

Importance-Performance Analysis of Activating Factors of Community-based Education Network by Region Type

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Abstract: The purpose of this study was to analyze the importance-performance of influencing factors of a community-based education network for improving young children's character by region type. The subjects in this study were 344 teachers of kindergarten and child care center located at 13 provinces in Korea. Factors influencing community-based education networks derived by literature review were vision sharing, leadership, interdependence, resource richness, resource transaction, loop learning, and administrative-financial support. Based on the seven factors and sixteen sub-factors, the questionnaire was composed of 16 items that affect the influence of a community-based education network. Responses of teachers were analyzed by Importance-Performance Analysis (IPA) according to region type. The results of the study show that there are three common strengths elements: Educational interest in young children in the community, the will of the principal of kindergarten or child care center, and share character education data were actively implemented. Common factors that require intensive 'improvement efforts' are suitable space and facilities for children's character education in the community and gain operational budgets. These results can be used as basic data in establishing the role of the local community for cultivating the character of young children and the direction to activate a community-based education network.

Keywords: *community-based education network; young children's character education; activating factors; region type; importance-performance analysis*

1. Introduction

Character refers to the ability of individuals to 'how to be' and 'how to be together' in their society [1] and to a coherent and stable cognitive, affective, and emotional behavior style that interacts with the social environment [2]. Meanwhile, a community is a group of people who have a or common linkage [3], and a group of people living in a certain area who share and share common values and interests in economic, social-based, and cultural solidarity [4]. In other words, communities have organic interactions based on common rules, customs, community consciousness, and common interests on a range of shared areas. Therefore, children must have the ability to respect and live together with others in their communities. They also expected to become democratic citizens by practicing their responsibilities, service, and dedication as members of society.

The community-based education network for enhancing young children's character in this study will be defined as a cooperative educational system and as providing opportunities for children with abundant character education and the environment by utilizing the human, material, and environmental resources of the community. Also, there is a need for vision sharing, leadership, resource sharing, group cohesion (trust) formation, conflict management, loop learning, and change leadership as influential factors for successful implementation [5,6]. The previous studies are as follows: There is a strong correlation between the effects of educational institutions and local communities on the effects of early childhood education and community linkage the actual state of early childhood education institutions and parents' participation, and teacher recognition of open daycare center and parent involvement [7,8]. Although there is an approach to establishing

connections between education institutions and family, it is not yet discussed on the aspect of infant character development and community-based education network. Therefore, the purpose of this study was to analyze the importance-performance of influencing factors of a community based education network for improving young children's character by region type.

2. Research Method

Research subjects, research instruments, research procedures, and data analysis methods are as follows.

2.1. Subject

The subjects of this study were 344 early childhood teachers who were in early childhood education institutions located at 13 provinces in Korea.

Table 1. Participants' background information

Participants' Information		N	%	Total
Region type (size)	Big city	184	53.5	344
	Small & Medium-sized cities	118	34.3	
	Rural town	42	12.0	
Institution type	Kindergarten	94	27.3	344
	Early child daycare center	250	72.7	

2.2. Research Instruments

Questionnaires were made by reference to education network research, activating factors of community connected education, parent participation research, obstacles and activation plan of the community network, school community, and social capital, etc [5-10]. Vision sharing, leadership, interdependence, resource abundance, resource exchange, loop learning, communication, administrative and financial support were derived as the influencing factors of the community-based education network.



Figure 1. Seven factors for activating community-based education network

The questionnaire was composed of the importance and performance of the activating factors of a community-based education network. The reliability (Cronbach's α) of the importance of educational network factors was .936 and the reliability (Cronbach's α) of performance of educational network factors was .930.

Table 2. Questionnaire composition & reliability

Questionnaire Composition	No. of Questions	Reliability		Remarks
		Importance	Performance	
Activating factors of community-based education network	16	.936	930	Likert 5 point scales

Table 3. Factors and sub-factors for activating community-based education network

Factor	Label	Sub-factors
Sharing Vision	V1	Educational objective exchange between teachers and institutional educators
	V2	Educational interest in young children in the community
Leadership	L1	Parent's willingness to cooperate
	L2	The will of principal of kindergarten or child care center
	L3	The willingness to cooperate of local personnel and the head of the community institution
Interdependence	I1	Cooperation with universities, professional organizations and human resources
	I2	Participation of local experts in designing character education programs
Resource Richness	R1	Suitable space and facilities for children's character education in the community
	R2	Excellent educational programs in community organizations
	R3	Rich human and material resources of the community
	R4	Professional education staff in community organizations
Resource Transaction	T1	Provide and share information on community organizations, people, and environments
	T2	Share character education data
Loop Learning	P1	Educate their understanding of early childhood for local institutions and residents
Administrative & Financial Support	A1	Gain operational budgets
	A2	Establish regulations and laws for community connected education

2.3. Research Processes

After verifying the validity of the questionnaire by 7 experts in research and field, the preliminary survey was conducted on 10 principals and teachers in early childhood education institutions. 370 questionnaires were distributed by mail or direct delivery to teachers in kindergartens and daycare centers nationwide, and 351 questionnaires were collected. The final analysis was 344 questionnaires.

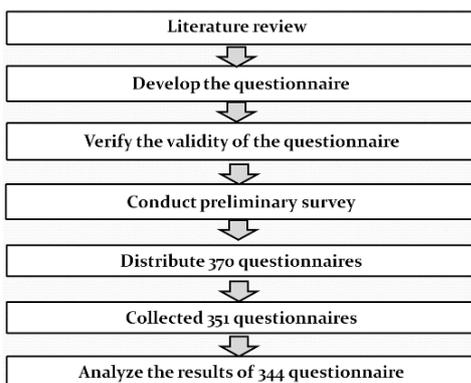


Figure 2. Research processes

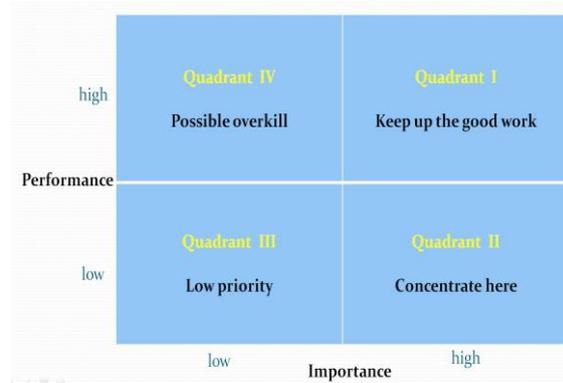


Figure 3. The attributes of the quadrant of importance and performance degree

2.4. Data Gathering & Analysis

The collected data were analyzed using SPSS 23.0 program. The mean and the standard deviation were calculated for descriptive statistical analysis. Importance-Performance Analysis (IPA) is a method of marking a quadrant based on the average value of each item of importance and performance, and giving meaning by deciding according to the position [11]. As shown in Figure 3, Decision-making guidelines can be provided by deriving priority items or by dividing areas where improvement efforts should be focused and areas that have been over-invested. The <Quadrant I> is the area for maintaining good performance (priority-high, execution-high: keep up the good work), and the <Quadrant II> is the focus area for improvement efforts (priority-high, execution-low: concentrate here), The <Quadrant III> is divided into areas with low priority (priority-low, execution-low), and <Quadrant IV> is divided into areas for avoiding over-effort (priority-low, execution-high: possible overkill).

3. Results

The results of the analysis of the importance and performance of the influencing factors of the community-based education network to improve the character of young children by regional type are as follows.

3.1. IPA Result of Big Cities

According to the importance and performance score, the matrix composed of quadrants was presented as shown in Figure 4. As a result of analyzing the difference in scores on the importance and performance of teachers in Big cities on the factors that affect the community-based education network, in the case of importance, the distribution of average scores is from the lowest 3.29 to the highest 4.45, and the overall average is 4.10. The distribution of the average performance score was 2.91 to 3.11, and the overall average was 3.41.

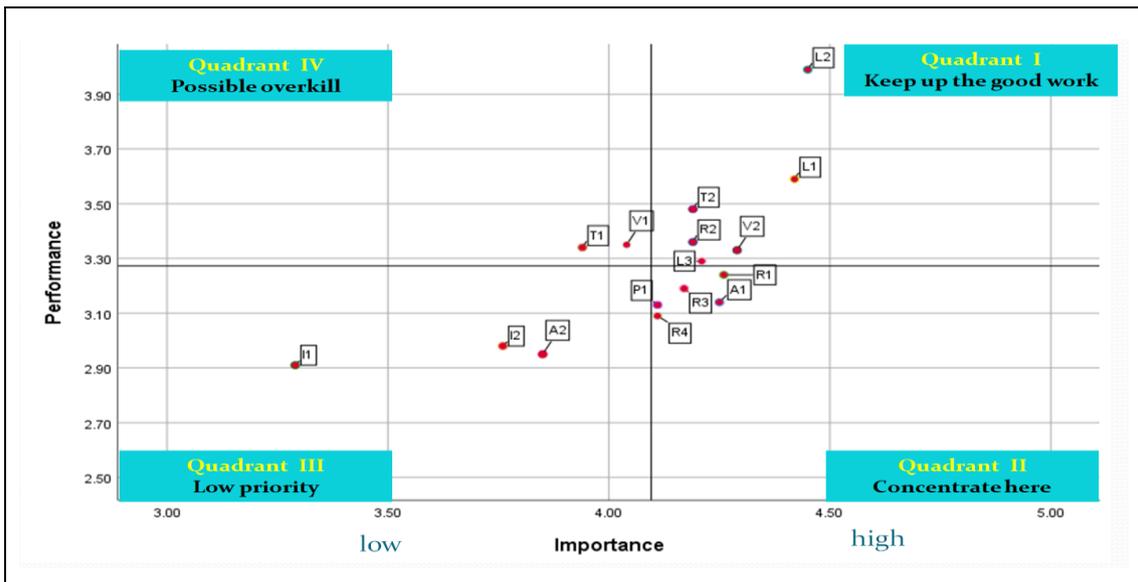


Figure 4. IPA matrix of big cities

According to Figure 4, there are six items in <Quadrant I>, which is a strength item that shows high importance and execution degree and requires continuous maintenance of good performance. <Quadrant II> is five items. It was found that the <Quadrant III>, which has a low priority, had three items, and the <Quadrant IV>, which should avoid excessive effort, was found to have two items.

The items of 'keep up good work' are the understanding and educational interest in young

children of the community (V2) among the factors of 'sharing vision', parent's willingness to cooperate among the 'leadership' factors (L1), the will of the principal of kindergarten or child care center (L2), and the factors of human resources and institutional heads' willingness to cooperate (L3), local community organizations and organizations have excellent character education programs (R2) among the factors of 'resource richness', and sharing of personality education materials (T2) among the factors of 'resource transaction'.

On the other hand, the item 'requiring concentration of improvement efforts' are found to be securing character education spaces and facilities suitable for children in the local community, rich human and material resources, and professional staff (R1, R3, R4) among the factors of 'resource richness'. Also, it includes educate their understanding of early childhood for local institutions and residents(P1) and gain operational budgets (A1).

3.2. IPA Result of Small and Medium-sized Cities

As a result of analyzing the difference in scores on the importance and performance of small and medium-sized city teachers on the factors affecting the community based educational network, in the case of importance, the distribution of the average score is from the lowest 3.84 to the highest 4.56, and the overall average is 4.3. The distribution of the average performance score was from the lowest 3.02 to the highest 4.22, and the overall average was 3.6.

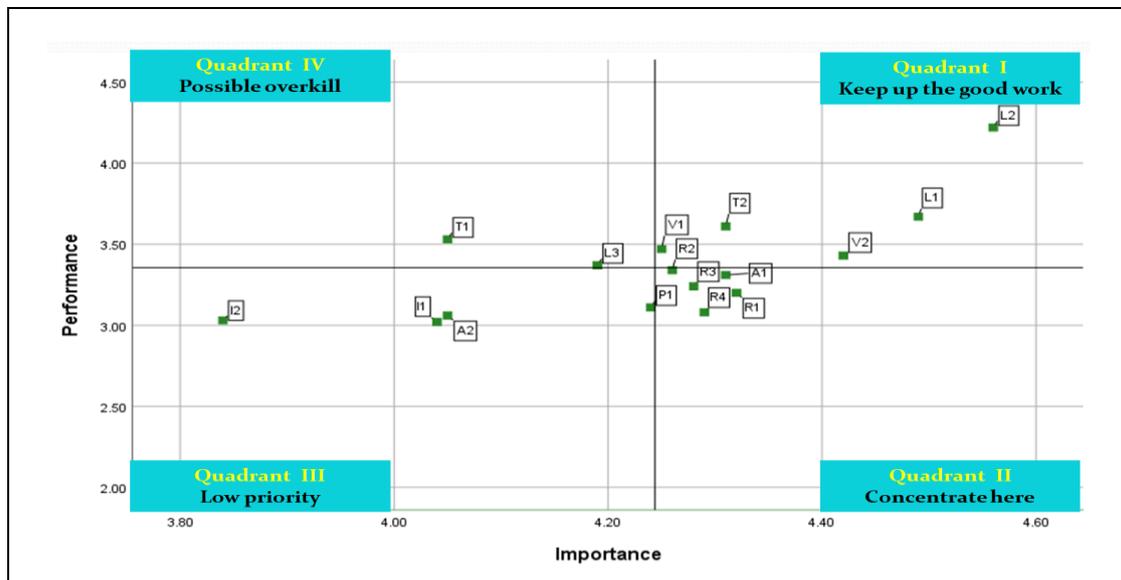


Figure 5. IPA matrix of small and medium-sized cities

The items of 'keep up good work' are as follows: an educational objective exchange between teachers and institutional educators (V1) and the understanding and educational interest in young children of the community (V2) among the factors of 'Sharing vision', parent's willingness to cooperate (L1) and the will of the principal of kindergarten or child care center (L2) among the 'leadership' factors, and sharing of personality education materials (T2) among the factors of 'resource transaction'. On the other hand, the item 'requiring concentration of improvement efforts' are found to be securing character education spaces and facilities suitable for children in the local community, educational program, rich human and material resources, and professional staff (R1~R4) among the factors of 'resource richness'. Also, it includes gaining operational budgets (A1).

3.3. IPA Result of a Rural Town

As a result of analyzing the difference in scores on the importance and performance of rural teachers on the factors affecting the community based educational network, in the case of importance,

the distribution of the average of performance score is from the lowest 3.95 to the highest 4.86, and the overall average is 4.44. The distribution of the average performance score was from 2.9 to 4.31 and the overall average was 3.48.

The items of 'keep up good work' are the understanding and educational interests of the local community for infants (V2), the will of the director for implementation (L2), Rich human and material resources of the community (R3), Share character education data (T2), and Educate their understanding of early childhood for local institutions and residents (P2). On the other hand, items 'requiring concentration of improvement efforts' are parent's willingness to cooperate (L1), the willingness to cooperate of local personnel and the head of the community institution (L3), suitable space and facilities for children's character education in the community (R1), and gain operational budgets (A1).

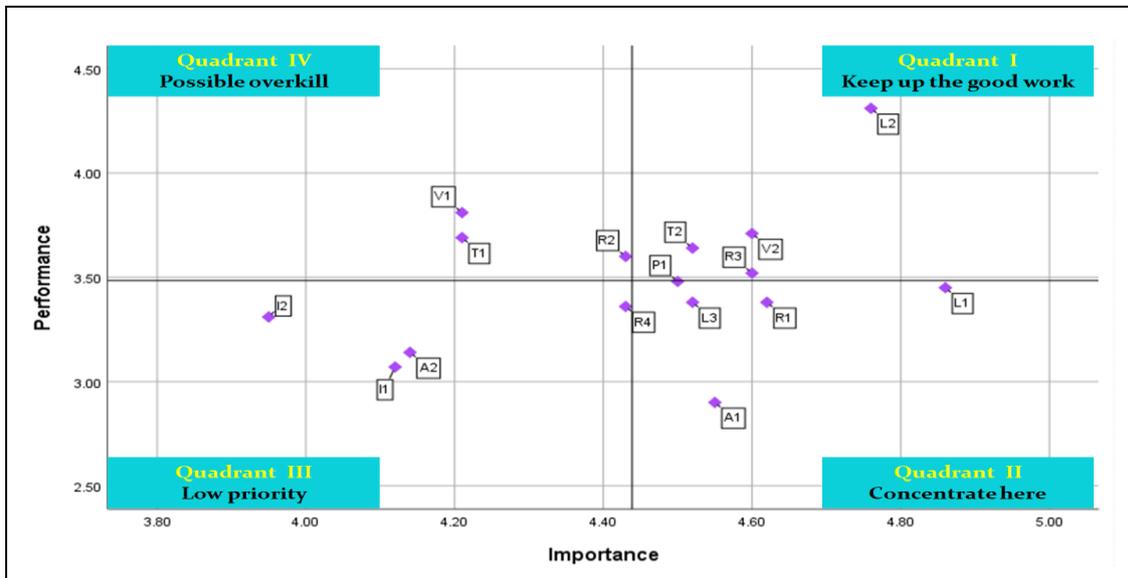


Figure 6. IPA matrix of a rural town

4. Discussion

According to research results, the strongest factors that promote community-based education communities in common in large cities, small and medium cities, and rural town were as follows; Educational interest in young children in the community (V2), the will of the principal of kindergarten or child care center (L2), and share character education data (T2). It is consistent with the research results [7,10] of obtaining the leadership necessary for unity and continuous participation among members through a shared vision of core values. Also, 'resource transaction' appeared as a strong factor because it is difficult for educational institutions to operate with limited resources owned by their organizations to continuously operate high-quality education and programs. This can be seen as a result that is consistent with the research [6,12] that solves problems through the exchange of resources. Common factors that require 'intensive improvement efforts' are suitable space and facilities for children's character education in the community (R1) and gain operational budgets (A1). Administrative and financial support factors such as facilities and budget require systematic financial support efforts from administrative agencies such as the Ministry of Education, municipalities and provinces, and the Office of Education, rather than being resolved by individual educational institutions. The differences by region type are as follows: Large cities and small and medium-sized cities need intensive improvement efforts in aspects of rich human and material resources of the community (R3) and professional education staff in community organizations (R4). It needs to make a method to establish an information-sharing system and a case management system to revitalize the sharing of educational resources in the local community [10]. In a rural town, it found that 'leadership' such as parent's willingness to cooperate (L1) and the willingness to cooperate with local personnel

and the head of the community institution (L3) are insufficient. It is necessary to strengthen local capacity through projects and workshops in which community education network leaders participate [8,9]. Interdependence (I1, I2) showed low priority in all regions. Teachers have shown that the importance of trust and cooperation in the principal, parents, other local experts is insignificant compared to interdependence among teachers [13].

This study has a limitation in that a survey on the perception of community members or parents about the factors of education network has not been conducted, so future studies including members of the community and family are needed. These results can be used in confirming the role of the local community in cultivating the character of young children, the linkage of educational institutions, homes, and local community resources as educational resources within the community, and the direction for the formation and activation of community-based education network.

Acknowledgments

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