

## Prediction Factors Child Care Efficacy on Childcare Helpers in K City

Young-Ju Jee<sup>a</sup> Yoon-Ji Kim<sup>b</sup>

<sup>a</sup>College of Nursing, Kyungnam University

<sup>b</sup>Department of Nursing, Dong Ju College

Jeeyoungju@kyungnam.ac.kr, <sup>1</sup>gadget-@hanmail.net

### Abstract

*This research is a descriptive investigation in order to provide the basic material for in-home child caregivers' qualitative growth by identifying the predictive factors of in-home child caregivers' child care efficacy. The study examined 102 participants in an educational program for new in-home child caregivers implemented by the Health Family Support Centers of the province K in 2015. A survey was conducted to collect data concerning their efficacy. The statistical program, SPSS/Win 21.0, was employed for this research descriptive statistics, correlation analysis, and regression analysis. As a result, the participants' child care efficacy was found to be 36.36 points and related with the number of children, perceived health status, self-esteem and job efficacy. Regression analysis was performed for these variables and the number of children, self-esteem, and job efficacy were found to be predictive factors. The constituted regression model showed 61.6% explanation power regarding the variables. Accordingly, it will be necessary to reflect the existence of child rear experience in training in-home child caregivers. And such an education program needs to include contents for them to improve their child care efficacy together with self-esteem and job efficacy.*

**Keywords:** *child care, social support, efficacy*

### 1. Introduction

Amid the modern-day social changes including family functional changes, smaller families and increasing double-income households, in-home child care has become absent, increasing the problem of childcare. Single parent families experience larger vacuum due to the absence of one of the parents and the number has been continuously growing due to many different reasons such as bereavement, divorce or no-marriage[1]. Also as more women find it difficult to pursue both work and family or, that is, childcare, they gradually try to avoid having a baby[2].

This way, as the interest and necessity are increasing in development and support of various care system that can support child care besides the family, 'Child care support business' began firstly in 2006, and child care service has been conducted in all local governments since 2009[3]. Child care support business began to resolve blind spot of nursery facilities, safe protection for children and reduce nursery burden of family by providing nursery service by dispatching child care professional to the family with children between 3 months and 12 years old who require temporary and urgent care along with rearers' night overtime, business trip, disease, and the characteristic of child[4]. The number of such families that use child care service is increasing, *i.e.* 27,463 in 2010, 39,138 in 2011, and 43,947 in 2012, accordingly, qualitative improvement of child care helper is required besides quantitative expansion[5].

Child care helper is a person who individually cares children during the time gap of parents' care by being dispatched to a family, whose role is very important, since the person takes care of intellectual education and safe care similar to the nursing teacher,

based on the understanding of the second parents' role and children's characteristics such as children's physical growth, healthy emotional development support, *etc.*[6-7]. To perform this role well, efficacy[8] is required to conduct by trusting that one can achieve valuable thing through one's own efforts, self-efficacy, the basis among various efficacies is the belief that one is competent in various achievement situation.

Teacher efficacy is to adapt self efficacy to the teacher[9], and child care efficacy is to apply teacher efficacy to child care field[10]. Efficacy that care service manpower has was reported to help them to well adapt to the duty and perform the function to prevent exhaustion related to duty[11].

This way, as the quality of teacher is an important factor when providing child care service when discussing quality of child care at a child-care institution, research on child care helper's child care efficacy who provides child care service is essential for qualitative improvement of child care business. However, in 2006 child care support business began as the test operation and quantitative expansion was achieved to be conducted nationally since 2009, researches to verify child care service began mainly with users' satisfaction who were provided with service, which presently was expanded and increased to the interest in service quality that is closely related to user satisfaction. This way, researches have been conducted mainly with service users' satisfaction, however, advanced research on child care professionals who provide service is insufficient.

In the researches that influence child care professionals' job satisfaction displayed difference in job satisfaction along with education and age[12], and as the result of qualitative research on economical value, sense of accomplishment and fruitfulness, joy of working, and difficulty, child care professionals felt fruitfulness to help the parents who have no baby-sitter, also, pleasure and self-respect to participate in social activity. However, monthly income is about 200,000 won, which is not economically helpful, accordingly, they appeared to require minimum guaranteed income[13].

According to advanced research on efficacy, child care teacher who had high efficacy said quality of child care is high, also, they commented efficacy is important to provide high quality child care[14]. There might be various factors that influence child care teachers' child care efficacy, however most of child care teachers participate with similar experience of child care during their own child care before the activity, also, child care efficacy would be different along with personal characteristics such as age, marital status, education and economic status, *etc.*.

Therefore, this study was conducted to provide basic material for qualitative growth of child care service in family by investigating the child care helper participants' child care efficacy and comprehending which factor influences child care efficacy.

## **2. Method**

### **2.1. Study Design and Sample**

This study is a descriptive research to identify predictive factors of child care efficacy of child care helper applicants in K-do, and the target applicants are the education targets who gathered in the education hall of Healthy Family Support Center for new education in 2015. This research was conducted to investigate the applicants' child care efficacy under the condition without the influence of education content, questionnaires were distributed on February 2, 2015, the first day of education, before starting the class, 120 questionnaires were distributed and 110 among them were collected, finally 102 questionnaires were utilized for analysis excluding insincere questionnaires.

As the sample size, G\*power 3.1 was used. the number of samples that were attained by applying significance level .05, effect size of mid-level .35, power of test .95, and explanatory variable 12 was 86, accordingly, the number of the subjects 102 was enough.

## 2.2. Instrument

Research instrument of this study analyzed age, education, number of children, marital status, economic level, cognized health condition, and career in infants and children related occupation, *etc.* to comprehend general characteristics of the subjects, in order to comprehend the variables related to child care efficacy, a questionnaire composed of self-esteem, depression, job efficacy, and social support scale was used.

**2.2.1. Child Care Efficacy:** In this study, the child care efficacy test was employed which was developed in Japan and amended and improved by Jeogn-hwan Hyeon[10]. The test asks if a nursing teacher could guide child development to a desired direction in the field of education and is consisted of 15 questions on favorable understanding of overall child care area such as preschooler program development plan and implementation, preschooler daily guidance, teacher's confidence in the cooperation with children's parents, and teacher's response to different educational situations according to the levels of task difficulty. For this research, the tool was partially modified in line with the job of child caregiving and one inappropriate item was excluded, which says 'I think I am interested in the whole classmates of my class and can appropriately respond to the group; to use a total of 14 question items. The 5-point Likert scale was employed, ranging from 'not at all' to 'very much so'. The higher the point, the higher the child caregivers' child care efficacy grows.

**2.2.2. Self-Esteem:** Self-efficacy scale utilized in this research was the scale that Kwon reused the tool which Song developed[15][16]. Self-efficacy is the belief that one has on the ability that the person organizes and perform necessary behavior to draw intended result in a concrete scene(Bandura, 1997), in order to measure this, the researcher composed total 10 questions to ask the degree that they trust how they could do it well in the general performance and accomplishment situation. The questions were 5-point Likert scale, *i.e.* 5 points for 'very much' to 1 point 'not at all', the higher score indicates high self-efficacy.

**2.2.3. Job Efficacy:** In this study, the job efficacy was assessed by using the job efficacy scale developed by Kang, Kwon[18] in consideration of the vocational characteristics of child caregiver, which are similar to the job of nursing teachers. The tool is consisted of 20 items in total to assess own judgment on own ability to perform and organize given vocational tasks. Sub-factors include 4 items on hygienic management, 2 on dining manner education, 3 on health/first aid measures, 5 on play activities, 2 on emotional support and 4 on administrative aspect. The answer is to be scored in the 5-point Likert scale ranging from 'not at all' to 'very much so'. The higher the point, the higher the child caregivers' vocational self-efficacy moves.

**2.2.4. Depression:** In this study, the BDI (Korean Beck Depression Inventory) was employed to understand the participants' depression levels. The test was developed by Beck, translated into Korean by Lee[19], then reverse-translated and formed after experts' review and preliminary inspection. It is a self-report measurement tool widely utilized to assess depression symptom seriousness and intensity. Question numbers from 1 to 13 are on psychology including emotional, cognitive, motivational and physiological symptoms; and from 14 to the last question of 21, on physical symptoms. The tool has 21 questions in total with points ranging between 0 and 63. Beck viewed the 0-9-point section represented not depressed status; 10-15 section, minor depression; 16-23section, depression; and 24-63 section, serious depression.

**2.2.5. Social Support:** The social support in this study, was assessed by using the Interpersonal Supper Evaluation List: (ISEL) developed by Cohen & Hoberman[20] and

modified by Munja Seo[21]. The tool has 8 items in total and each item is to be answered in 5-point Likert scale with point 4 representing 'very much so'; 3, 'generally so'; 2, 'fair'; 1, 'not very much'; and 0, 'not at all'. The full score is 40 and the higher the point, the higher the perceived social support goes.

### 2.3. Data Analyses

The collected data was analyzed by using SPSS/Win 21.0 program, two-tail test was conducted in significance level 5%. General characteristics and characteristics related to the child care efficacy of the subjects were analyzed with descriptive statistics, e.g. percentage, average and standard deviation, *etc.*. Relation between child care efficacy and related variable was analyzed with Pearson's correlation coefficient, predictive factors of child care efficacy was verified using Simultaneous multiple regression.

## 3. Result

### 3.1. General and Child Care Efficacy Related Characteristics

General characteristics and child care efficacy of the subjects are as in the table 1. Age of subjects were between 33 and 66, average age 51.25 years old. The level of education appeared the most in high school graduate, 63(61.8%). Most of the subjects had more than 1 child, number of children appeared the highest in 2, 68(66.7%). In the case of religion, most of them had religion, 84(82.4%), in the case of economic level, 'medium' showed the highest distribution, 77(75.5%). Regarding cognized health condition, 'normal' appeared in 50 applicants(49%), therefore, most of the subjects cognized the health condition over 'normal.' In the case of infants and children related occupation, no experience in infants and children related occupation appeared in 75(73.5%), regarding marital status, married showed the highest distribution, 89(87.3%).

Self-esteem of the subjects was 3.99, which was slightly higher than normal, however depression was 7.56, which was lower than normal. Job efficacy of the subjects was 73.01, slightly higher than normal, social support was 15.80, relatively low. Child care efficacy of the objects was 36.36, which was normal.

**Table 1. General and Child Care Efficacy Related Characteristics (N=102)**

Variable	Category	n(%)	M(SD)	Min-Max
Age (yr)			51.25(6.61)	33-66
Education	Middle school(1)	5(4.9)		1-4
	High school(2)	63(61.8)		
	College(3)	34(33.3)		
	Others(4)	0(0)		
Number of children (person)	No(1)	1(1.0)		1-4
	1(2)	13(12.7)		
	2(3)	68(66.7)		
	more than 3(4)	20(19.6)		
Religion	Yes(0)	18(17.6)		0-1
		84(82.4)		

	No(1)			
Economic status	High(3)	2(2.0)	1.79(0.45)	1-3
	Medium(2)	77(75.5)		
	Low(1)	23(22.5)		
Perceived health status	Not very healthy(1)	0(0)	3.43(0.67)	1-5
	Not healthy(2)	6(5.9)		
	Normal(3)	50(49.0)		
	Healthy(4)	42(41.2)		
	Very healthy(5)	4(3.9)		
Career in infants and children related occupation	Yes(1)	27(26.5)		1-2
	No(2)	75(73.5)		
Marital status	Married(1)	89(87.3)		1-3
	single(2)	3(2.9)		
	Others(3)	10(9.8)		
Self-Esteem			31.41(3.99)	10-40
Depression			7.56(6.42)	0-63
Job efficacy			73.01(10.20)	20-100
Social support			15.80(5.86)	8-40
Child care efficacy			36.36(4.89)	14-70

### 3.2. Correlation of Child Care Efficacy and Related Variables

Correlation between child care efficacy of subjects and the variables is as in the table 2. Number of children of the subjects( $r=0.303$ ,  $p=.002$ ), cognized health condition( $r=0.237$ ,  $p < .016$ ), self-esteem( $r=0.373$ ,  $p < .001$ ), and job efficacy( $r=0.750$ ,  $p < .001$ ) had significant correlation with child care efficacy, accordingly, they were included in multiple regression analysis.

**Table 2. Correlation of Child Care Efficacy and Related Variables (N=102)**

Variable		Efficacy of educate
Child care efficacy	Pearson correlation coefficient	1
	P-value (double-tail)	
Age	Pearson correlation coefficient	-.035
	P-value (double-tail)	.727
Number of children	Pearson correlation coefficient	.303(**)

	P-value (double-tail)	.002
Education	Pearson correlation coefficient	-.006
	P-value (double-tail)	.956
Religion	Pearson correlation coefficient	-.055
	P-value (double-tail)	.580
Economic status	Pearson correlation coefficient	.092
	P-value (double-tail)	.356
Perceived health status	Pearson correlation coefficient	.237(*)
	P-value (double-tail)	.016
Career in infants and childrenrelated occupation	Pearson correlation coefficient	-.092
	P-value (double-tail)	.356
Marital status	Pearson correlation coefficient	.149
	P-value (double-tail)	.135
Self-Esteem	Pearson correlation coefficient	.373(**)
	P-value (double-tail)	<.001
Depression	Pearson correlation coefficient	-.194
	P-value (double-tail)	.051
Efficacy of job	Pearson correlation coefficient	.750(**)
	P-value (double-tail)	<.001
Social support	Pearson correlation coefficient	-.177
	P-value (double-tail)	.075

### 3.3. Predictors of Child Care Efficacy

In order to identify predictive factors for child care efficacy of the subjects, the result of multiple regression analysis is as in the table 3. As the result of regression analysis, the regression model was significant ( $F=41.543$ ,  $p < .001$ , 3 variables), number of children, self-esteem, and job efficacy appeared as significant predictive variables for child care efficacy, explanation power of these factors on child care efficacy of the subjects was 61.6%. Eventually, child care efficacy appeared high when the number of children was bigger, when they had higher self-esteem and job efficacy.

**Table 3. Predictors of Child Care Efficacy**

(N=102)

Variable	b	$\beta$	t	p
(Constant)				
Number of children	1.362	.168	2.687	.009
Perceived health status	.751	.103	1.622	.108
Self-esteem	.195	.160	2.457	.016
Job efficacy	.317	.662	10.154	<.001
$R^2=.631, AdjR^2=.616, F=41.543, p <.001$				

#### 4. Conclusion

This study is a descriptive research performed to determine factors affecting child caregivers' candidates' child care efficacy. As a result of this research, the factors influencing child care efficacy were found to be the number of children, self-esteem and job efficacy. These factors showed 61.6% explanation power regarding child care helper' child care efficacy. Of them the factor with the biggest explanatory power was job efficacy, followed by number of children and self-esteem.

When investigating general characteristic of child care teachers, self-efficacy, depression, job efficacy, and social support degree, general characteristic excluding number of child caregivers' children showed no meaningful difference. The more the number of child care teachers' children, child care efficacy was high, however no meaningful difference appeared in the age. This implied that child care efficacy developed in the process of accumulating the experience of one's own children care rather than high age. However, differently from the advanced research that determined that child care efficacy was higher when the child caregivers' education was high, this research showed no meaningful difference therein, which requires repeated research henceforth.

Child care efficacy displayed meaningful result along with the research result that job satisfaction appeared high when child caregivers' job efficacy and self-efficacy was high, which has the same context with the research result that reported that job efficacy appeared high along with child care teachers' child care efficacy and self-efficacy was high.

Child caregivers' are sent to homes and individually take care of children during the vacuum of parents' care. Since they play similar roles to nursing teachers, their roles are very significant. In this sense, it is necessary to arrange appropriate training program for them who provide firsthand service to children to enhance their child care efficacy, offer safe care to children at home when their parents are absent and influence positively to children's development. Based on this research finding that the more the number of children, the higher the child caregivers' child care efficacy, their training program needs to reflect their experience of child rearing experience. Such a program also should be helpful for enhanced child caregivers' child care efficacy, self-esteem and vocational self-efficacy as well. This study is significant in measuring the child care efficacy, an important indication for child caregivers' child care quality improvement and identifying the roles of internal factors such as self-esteem and vocational self-efficacy related to child care efficacy with a view to serve as the basic material for stable use of child caregivers and enhanced child care efficacy quality. This study, however, is limited in investigating child caregivers in the province K so the generalization of its findings is

limited. The perceived health status was found to have a significant correlation with child care efficacy herein but have no effect on regression analysis as a result of the regression analysis. Further study will be necessary in this regard.

## References

- [1] E. J. Kim, J. S. Lee and I. S. Choi, "Policy Improvement for Parenting Support: With Special Focus on Dual-income Household", Korea Institute for Health and Social Affairs, Sepul (2014).
- [2] Y. J. Lee, J. W. Lee, M. J. Kim and E. S. Hwang, "Study on Child Care Needs and Policy Measures by Household Types", Korea Institute of Child Care and Education (2010).
- [3] Ministry for Health Welfare and Family Affairs, Child Care Support Project Information, Ministry for Health Welfare and Family Affairs, Seoul, (2009).
- [4] Ministry for Health Welfare and Family Affairs, 2010 Child care support project information, Ministry for Health Welfare and Family Affairs, Seoul, (2010).
- [5] J. L. Lee, I. J. Jung, J. Y. Chung and H. J. Jo, "Child care service. Korea Institute of Child Care and Education", (2013).
- [6] Ministry of Gender Equality & Family. : 2011 Child Care Support Project Operations Manual. Ministry of Gender Equality & Family, (2011).
- [7] Y. Jee and Y. Kim, "Prediction factors efficacy of educare in Child care helpers in K City", Asia-pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology 1, no. 5, (2015)
- [8] Y. M. Kim, "A Study on the Level of Involvement in Decision Making and Teacher Efficacy among Daycare Center Teachers", Journal of recognition and development, vol. 5, no. 2, (2014), pp. 35-50.
- [9] P. T. Ashton, R. B. Webb and N. A Doda, "Study of teachers' sense of efficacy. Final Report, Executive Summary. National Institute of Education Contact", (Eric Document Reproduction Sercide No. ED 231-833), (1983).
- [10] J. H. Hyun, "The Effects of Practice on Student Teachers' Perceived Efficacy for Child Care and Teaching", Korean association of child studies, vol. 6, no. 24, (2003).
- [11] R. Schwarzer and S. Hallum, "Perceived teacher self-efficacy as predictor of job stress and burnout", Mediation analysis. Applied Psychology, vol. 1, no. 57, (2008).
- [12] I. R. Choi, "The Study on the Determinants of Child caregiver' Job Satisfaction", Unpublished mister's thesis, Korea Chistian University, Seoul, (2010)
- [13] M. H. Byun, K. J. Kang and H. J. Chung, "Service and Policy Direction. Journal of Korean Family Resource Management Association", vol. 2, no. 11, (2007).
- [14] H. J. Kim, "The relationship between efficacy belief and role performance of childcare teachers", Korean association of human ecology, vol. 1, no. 15, (2006).
- [15] Y. A. Song, "Development and Validation of the General Self Efficacy Scale", Unpublished mister's thesis, Korea Chistian University, Seoul, (2010).
- [16] J. A. Kwon, "The Analysis of efficacy and the needs for educational on in-home child caregivers", Unpublished mister's thesis, Korea Bible University, Seoul, (2012).
- [17] A. Bandura, "Self-efficacy, Theofcontrol", New York, (1997).
- [18] J. W. Kang and J. A. Kwon, "The Study of Efficacy on In-home Child Caregivers", The research association for childcare practice, vol. 2, no. 8, (2012).
- [19] K. K. Jeon, K. D. Kwon and S. K. Kim, "An Attempt to Revise the Korean Adaptation of the CES-D", I , Journal of social science research, vol. 1, no. 6, (1999).
- [20] S. Cohen and T. A. Wills, "Stress, social support, and the buffering hypothesis", Psychological Bulletin, no. 98, (1985).
- [21] M. J. Seo, "A Study on Factors Influencing The State of Adaptation of The Hemiplegic Patients", Journal of Korean Academy of Nursing, vol. 1, no. 20, (1990).
- [22] H. R. Kang, "Study of the Child Care Teacher`s Professional Recognition and Self-Efficacy on Job Satisfaction", The Journal of Vocational Education Research, vol. 1, no. 25, (2006).