

Analysis on the Types of Infant Leaders' Images among Early Childhood Teachers

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Abstract

This study has purpose to identify image of leader infant on site recognized by early childhood teachers based on specific and subjective opinion by investigating deeply early childhood teacher's recognition of leader infant. To see the characteristics of image type and characteristics by type on leader of infant, Q-method was applied. Data composed Q-population from 200 early childhood teachers, collected P-samples from 36 early childhood teachers to analyze. In the result of this study early childhood teachers recognized images of infant in leader as 3 types such as intelligent, sociable, and curious leader types.

Keywords: Early Childhood Teacher, Leader' Images, Q-method

1. Introduction

Infant leaders are analyzed to excel in not only cognitive development but also social development¹. Infant regarded as leaders in a peer group recognize themselves as positive beings in their social relations², which forms high self-concept and self-esteem to enable them to live as excellent citizens in society. Recent studies about infant leadership are paying attention to diverse types of infant leadership rather than the characteristics of a few infant with leadership³⁻⁵. That is, every infant can presumably be a leader according to the size, intimacy and gender ratio of a group and the characteristics of infant with whom he/she builds relations in the continuous process of starting and finishing plays in infant education institutions and a leader can change depending on the situation. This differs from traditional perspective that only a few infant are born to be great leaders and indicates that leadership shown by infant are much more complex and diverse than what have been studied so far⁶. For this reason, most studies about leadership propose ways of taking leadership to the next level among average infant through leadership enhancement programs⁷.

Before proposing programs to strengthen leadership, however, we believe that there is a need to figure out realistic images of leaders in infant educational institutions by examining the types and characteristics of infant leaders from the viewpoints of teachers working in the field of infant education. Since the field of infant education shows very diverse backgrounds of environment, peers, teachers and parents, we can presume that there are various types of leaders coming from these diverse backgrounds.

This study aims at analyzing how the images of infant leaders recognized by early childhood teachers can be classified and what characteristics each type of images has. Qualitative research is needed by surpassing the limitation of quantitative research to investigate not only the types of infant leaders' images but also subjective perception of each type specifically. It is possible to discover diverse values, attitudes and perceptions of infant leaders through qualitative methods but there is a limitation in objectifying the results⁸. Therefore, this study is to figure out subjective perception on the images of infant regarded as leaders by early childhood teachers by applying Q-methodology. This methodology makes it possible

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to understand and explain about each type by identifying types formed according to the structure of subjectivity starting from the viewpoint of an agent about the images of infant considered to be leaders by early childhood teachers. That is, this study aims to delve into the images and types of infant leaders through Q-methodology and provides a favorable environment for infant leaders within classroom by recognizing the characteristics of infant leaders among early childhood teachers based on the study results.

2. Methodology

2.1 Study Procedure

This study was conducted in 4 stages. In stage 1, Q-population was formed with 200 early childhood teachers and 283 ideas about infant leaders were extracted. Forty eight Q-samples were extracted from the collected 283 Q-population through the consultation with 1 researcher, 1 professor of the department of early childhood education and 1 director of early childhood education institution. P-samples of 36 early childhood teachers residing in Busan City were extracted and Q-sort was done by requesting Q-classification of cards to the extracted P-samples.

2.1.1 Q-Sample Selection

2.1.1.1 Composition of Q-Population

Q-population is a group of statements where opinions on particular phenomenon or incidents are put together and, to select Q-samples, Q-population should be formed first. For this end, first, thoughts on infant leaders were extracted through brainstorming targeting 200 early childhood teachers of random sampling working in Busan. Then, based on the brainstorming result of infant leaders among early childhood teachers, a total of 284 Q-population was formed through final agreement among 1 researcher, 1 professor of early childhood education department and 1 director of early childhood education institution.

2.1.1.2 Selection of Final Q-sample

To select final Q-sample statement, appropriate items were selected among statements contained in Q-population by reviewing references related with evaluation. The appropriateness was discussed among 3 early childhood education specialists: 1

researcher, 1 professor of early childhood education department and 1 director of early childhood education institution. In the consultation process, participants were asked to assess each statement with 3 measures of 'positive, neutral and negative' and the final Q-samples were selected through consultation of researchers by using the selected items. 48 Q sample statements are as shown in Table 1.

2.1.1.3 Making Distribution Map of Q-samples

Distribution map of Q-samples was drawn up by making study subjects classify statements selected as Q-samples with 9-point scale according to the importance in their opinions based on forced distribution.

2.1.2 Sampling of P-samples

In principle, P-sample is based on small sample according to the principle that Q-methodology deals with difference of importance or meaningfulness within an individual rather than difference among individuals⁹. In this study, P-samples were selected targeting 36 people.

2.1.3 Sampling of P-samples

Early childhood teachers of P-samples put Q-statements of 48 cards on Q-distribution table according to the direction of a researcher. Early childhood teachers read 48 statements and classified them into 3 categories—very much agree, somewhat agree, very much disagree—depending on how much they agree with each statement. Then, they arranged them on the distribution table according to their thought and belief.

2.2 Data Processing and Analysis

Coding was conducted for data collected from a total of 36 study subjects. Coding was done through scoring: starting from 1 point for 'what is furthestmost from their opinion (-4)' followed by 2 points (-3), 3 points (-2) and 4 points (-1); neutral 5 points (0); and 6 points (+1), 7 points (+2), 8 points (+3) and 9 points (+4). Scoring data was analyzed by PASW 18.0. Q-factor analysis was conducted by using PCA (Principal Component Analysis) with the application of Varimax Rotation and the most ideal number of factors was designated to extract types¹⁰. Factors were arranged according to the factor loading per study subject that is representative of each factor as a result of Q-factor analysis.

Table 1. Q-statements for early childhood teachers

No	Image of infant leaders among early childhood teachers	No	Image of infant leaders among early childhood teachers
1	Imaginative	25	Care for friends
2	Like books	26	Greet people well
3	Prescriptive	27	Ambivalent
4	Have problem-solving ability	28	Good at presentation
5	Have great observation ability	29	Have no fear
6	Meddling	30	Only infant
7	Active in everything	31	Have many friends
8	Good laughter	32	Creative
9	Have desire for winning	33	Obedient to teachers
10	Sociable	34	Keep promises well
11	Serve as an arbitrator	35	Listen to friends
12	Have great self-respect	36	Try to teach others
13	Good speaker	37	Courteous
14	Ask lots of questions	38	Rich in vocabulary
15	Self-assertive	39	Mighty
16	Have sense of humor	40	perseverant
17	Eat well-balanced meals	41	Independent
18	Study hard	42	Have a loud voice
19	Popular	43	Good family background
20	Mature	44	Active
21	Authoritative	45	Likes and dislikes are clear.
22	Smart	46	Considerate
23	Have diverse experiences	47	Good-looking
24	Greedy	48	Quick-witted

Then, extracted factors were interpreted among researchers by discussing what meaning they have based on factor score of Q-statement.

3. Findings and Discussion

3.1 Formation of Q-types

Three types were derived from Q-factor analysis and these accounted for 50.57% of total variance. Explanatory power of each type was 36.56% for type 1, 7.32% for type 2 and 6.70% for type 3. Thus, type 1 was found to be able to explain the most about the image of infant leaders among early childhood teachers.

Table 2. Eigen value and explanatory power per factor for Q-sort result of early childhood teachers

	Type 1	Type 2	Type 3
Eigen value	13.52	2.71	2.48
Variable explanatory power	36.56	7.32	6.70
Cumulative explanatory power	36.56	43.88	50.57

3.2 Analysis on Each Image Type of Infant Leaders Perceived by Early Childhood Teachers

In order to analyze early childhood teachers' image of infant leaders by extraction type, total score was calculated for statements of subjects loaded on each type. Then, the score was converted into standard score (Z score) to sort out statements over +1.00 and statement below -1.00 among 48 statements. The analysis result is as follows.

3.2.1 Type 1: Intelligent Leader Type

Statements that received relatively high score from type 1 early childhood teachers are

in order of 'have problem-solving ability ($Z=1.52$)', 'smart ($Z=1.40$)' and 'have diverse experiences ($Z=1.34$)'. In addition, type 1 teachers gave low score to the following statements in order of 'ambivalent ($Z=-1.96$)', 'meddling ($Z=-1.68$)' and 'greedy ($Z=-1.60$)'. The number of early childhood teachers who fall into type 1 is 18 out of 36 in total. This shows that 50% of entire early childhood teachers had the image of type 1 on infant leaders. With regard to the image of infant leaders among type 1 early childhood teachers, teacher's perceived infant with excellent cognitive and learning ability as infant leaders. That is, infant perceived as leaders by type 1 early childhood teachers had outstanding learning ability- have problem-solving ability, smart, like books and active in everything-or were leaders in terms of behavior. Teachers gave low score to authoritative, prescriptive and ambivalent behavior of infant, which indicates that they perceived dogmatic and unilateral aspect of infant as opposite image of leaders. Therefore, the researcher named the image of infant leaders falling into this category an 'intelligent leader type'.

3.2.2 Type 2: Sociable Leader Type

Statements that received relatively high score from type 2 early childhood teachers are in order of 'popular ($Z=2.53$)', 'courteous ($Z=1.69$)' and 'good at presentation ($Z=1.59$)'. In addition, type 2 teachers gave low score to the following statements in order of 'like books ($Z=-2.05$)', 'ambivalent ($Z=-1.60$)' and 'have great observation ability ($Z=-1.47$)'. The number of early childhood teachers who fall into type 2 is 10 out of 36 in total. This shows that 27.8% of entire early childhood teachers had the image of type 2 on infant leaders. With regard to the image of infant leaders among type 2 early childhood teachers, teachers had certain images about infant leaders in the social and emotional aspect of infant. That is, infant perceived as leaders by type 2 early childhood teachers had many friends and were popular as they were courteous, sociable and considerate and cared for friends. Additionally, teachers gave low score to authoritative, prescriptive and ambivalent behavior of infant, which indicates that they perceived dogmatic and unilateral aspect of infant as opposite image of leaders. That is, negative image about infant leaders was similar to that of type 1. Therefore, the researcher named the image of infant leaders falling into this category an 'sociable leader type'.

3.2.3 Type 3: Curious Leader Type

Statements that received relatively high score from type 3 early childhood teachers are in order of 'imaginative ($Z=1.92$)', 'self-assertive ($Z=1.87$)' and 'have problem-solving ability ($Z=1.65$)'. In addition, type 3 teachers gave low score to the following statements in order of 'mighty ($Z=-2.17$)', 'care for friends ($Z=-1.78$)' and 'only infant ($Z=-1.50$)'.

The number of early childhood teachers who fall into type 3 is 8 out of 36 in total. This shows that 22.2% of entire early childhood teachers had the image of type 2 on infant leaders. With regard to the image of infant leaders among type 3 early childhood teachers, teacher's perceived curious infant as infant leaders. That is, infant perceived as leaders by type 2 early childhood teachers had excellent observation ability thanks to their great interest and curiosity and were creative and self-assertive and asked lots of questions. Teachers gave low score to behaviors related with sociality of infant leaders, which indicates that they perceived infant's sociality had nothing to do with leadership. Therefore, the researcher named the image of infant leaders falling into this category a 'curious leader type'.

3.3 Discussion

This study examined images of infant perceived as leaders by early childhood teachers in 3 different types and this aimed to improve the image and perception of infant leaders among early childhood teachers in the field of preschool education.

First, the image of type 1 infant leaders is an intellectual leader, which accounts for 50% of total early childhood teachers. This supports the study result that infant leaders have ability of expressing information or knowledge effectively like the study of Kim¹¹. This also coincides with the study result of Park (2001) that leaders show the characteristics of solving problems with abundant knowledge, logical use of language, excellent judgment and drive as well as interest in others¹².

Second, the image of type 2 infant leaders is a sociable leader, which accounts for 27.8% of total early childhood teachers. This is in the same vein with the study result of Kim (2010) that infant with leadership seek several alternatives and make concession to and advice peers not to continue conflict situation¹¹. This is also identical with the study result of Nam (2009) that infant leaders, in a

play situation, demonstrate leadership by observing other toddlers behaving and talking like teachers and considering others with interest in them¹³. This also coincides with the idea of Covey (1990) that interpersonal skill is the most important characteristics of leaders and they are sensitive, considerate, kind and compassionate and can remember even little things in interpersonal relations¹⁴.

Third, the image of type 3 infant leaders is a curious leader, which accounted for 22.2% of total early childhood teachers. This coincides with what Jo said in her study (1998): infant leaders are vibrant and creative and have positive self-concept¹⁵. This is also in line with the statement of Simontion (1988) and Norris (1990): roles of leaders and creativity are considered to have crucial relations^{16,17}. Through the result of this study, the author could understand that image and perception of preschoolers among early childhood teachers are serving as an important yardstick to judge infant more than anything else. However, in the field of preschool education, early childhood teachers showed marked tendency of focusing on cognition and learning when thinking about infant leaders of class and failed to recognize diverse types of leaders. Thus, the author believes that education is needed for early childhood teachers on diverse types of infant leaders. They also need to change their mindset as infant can be leaders in various aspects such as cognitive, social-emotional and creative perspective.

Based on this, the author proposes as follows. First, infant leaders were looked into per type by examining the images of infant leaders among early childhood teachers. However, further study is needed to figure out behavior pattern and characteristics of infant leaders by observing them in the actual field of toddler education. Second, it is difficult to generalize the study result since the study subjects are teachers in a certain region. Therefore, sampling of diverse regions will be needed for generalization.

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