE approval (M=3.38, SD=0.40).

3) Degree

Since there were few respondents in some degree categories (see <Table 1>), respondents were re-categorized into two groups: those who had a bachelor's degree (n=60) and those who had a master's degree (n=86). Independent t tests were conducted to determine if the mean differences in the ratings of respondents were statistically significant by degree. The results indicate that no significant differences existed across survey categories or subcategories.

4. Teachers' Perceptions and Years of Teaching Students With Disabilities

Pearson's Correlations were conducted to examine correlations between respondents' ratings and selected demographic variables (see <Table 8>).

<Table 8> Correlations Between Implementation and Selected Demographic Variables

Category	Full IEP Ratio	Years of Teaching Preschoolers with IEPs	Total Years of Teaching
Implementation	-.015	.014	.006
Environment design	-.271**	-.019	-.011
Individualize practice	.124	.080	.063
Systematic procedures	.051	-.025	-.057
Best Practice	-.014	-.104	-.125

Environment design	−.139	−.134	−.169*
Individualize practice	.045	−.069	−.080
Systematic procedures	−.010	−.115	−.151
Competence	−.069	.106	.096
Environment design	−.174*	.116	.095
Individualize practice	.025	.188*	.175*
Systematic procedures	−.068	.024	.010

*p<.05, **p<.01, 2−tailed

There were no statistically significant correlations between respondents' ratings on the three survey categories (i.e., Implementation, Best Practice, and Competence) and selected demographic variables (i.e., years of teaching preschoolers with IEPs, total years of teaching, and full IEP ratio). However, there were statistically significant correlations between some demographic variables and the subcategories (i.e., Environmental design, Individualized practice, and Systematic procedures).

1) Full IEP ratio

Pearson Correlations were conducted to examine correlations between respondents' ratings and the Full IEP ratio. Across the three subcategories of implementation, a statistically significant negative correlation existed between the 'Environmental design' subcategory and the ratio of children with full IEPs. This finding means that the presence of more children with IEPs in a class resulted in respondents being less likely to report implementing these practices in their classrooms.

In addition, a negative correlation was found regarding teachers' competence in the 'Environmental design' subcategory in relation to the full IEP ratio. This finding means that the presence of more children with IEPs in a class resulted in respondents being less likely to report feeling competent in implementing these practices.

2) Years of teaching

A negative correlation also existed for teachers' ratings of agreement with items in the 'environmental design' subcategory as Best Practice and their total years of teaching experience. Thus, the more years of teaching the less likely the respondents were to agree with the practices under the environment design as best practice.

On the other hand, positive correlations were found between the Individualized practice subcategory and years of teaching preschoolers with IEPs, as well as with respondents' total years of teaching under Competence category. The more years of teaching preschoolers with IEPs, the more likely the respondents were to feel competent implementing Individualized practices. Also the more years of teaching experience that respondents had, the more likely they were to feel competent implementing the Individualized practices.

Ⅳ. DISCUSSION & IMPLICATIONS

This study examined preschool teachers' perceptions of DEC's Child-Focused practices. Overall, respondents rated the DEC practices highly across: (a) frequency of implementation, (b) agreement with best practice, and (c) competence (see Appendices G, H, and I). As shown in <Table 5>, respondents tended to believe that they frequently implemented most of the practices (M=3.58, SD=0.32). About 68% of the total responses (n=3969) were frequently implemented. Further, less than 5% of the responses were either rarely (4.3%) or never (0.7%) implemented. Although these data are based on teachers' self-report, it is promising that teachers report that DEC's child-focused practices are being implemented regularly in their preschool classrooms.

Overall, there were strong correlations across implementation, best practice, and competence (see <Table 5>). As self-efficacy theorists have argued, it is highly probable that teachers implement those practices in their classrooms with which they feel competent (Brownell & Pajares, 1999;

Gibson & Dembo, 1984). The strong correlation showed that teachers with higher perceptions of competence reported that they more frequently implemented the practices (r=.84).

There were no statistically significant differences in ratings by respondent characteristics such as age, gender, and ethnicity. However, the disproportionate percent of male respondents represents a larger concern in the field of early childhood. In bydition, the ethnic distribution of teachers represents an issue of concern in the field. The lack of bicultural and bilingual professionals is a critical issue related to the development of collaborative relationships between diverse fdevlies and professionals (Baird & Peterson, 1997; Beckman et al., 1994). On the other hand, there were statically significant differences in rs (Baird & Petings in rslation to other demolya(hic variables; ECSE a(proval, classroom type (i.e., special education and integPeter/ blssroomclassrooms), ty significant diff, and to rd & with full IEPs. It is noteworthy suchurtherficamine these variables.

Results of the current study support the existing literature, indicating that teachers who had ECSE training (i.e., the Illinois ECSE approval) reported that they were more likely to implement many of the practices (i.e., DEC-recommended practices) than did respondents without the ECSE approval. Further, results indicate that respondents with an Illinois ECSE Approval tended to implement Systematic procedures more frequently than did respondents without the ECSE approval. Not surprising, this supports the literature noting that EI/ ECSE program graduates feel more competent in ECSE standards than ECE program graduates (LaMontagne et al., 2002; O'Shea, Stoddard, & O'Shea, 2000). As teachers' beliefs and their instru ctional behaviors are reflection of their initial training (Lieber et al., 1998), it is possible that teachers with the ECSE approval had more training in the intervention approaches described in the DECRP and therefore use these practices more often than their ECE counterparts. On the other hand, as pointed out by research, respondents without the ECSE approval most likely have not had adequate training to teach young children with special needs (Gettinger, Stoiber, Goetz, & Caspe, 1999; Goodland & Field, 1993) at least with the intervention approaches described in the DECRP.

The results of mean comparisons indicated that teachers in integrated /blended classrooms believed that they more frequently implement the

practices in the subcategory of Environmental design than did respondents who taught in segregated ECSE classrooms. Also, ECSE teachers were more likely to agree that these practices were best practice than did participants from integrated/blended classrooms. In addition, respondents' perceptions of competence for these Environmental design practices were station,callsroignif,cant p erceptions of competence from integrated/blended classrooms felnteore competent implementing the practices than did respondents from ECSE classrooms.

Personnel preparation programs have been redefined to focus on inclusive settings to meet the needs of young children with special needs (Gettinger et al., 1999; Scruggs & Mastropieri, 1996). Results of the current study indicate that respondents in integrated/blended classrooms believed that they more frequently implement the practices in the subcategory of Environmental design than did respondents who taught in segregated ECSE classrooms. Different intervention approaches exist in special education classrooms and integrated classrooms. For example, social interaction is one area that inclusive programs can provide to the children with disabilities (Guralnick, 1990; Strain, 1990). The practices in the Environmental design subcategories emphasize interactions across people and places. Thus, respondents in inclusive settings might find these practices more feasible to implement them respondents in segregated ECSE classrooms.

Studies have indicated that the presence of a child with a disability has an impact on a teacher's choice of intervention strategies or practices (Bulgren & Carta, 1992; Kilgo et al., 1999; Wolery & Bredekamp, 1994). The results of the current study also support the literature. The more years of teaching preschoolers with IEPs, the more likely the respondents were to feel competent implementing individualized practices. Also, the more years of teaching experience that respondents had, the more likely they were to feel competent implementing the individualized practices. It is probable that their continuing experiences with students with disabilities had a positive impact on their perceptions of meeting the individual needs of young students with disabilities (at least in their perceptions of competence on the individualized intervention strategies). Teachers might egies).come more familiar with specific interventions and strategies th specific individual needs of students aizedeir experience increased. it is important to acknowledge that the more years of teaching and more students with Full

IEPs, the less likely the respondents were to agree with ere to agree w under environmental design ath Fst to agreesed. pondents in ECSE settings (higher terve of Full IEP students) implemented the environmental design to agree wless ely the resn ath Fstthe respondents f teaching an ath Fstthe r eurther, it is probable that the natureunderCSE settings limits ere toomotion of interactions across people and places. Research has pointed out various barriers to inclusive practices such as poor communication, different perspectives toward children's educational goals, and lack of time (Lieber et al., 1997). There might be practical difficulties with implementing these practices. However, it is not clear whether their negative perspective reflects difficulty in implementing the environmental design practices or respondents' uncertainty of the effectiveness of the environmental design practices. Further investigation is necessary on this issue.

In summary, the results of this study indicate that there is a higher level of social validity in terms of preschool teachers' perceptions of implementation, agreement with best practice, and competence with the child-focused intervention practices than previous studies found (McLean et al., 2002). Nevertheless, there were a few practices that teachers reported implementing less frequently and not feeling competent to implement. Thus, assistance should be provided to teachers through preservice and in-service training to facilitate the translation of research to practice. Given that the results of this study indicated that teachers with the Illinois ECSE Approval more frequently implemented the child-focused intervention strategies, this finding supports the logic behind training and practice. It is possible that additional focused training would facilitate implementation of recommended practices in more early childhood classrooms.

Caution must be taken when considering the findings of this study. The results were obtained from self-report data, and although it is proven to be a reliable and valid psychometric, there is the possibility that the respondents might have had a positive response bias and provided socially desirable answers (Heppner, Kivilighan, & Wampold, 1992). Consequently, the results may not accurately indicate how often typical preschool teachers implement the child-focused practices in their classrooms.

Numerous ideas for additional studies arose as a result of the current study. First, measuring the frequency of implementation of the DEC recommended

practices might be a better measure to consider in future studies. However, this is not the perfect measure to gauge the effectiveness and appropriateness of any intervention without measuring child outcomes. Second, Multiple stakeholder groups such as families, administrators, and faculty members in teacher preparas, admiograiveshould be included in future studies. The pd facultDECRP studies eacher preparas, admieshowed differe sts in ras,ngs across stakeholder groups. The ropreeasurtakeholder groups should be considered when designing quesny intin future studies, because the saie measurement (i.e., frequency) might not be appropriate for all stakeholder groups. For example, frequency of implementation could not be judged adequately by parents as they are not able to continuously observe recommended practices being implemented in classrooms.

Competence in implementing these practices is beneficial to teachers as well as to the young children in their classrooms as part of their own professional development. Teachers will find it useful to access helpful resources developed by DEC, such as the comprehensive guide with examples (Sandall et al., 2005), and the program assessment tool (Hemmeter et al., 2001).

University faculty members need to embed evidence based practices in their teaching such as having teachers identify their own needs (Ross et al., 1999), and planning for the transfer of learning (Wolfe & Snyder, 1997). Accreditation for individual early childhood programs might help to ensure the quality of those programs (although there may be other social and political agendas fir becoming accredited). The development and wide dissemination of evidence based practices and standards such as DEC's would, in turn, increase familiarity with and secure continuous implementations of the recommended practices among early childhood practitioners in Korea as well.

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DEC 추천 실제들에 관한 유능감과 실행에 관련된 유아교사들의 인식

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<국문초록>

본 연구는 DEC의 아동중심 추천 실제들과 관련된 유아교사들의 교육현장에서의 실행 및 유능감에 관한 인식을 조사했다. 311명의 발달지체유아가 있는 유아원 학급의 유아교사들을 대상으로 한 설문조사에서 147명의 유요한 응답자의 설문응답을 분석한 결과 대체로 교사들은 자신들이 유아중심 추천 실제들을 빈번히 실행하고 있다고 생각하며, 아울러 대부분의 교사들이 이러한 실제들을 실행하는데 유능감을 가지고 있다고 믿고 있는 것으로 나타났다. 또한 교사들의 유능감과 실행정도가 정적인 상관관계를 보였다. 유아특수교사 자격증을 가진 교사가 전체적인 추천 실제의 실행에 통계적으로 유의미한 우위를 보였으며, 통합교실환경의 교사들이 환경 구성과 관련된 추천된 실제의 실행과 유능감에서 보다 더 높은 인식을 보이는 결과를 도출 할 수 있었다. 본 연구의 제한점과 개선점, 현장을 위한 제언과 아울러 교사양성 기관을 위한 제언 제시하였다.

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