



## Impact of Symbolic Modeling on Developing the Emotional Intelligence and Ability to Solve Life Problems of the Children at Early Childhood Stage

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## **Introduction**

Human, since the analysis starts, observe the people surrounding them and start imitating and learning these behaviors, whether the desired or the in desired through observation and imitation (Qatami & Al-Yousef, 2010), learning resulting from observing the other's behavior is called sociology (modeling), which is one of the important processes in the process of modifying the human behavior, this process is basic in most of the human learning stages, its great importance appears at the early childhood stage (Mehrsa & Zeinab, 2019). Since the child acquires many of the concepts, information, and skills, he seeks to satisfy all his needs, attitudes, and personal interests, forming his ego through what he acquired from daily experiences inside the home or the kindergarten or through his interaction with his peers or with the elders surrounding him, so the mean risky problem the children encounter at this early age stage resides in the deficiency in the emotional intelligence in the kindergarten children (Mahroos, 2016) so ignoring teaching the children emotional and social lessons, learning the children emotional and social lessons, learning them to chances might lead to loss of the available opportunities to help the children since the early stages on developing their emotional intelligence.

Among the ways through which achieving the development of emotional intelligence in children is the use of modeling, since it is considered one of the meta-cognitive strategies, it is an effective way of prolonging the learning and teaching through real-life situations the children are living. Its worth mentioning that symbolic modeling is considered the best type of modeling to be used with children, since every child imitates the symbolic modeling behavior, a photographed model through the TV, films, published pictures, stories, the books. Bandura has explained that it is possible to acquire emotional responses, social orientations, and behavioral models through these means (Haj Mofi, 2015; Burkhardt, & Pollak, 2006).

Technological progress has allowed the expansion modeling concept to include visual strategies and techniques such as the media in teaching a wide group of skills (Bandura, 1997). The easy and available technology and techniques support and enrich the educational process by speaking with the child in his language, and following up on his emotional, psychological, and mental aspirations (LeBlanc et al, 2003). On the other side, studying symbolic modeling is considered one of the important topics in the academic field at the early childhood stage with the help of real living takes place through video films, pictures, TV, recording tapes, and other different media as symbols for the targeted behavior, its importance refers to its great role in forming the social attitudes and the individuals' behaviors through the individual acquisition of the behavioral models, using the modeling because the children need direct and purposive learning from things and mean they love (López-Pérez & Pacella, 2021).

On the other side, kindergarten children encounter a diversified group of problems ranging from academic difficulties, the problems between their friends during playing, few of them possess the required skills to solve those problems, children might avoid those who lack problems solving skills and make procedures when facing a specific problem, instead of setting their energies in solving the problem, this is the reason that many of the children drop the kindergarten, or losing the friends, leading to the occurrence of bigger problems on the long term such the obstacles in achieving success and psychological disorders (Zamzami, 2007). So, the researcher sees the necessity of teaching the child how to solve the problems he is facing by providing him with the programs and the strategies which develop his emotional intelligence skills, which greatly contribute to help him in solving his problems.

## **Literature Review**

According to what has been mentioned by Bandura (1997) and Charlop et al (2010), the modeling process passes four stages, it starts with directing the intention towards a behavior and perform model, it is insufficient occurrence the behavior to be modeled in front of the individual to acquire it, rather should be available behavior intention process, then starts preserving and memorizing processes, retrieving and remembering to accomplish the procedure of symbolic processes for the behavior performance to model it, then moving to translate the actual behavior, this requires the presence of capabilities in the individual to perform the skill, then the motivation

process about the skill by the teacher, but this does not mean that the child will perform the skill or continue in performing it due to presence of factors controlling the performance, especially the motivation factors.

Casamassima and Insua (2015), and Hancock and Schoonen (2015) have indicated the importance of using modeling in developing different thinking skills, also Wynkoop (2016), and Webber et al. (2016) have confirmed the effectiveness of using the modeling strategy in explaining many cases such as some of the social and emotional problems in the children, also Nevid (2011) has conducted a study which aimed to know the role of the modeling in developing the child's mental capabilities in Belgium, results showed that the educational modeling helps in developing the creative thinking in the children, while in the creative thinking field, the study of Al-Razhi (2012) study revealed the effect of using the mathematical modeling in developing the creative thinking skills in the children. The study of Al-Brashi (2012) aimed to know the impact of using modeling on developing rhythmical thinking skills in science subjects in Egypt, results of the study indicated that modeling has a great impact and effective impact on developing rhythmical thinking skills.

The study of Ali (2014) has confirmed that teaching through modeling had a great impact on developing some of the teaching skills, also the study of Brigman (2014) aimed to know the role of modeling strategy in problem-solving due to the lack of remembering among the students in Ohio State, results showed that the students in the experimental group were able to solve more complex and unfamiliar problems, and they had mental flexibility compared with the control groups, the study of Al-Ja'fari (2018) has confirmed that modeling has a great role in developing the audible reading skill. The study of Haj Mofi (2015) was based on a modeling strategy to develop the basic thinking skills of fifth-grade students in social studies in Syria, the results showed the effectiveness of the program in developing the basic thinking skills and teaching staying achievement in favor of the experimental group which indicates the strategy effectiveness. In addition, the study of Al-Zobaidi (2013) aimed to know the impact of modeling on developing emotional intelligence at the early childhood stage, age (5-6) years for both gender. The researcher depended on life and not life modeling, results showed the effectiveness of the program in developing emotional intelligence in favor of the experimental group.

#### Importance of the Emotional Intelligence

Importance of the emotional intelligence resides in the nation that the early childhood stage is characterized by rapid mode fluctuations and severity and acute emotions, love of possessing & difficulty to live with other children, and the ability to face and solve problems depending on the children's emotional intelligence skills and interaction skills with the others preparing him to move to the elementary school (Elias, 2004; Goleman, 1995; Qatami & Al-Yousef, 2010; Johnson, 2008). Through the review of the previous literature, five emotional intelligence skills were determined, which are the same the researcher sees to adopt in here present study, such as self-awareness, emotional understanding, empathy, controlling anger, and building social relationships and friendships with the others (Bertini, 2020; López-Pérez & Pacella, 2021).

#### The relationship between Emotional and Ability to Life-Problems

Coleman (1997) sees that students who have emotional intelligence have more popularity and love from their friends, as well as with high social skills, are less aggressive, and are more devoted in learning situations, so effective learners Yoder (2005) has indicated that children who have high capabilities of the emotional intelligence more healthy and more successful, they establish strong social relations, possess effective leadership skills more vocational success compared to their peers with low capabilities of emotional intelligence. So, emotional intelligence plays a vital role in directing individuals' behavior and their relationship with others, they are able to understand and deal flexibly with their surrounding with skill and responsibility, more able to succeed in establishing social relationships with others (Al-Olwan, 2011). Children who lack problems-solving skills might be more subject to depression, the researchers found that teaching children problems solving skills can improve their mental health (Jody, 2001; Maite, 2006; Kamps & Kay, 2002). Since few children have the capability to solve academic and life problems, they might avoid making procedures when facing any problem, they major invest their time in avoiding the problem (Susan & Wilkens, 2002; Zamzami, 2007; Jeffrey, 2001).

### Why Symbolic Modeling has been used

Alzghool (2018) prefers using symbolic modeling which helps in the incorporation of behavior in the form of video films, plays, photographed stories, or artistic recordings, in which the focus is on a specific part of the model's behavior. From this stance, the researcher sees employing the symbolic modeling strategy due to its importance effectiveness and scarce studies on it.

### Socio-Learning Theory Supporting the Modeling Strategy

Socio-learning theory or learning by modeling came to confirm the importance of social interaction and social standards, this means that learning does not come in a vacuum but rather in social surroundings (Bandura, 1976), Albert Bandura (Founder of the theory) sees that most of the human behavior is learned by following a model or actual example, since by noticing the others an idea develops about how a behavior formulates, from his view the social cognitive learning means that the information we receive through noticing (observing) the things or behaviors of those who surround us influence the way of our actions (Alotoom et al 2014), also Bandura calls learning by observation-which takes place when the learner imitates behavior appears at a model called (modeling) or learning by modeling (Alotoom et al, 2014; Bandura, 1976).

### Study problems

The first launch of the problem of this study came from the increasing psychological problems and behavior disorders among the children resulting from different family, social and school problems in their respiratory system disorder. Since children are characterized by severe emotions and rapid mode fluctuations, love of possession, and living difficulties with other children, they lose their friends and encounter daily obstacles because they act without considering how to express their feelings to others, this cannot be reached except by educating and shaping the child's feelings by inserting the emotional intelligence in their world through caring about the social normalization processes of the feelings and the emotions, encouraging the child to express his feelings, and attempting to calm the acute feelings and teaching him ways to organize and perceive his emotion significance (Al-Deedi, 2005; Hayes et al, 2006; Zghaer, 2011).

In addition to what has been mentioned, the present study problem was determined from the actual dealing with the children during training and supervising in the kindergartens, since the researcher found that feelings and emotions education, managing them, and using them as a helping component on the thinking and problems solving, and it is not better invested at this sensitive stage to develop the emotional intelligence of the children, it was noticed low percentage of the children were actually characterized by emotional intelligence. From this point, using symbolic modeling could help solving those problems, researcher sees the studying effect of symbolic modeling in these two important variables as the important educational goals, so revealing impact of the symbolic modeling in developing emotional intelligence skills and life problems solving in the children are considered real problem represents in the following questions:

"What is the impact of symbolic modeling strategy on developing emotional intelligence and the ability to solve life problems among children at the early childhood stage?"

### Objectives of the Study

Building a training program based on symbolic modeling to develop the emotional thinking skills of the children at early the childhood stage.

To find out the impact of the training program on developing the children's ability to solve life problems.

### Hypotheses of the Study

There be no differences in statistical significance degrees means of the children in the experimental group (Taught by using the symbolic modeling strategy) and degrees means of the children in the control group (Taught by the traditional way) for the early childhood stage in the post-application of the emotional intelligence test among the children.

There be no differences in statistical significance between the degrees means of the children in the experimental group and the control group in the post-application of the test the ability to solve life problems among the children.

## **Methodology**

The researcher depended on the semi-experimental method in designing the two groups (experimental and control group) by the purposive method, also the researcher depended on applying the post and pretests and between the pre application and post-application, exposing the experimental sample individuals to the training program, the study consisted of independent variables (symbolic modeling, the traditional way) and two dependent variables (emotional intelligence skills, and ability to solve life problems).

### **Study Population and Sample**

The study population consisted of preparatory classes, 3 classes Al-Hussein Bin Talal University School which includes children from 5-6 years old, this age group was selected due to ease of application to them at this level compared with other studying levels, less than (Kg1) because they used to kindergarten's rules and regulations, and their improved emotional and social maturity, also because acquiring a group of concepts, facts, skills, life experiences & cognitive storage to facilitate using their ability development to solve the problems with them through the proposed program which requires many responses, communication, and interaction with the researcher.

### **Sample Selection**

The sample has been selected in a purposive way, before starting the procedures to apply for the program, the researcher visited the school in which the training program will be implemented she found it contains 3 classes for the preparatory grade, and by the random way the researcher selected branch (B) to represent the experimental group to study according to the symbolic modeling strategy and branch (A) to represent the control group which study according to the traditional way, the sample was divided into three samples:

The sample size consisted of 65 children, the study experiment was applied to them, then divided into 2 groups.

Control-32 children, these children were taught using the traditional way.

Experimental-33 children the training program was applied to them.

Equivalence of the study's two groups: The researcher was interested before starting the experiment to strike the equivalence between the two groups regarding one residential region, studying at one school, and the age calculated by months for the children equivalence, this indicates that the two study groups are statistically equivalence.

Processes relating to maturity: It means by this the physical, intellectual, and social growth of the children subject to the experiment in this study, this factor has no impact since the experiment was equal to the children sample of this study, and it was not long.

Instruments of the study: This present study consisted of three instruments (The training program which depends on the symbolic modeling strategy, the emotional intelligence skills test, and the ability test for solving life problems).

Description of the training program: the program included a group of procedures, which are:

The foundation upon which the program was based: The training program is based on the social theory of scientist Bandura (1979) in behavior formulation, to reach the best emotional intelligence skills and mastering them among the study sample individuals, in addition to reaching the ability of the sample's individuals to solve the life programs they encounter in their life.

Program period: Two sessions were designed weekly for about ten weeks, the experiment period was equal for the two groups, and each session lasted between 45-60 minutes, application of the program started Sunday, 3/10/2021-2/11/2021.

Validity of the training program: The validity of the program was assured that it achieves its goals set form, through introducing it to a group of arbiters of specialized Doctors to present the opinion and notes, regarding the general and special goals, training procedures, training sessions, the recorded films, the photographed films, the cards containing photographed positions, work papers & songs.



**The program executor:** The researcher by herself applied the training program to the two groups of the research, this gives the experiment a high degree of accuracy and objectivity since the cost of the female teachers to each group makes it difficult to control the experiment, because one of the female teachers might possess more information about the training program than other teacher or other personality traits that might influence the experiment results.

**Techniques of the training program:** The program included collective diversified training sessions, including a group of films and pictures, CDs, stories, short photographed stories, plays & dummies, these means include illustrating a behavioral model through recording it in the form of cartoon film displays on the TV or the data show or on the computer to solve a specific problem, the goal is to deliver information about the illustrated behavioral model with the objective to create change in the child's behavior and making him acquire new behavior since each film links to one skill of the emotional intelligence skills. The models were designed in an astonishing way in the movement, colors, voices, backgrounds, and sonic influences. The model (Cartoon character) performs the behavior intending to learn, then the student observes the behavior and imitates it through the child's observation of the model, then performs it individually in different situations, for every child from the individual samples to be able to comprehend the vocabulary, the concepts and the mentioned behaviors in the film. Collecting the data to observe the progress or the post-measure, continue in data collection about the behavior by using tasks analysis to determine whether the child has acquired behavior, when the child shows frequent successes in completing the targeted behavior, then it is time to reduce the child seeing the films.

**The emotional intelligence skills test:** After the researcher reviewed the emotional intelligence scales included in some published studies (Mayer & Salovey, 1997; Narimani & Basharpour, 2009; Al-Nabhan & Kamali, 2003), the researcher developed an emotional intelligence scale relevant to the children at early childhood stage in Jordan, since some scales have been developed on samples from the preparatory, elementary and secondary stages, while some of them did not include the dimensions adopted by the researcher in the study, so the scale developed by the researcher in its final form from 25 positions distributed to the five emotional intelligence dimensions.

**Description of the emotional intelligence test:** It is a substantive test which includes a number of diversified actual life situations and photographed expressions, and designed to measure the child's emotional intelligence, considering these photographed situations relevant to the children's mental, social, and age characteristics, also to be comprehensive and clear, the researcher presents the photos to the children then discuss with them what they see in the pictures starts by explaining some presenting events then reads to them the three existing solutions under the picture, for the child to start selecting what he sees relevant from his point of view, reaching determining the most important emotional intelligence skills can be developed in the children which previously presented.

**Method for correcting the scale:** The way for correcting the scale has been determined by formulating three choices at the end of each photographed situation for the child to select the appropriate answer. The researcher presents the photographed situations to the children, then explains that to the children, after reading each clause to the child clear oral reading in the slang language under the condition not to exit from the clause's meaning, and the child responds according to his selection, without pressure and encouraging the child on frankness to what he inclines to answers without fear or deceit showing accepting the child's answer in order not to changes it or hesitates, according to that the child answers on a three-point scale (yes, do not know & No). The clause yes takes the value (2), and value (1) in case I do not know, and finally takes the value (zero) in case of No. Emotional intelligence levels determine at levels: High, medium, and low.

**Validity of the scale:** Validity of the scale was confirmed through:

**Face validity-**The scale was presented in its initial form to a group of specialized arbiters to present their opinions and notes regarding the extent of the pictures representing the dimensions and extent of their suitability for the application to achieve the study's purposes, and in light of the committee's opinions, the relevant modification was made, for agreement percentages reached (80%), also modifying some situations and the pictures used in the test.

**Validity of the internal consistency** was calculated by finding the Pearson correlation

coefficient between the clause and the total degree of the dimension it belongs to, also its correlation with the total degree of the scale. Results in Table 1 show that all of the scale's clauses statistically correlate with the dimension they belong to and with the scale's total degree, and no one clause has been excluded, so the clauses of the emotional intelligence test scale were characterized by the validity of internal consistency making it valid to use on the main sample (Table 1).

Table 1. Pearson's Correlation Coefficient Between the degree of the statement and the degree of the dimension to which it belongs, and with the total degree of the scale

Dimension	Item number	Correlation with dimension score	Correlation with the total score of the scale
Self-awareness	1	0.505**	0.483**
	2	0.575**	0.423**
	3	0.462**	0.491**
	4	0.618**	0.601**
	5	0.523**	0.462**
Understanding emotions	6	0.394**	0.444**
	7	0.489**	0.512**
	8	0.581**	0.498**
	9	0.388**	0.390**
	10	0.587**	0.532**
Sympathy	11	0.408**	0.399**
	12	0.419**	0.384**
	13	0.394**	0.421**
	14	0.433**	0.465**
	15	0.409**	0.435**
Anger control skill	16	0.423**	0.572**
	17	0.502**	0.549**
	18	0.555**	0.597**
	19	0.420**	0.485**
	20	0.485**	0.503**
Social relations	21	0.404**	0.404**
	22	0.468**	0.465**
	23	0.586**	0.548**
	24	0.558**	0.521**
	25	0.469**	0.452**

Reliability of the Scale: Reliability was calculated through the repetition way on 32 children from the primary stage representing a class from outside the study sample, and reapplying the scale to the same sample after three weeks after correcting and observing the achieved degrees on the two tests using inter-class (correlation) to calculate the test's reliability, results showed that reliability value by the application and re-application way was (0.759) which is greater than 0.70, this indicates at the reliability of the scale in the two tests. Also, calculating the reliability of the dimensions and reliability of the scale as a whole using Cronbach's Alpha Equation. Results in Table 2 show that all reliability coefficients using Cronbach's Alpha way for the clauses the scale's dimensions and for all clauses higher than the limit value 0.70, this indicates that the emotional intelligence test's scale is characterized by reliability to be a reliable instrument for use on the main sample.

Table 2. Reliability Using Cronbach Alpha Equation for the Emotional Intelligence Test's Reliability

Dimension	The Clauses	Cronbach's Alpha reliability
Self-awareness	1-5	0.787
Emotions understanding	6-10	0.723
Empathy	11-15	0.805
Anger control	16-20	0.769
Social relations building	21-25	0.775



<b>Dimension</b>	<b>The Clauses</b>	<b>Cronbach's Alpha reliability</b>
Total	25 clauses	0.769

Problem-solving ability test: After the review of a sufficient number of studies which included scales for social and life problems solving among children (Naseem, 2001; Jody, 2001; Susan, 2002; Al-Kharabsheh, 2015; Mustafa, 200; Al-Dghaishem, 2000; Al-Takayneh, 2018; Al-Masri & Al-Fayes, 2015; Alsyof, 2009), the resent test has been built to develop the children's ability to solve the life problems. The scale consisted of 24 diversified photographed life situations, for the school's problem and playing from the child's actual environment in the kindergarten, it was designed to correspond with the child's abilities and characteristics at the kindergarten stage.

Method of implementing the post-test: Life problems solving skill scale was applied to the sample after applying the training program, and after applying for the emotional intelligence scale, to apply the scale the researcher distributed the scale's cards after recording data from every student on his paper, asking them to see the picture which contains a problem, the student was asked to think to find solutions for it, then explaining the first question to all students, giving them time to answer. After finishing with the experimental group the process was repeated with the control group to guarantee control of the variables entering into the scale application process, then the researcher corrected the sale by recording the degree which includes the child's answer, (correct answer) receives Number (1), wrong answer receives (zero), then collecting the total degrees for every child on the scale problems solving skills for the statistical process purposes and to extract the results. The test in its final form consisted of 24 cares within three dimensions of a problem determining skill (8 cards), comparing between available alternatives skill (8 cards), and selecting the best alternative skill (8 cards).

Validity of Problem-Solving Ability Test: The scale in its initial form was introduced to 15 arbiters from the Jordanian universities in psychology, childhood, and measurement 8 evaluation majors with experience and competence, they were asked to arbitrate the test regarding the pictures and the statements suitability and their correlation with the skills, relevance of the warding or not, the researcher has made the modifications required by the arbiters, percentage of agreement (80%) to the clauses is considered an indicator to their validity.

Reliability of the problem-solving Ability Test: The researcher has calculated the reliability of the scale another time through repetition way on a pioneering sample consisting of 32 male and female students from the kindergarten stage, problem-solving skills scale was applied to them twice with the time phase two weeks, the calculating the correlation coefficient between the test's two degrees using (interclass correlation) to calculate the reliability of the test. Results showed that the reliability value by the application and re-application way was (0.736) which is greater than 0.70, this indicates the reliability of the scale at the two tests. Also, calculating the reliability coefficient of the dimensions, and the scale's reliability coefficient as a whole using Kudner Richardson (21) reliability coefficient. Results in Table 3 show that all (KA21) reliability coefficients for the clauses of the scale's dimensions and for all clauses are higher than the limit value (0.70), this indicates that the problems solving scale is characterized by reliability making it a reliable instrument to be used for the main sample.

Table 3. Reliability by Kunder Richardson way for the Problems Solving Clauses

<b>Dimension</b>	<b>The Clause</b>	<b>Cronbach's Alpha Reliability</b>
Skill of determining the problem	1-5	0.766
Skill of comparison between the alternatives	6-10	0.815
Skill of testing the best alternative	11-15	0.793
Total	15 clauses	0.778

## Results

This section addresses the results reached for the purposes and hypotheses of the research and also deals with the conclusions, recommendations, and suggestions the researcher has reached.

Explaining the results relating to the null main hypotheses: There are no differences with statistical significance between the children's degrees means in the experimental group educated by using the symbolic modeling strategy and the control group educated in the normal way for the early childhood stage in the post-application of the test emotional intelligence development of the children after controlling their degrees on the pre-application as a companion variable, to test this hypothesis means and standard deviations were calculated for the performance of the study sample individuals on the degree of the post and pre-application degree of the skills and on the total degree for emotional intelligence development test according to the type of the group. Results in Table 4 show that there are explicit differences in means of the skills and the total degree for the test emotional intelligence skill development.

Table 4. Means and standard deviations for the test emotional intelligence development according to type of study group

The Skill	The Group	Pre-application		Post-application	
		Mean	S.D	Mean	S.D
Self-awareness	Experimental	6.11	1.81	7.86	1.30
	Control	5.83	1.63	6.23	1.54
Skill of emotions understanding	Experimental	6.32	1.73	7.98	1.75
	Control	6.06	1.59	6.34	1.61
Empathy skill	Experimental	6.97	1.71	8.25	1.96
	Control	6.02	1.63	6.35	1.43
Anger control skill	Experimental	6.65	1.76	8.25	1.79
	Control	5.98	1.68	6.29	1.51
Building social relation skill	Experimental	6.38	1.65	8.28	1.86
	Control	6.05	1.66	6.45	1.81
Total degree of the emotional intelligence development test	Experimental	32.43	3.91	40.62	4.00
	Control	29.95	3.12	31.66	3.87

To confirm that these differences in the mean with statistical significance between the two groups' individuals (MANCOVA) tests were used due to the presence of many dependent variables (post-application degrees), and the presence of accompanying variables (pre-application degrees) to isolate the impact of the accompanying variables, and attributes the difference between the two groups to the symbolic modeling strategy.

Table 5 shows that there are differences in significance at the significance level ( $\alpha < 0.05$ ) between the means for the study sample individuals' degrees on all the test skills and on the total degree of the emotional intelligence development test in the post-application according to the variable type of the group after considering their degrees on the same scale which was applied before starting the symbolic modeling strategy as accompanying variable since (F) value reached (25.29) for the variable type of the group, and this value with statistical ( $P < 0.001$ ), and the effect value  $P2(0.517)$ . This explains (51.7%) of the total variance in the post-test degree of the emotional intelligence development attributed to the type of the group, this value is considered with a great impact on the strategy according to "Cohen" classification.

Table 5. Results of MANCOVA analysis for performance of the study Sample's individuals on emotional intelligence development test

Source of variance	Skills of ability test to solve	Sum of squares	Freedom degree	Mean squares	(F) calculated value	Sig.
The group Wilks' Lambda = 0.483	self-awareness skill	58.126	1	58.126	36.385	<0.001

Source of variance	Skills of ability test to solve	Sum of squares	Freedom degree	Mean squares	(F) calculated value	Sig.
F= 25.29 P< 0.001 $\eta^2$ = 0.517						
	Emotions understating skill	69.483	1	69.483	33.420	<0.001
	Anger control skill	69.982	1	69.982	34.359	<0.001
	Empathy skill	55.932	1	56.932	26.40	<0.001
	Building social relations skill	113.984	1	113.984	39.085	<0.001
	Total degree for testing emotional intelligence development	1804.577	1	1804.577	127.998	<0.001
The Error	self-awareness skill	193.831	122	1.589		
	Emotions understanding skills	253.652	122	2.079		
	Empathy skill	258.418	122	2.119		
	Anger control skill	248.491	122	2.037		
	Skill in building social relations	355.792	122	2.916		
	Total degree for the test developing emotional intelligence	1720.009	122	14.098		
Total	Self-awareness skill	6800.0	130			
	Emotions understanding skill	7117.0	130			
	Empathy skill	7957.0	130			
	Anger control skill	7343.0	130			
	Skill of building social relations	7597.0	130			
	Total degree for the test developing the emotional intelligence	174366.0	130			

To know to which these differences attribute means and the modified standard errors were calculated between the study two groups of individuals on all the test skills and on the total degree for the test developing the emotional intelligence.

It is clear from the results in Table 6 that the differences in the modified means came in favor of the experimental group individuals which educated by using the symbolic modeling strategy, since the modified mean for the self-awareness skill reached (7.77), and emotions understanding skill (7.95), emotion skill (8.01), anger control skill (8.06) building social relations skill (8.37) and on the total degree of the test (40.17) which is higher with statistical significance ( $P<0.001$ ) from the modified means to control group individuals (Table 6).

Table 6. Modified means and standard deviations on the skills and the total degree for the test emotional intelligence development

The skill	The group	Post-Application	Standard error	Sig.
Self-awareness	Experiment	7.77	0.163	<0.001
	Control	6.32	0.163	<0.001
Emotion understanding	Experiment	7.95	0.186	<0.001
	Control	6.37	0.188	<0.001

The skill	The group	Post-Application	Standard error	Sig.
Anger control	Experiment	8.06	0.184	<0.001
	Control	6.48	0.184	<0.001
Building social relations	Experiment	6.48	0.184	<0.001
	Control	8.37	0.221	<0.001
Total degree for testing emotional intelligence development	Experiment	4.17	0.485	<0.001
	Control	32.11	0.485	<0.001

The previous results can be explained through the influence of the program introduced to the experimental group to develop their emotional intelligence, this means confirming the validity of the first hypothesis, over this achievement the children have made in the post-test indicates at effectiveness of the proposed program by using the symbolic modeling strategy in developing the emotional intelligence skills through introducing experiences, activities work to develop emotional intelligence skills, since using the training program based on the symbolic modeling strategy addresses the feelings and the emotions, and how to manage and control them and inducing the empathy appropriately, controlling anger and forming social relations (Ghosn, 1999). Also, the superiority of the experimental group attributes to the children's interaction with the introduced to them activities in diversified ways visual and acoustic, and to the use of the strategies, such as the voice, picture, movement, used means, fixed and moving pictures and the use of video, these means have strong influence touching the child's feelings and emotions leading to children's response and increasing their motivation to acquire skills relating to the emotional intelligence, in addition to the diverse ways for managing the sessions, including the discussions and dialogue with the children, making them more aware about their feelings and others' feelings, and how to express them and know the others' feelings, empathy, ability to control their anger, ability to build friendships, and communication with the others, all these sessions and discussions create skills and basic capabilities for the emotional intelligence. The superiority of the experimental group is also due to the long period of time in training the children leading to children in the experimental group acquiring emotional intelligence skills reflected on their behavior causing explicit change, since the children showed better abilities in expressing and employing the feelings and the abilities, respecting the other's feelings, and dealing with life problems, while the control group did not receive any experience.

The Second Basic Null Hypothesis: There are no differences with statistical significance between children's mean degrees in the experimental group educated by using (the symbolic modeling strategy) and the control group (educated by the traditional way) at the early childhood stage in the post-application of the ability test to solve life problems after controlling their degrees on the pre-application as an accompanying variable. To test these hypotheses, means and standard deviations were calculated regarding the performance of the study sample's individuals on post and pre-application degree of the skills and the total degree for ability test on life problems solving according to this type of the group. Results in Table 7 show the presence of apparent differences between the means to the dimensions and the total degree for the ability test to solve life problems.

Table 7. Means and standard deviations for ability test to solve the problems according to type of the group

The skill	The group	Pre-Application		Standard error	Sig.
		Mean	S.D	Mean	S.D
Problem determination skill	Experiment	2.69	0.95	3.89	0.71
	Control	2.48	1.07	2.52	0.90
Comparing between alternative skill	Experiment	2.71	1.11	3.83	0.82
	Control	2.35	1.09	2.43	0.68
Selecting the best alternative skill	Experiment	2.77	2.69	3.77	0.81
	Control	2.46	1.08	2.51	0.99
Total degree of ability	Experiment	8.17	1.95	11.49	1.52

The skill	The group	Pre-Application		Standard error	Sig.
		Mean	S.D	Mean	S.D
test to solve life problem	Control	7.33	2.02	67.4	1.55

To assure that these differences in the means with statistical significance between the two groups of individuals, (MANCOVA) analysis method was used due to the presence of a number of dependent variables (post-application degree) and the presence of accompanying variables (pre-application degrees) to isolate the impact of the accompanying variables and attributing the different between the symbolic modeling strategy. It is clear from the results in Table 8 that there are differences with statistical significance at the significance level ( $\alpha < 0.05$ ) between the means of the study sample's individuals degrees at all test degrees and at the total degree for the ability test to solve life problems in the post-application according to this type of the group. After considering their degrees on the same scale which was applied before the start of the symbolic modeling strategy as accompanying variables, since (F) value reached for the variable type of the group (80.187) and this value is with statistical significance ( $P < 0.001$ ), and the effective value of  $\eta^2$  (0.664), this explains that (66.4%) from the total variance in total degree of post ability test attribute to this type of the group, and this effect value is considered big for the strategy according to "Cohen" classification.

Table 8. Results of analysis the accompanying variable (MANCOVA) for the performance of the study sample's individuals on the ability test to solve life problems

Source of the variance	Skills of ability test to solve life problems post-application	Sum of squares	Freedom degree	Mean of squares	(F) calculated value	Sig.
The group Wilks' Lambda = 0.236 F = 80.187 P < 0.001 $\eta^2 = 0.664$	Problem determination skill	59.838	1	59.838	104.568	<0.001
	Comparing the alternatives skills	58.109	1	58.109	119.226	<0.001
	Selecting the best alternative skills	46.902	1	46.902	64.779	<0.001
	Total degree for the ability test to solve life problems	493.152	1	493.152	235.646	<0.001
The Error	Problem determination skill	70.755	124	0.571		
	Comparison between the alternatives skills	60.436	124	0.487		
	Selecting the best alternative skill	89.780	124	0.721		
	Total degree of the ability test to solve life problems	259.502	124	2.093		

To know in favor of what attribute these differences, modified means, and standard deviations were calculated between the individuals of the study's two groups on all test skills and on the total degree for the ability test to solve the problems.

It is clear from Table 9, that the differences came in favor of the experimental group educated by the symbolic modeling strategy since the mean for this skill reached (3.89) the comparison between the alternatives (3.81), and selecting the best alternative skill (3.75) and on the test total degree (11.45) which is higher with statistical significance ( $P < 0.001$ ) from the modified means of the control group, this indicates at the effectiveness of the symbolic modeling strategy in developing the children's ability to solve life-problems at the early childhood stage.

Table 9. Modified Means and Standard Deviations on Skills and the total Degree for the Ability Test on Solving life Problems

The skill	The group	Post-Application		
		Modified mean	Standard error	Statistical significance
Determination the problem	Experiment	3.89	0.94	<0.001
	Control	2.52	0.94	<0.001
Comparing between alternative	Experiment	3.81	0.087	<0.001
	Control	2.46	0.087	<0.001
Selecting the best alternative	Experiment	3.75	0.106	<0.001
	Control	2.53	0.106	<0.001
Total degree for the ability test on solving life problems	Experiment	11.54	0.180	<0.001
	Control	7.51	0.180	<0.001

The result can be explained that the children can be exposed to the training program became having high emotional intelligence levels, and become characterized by self-trust and the ability to direct and evaluate the self and cooperation with others, optimism, empathy, social balance, holding responsibility, openness, high motivation and determination to accomplish the works, the children became able to encounter life problems and able to solve them, stand still and control in organization the emotions, due to having mental flexibility making their relations and actions acceptable and organized reaching self-satisfaction about their life through their knowledge about organizing the emotions to achieve their goals in life. The reason for the variance in the rank might be attributed to the emotional knowledge dimension which is considered personal competency while the empathy dimension is considered social competence (Goleman, 1998). Also, this variance is explained in light of the mixed model in the developed emotional intelligence by Mustafa (2020) since he sees that the emotional knowledge dimension is one of the personality components in the model, while the empathy dimension is considered one of the components of the relationships between the individuals, and problem-solving still enable the individuals to confront the critical situations and gets out of the Dilma, then feeling self-efficacy, making him participate in others' activities to achieve life enjoyment and good psychological health, this is also is considered a basic element of the individuals' emotional intelligence. This result can be explained by launching from that social skills including emotional skills contribute to facilitating and establishing good relationships with others and managing interaction in a way to help approximation to them and know each other.

#### Significant of the Study

The present study represents the importance of the segment it is targeting which is the early childhood stage of what represents a critical stage in the individual's life, in addition to addressing one of the most important goals and requirements of growth at the early childhood stage which is the emotional side.

The most prominent thing the study derives is its importance from using symbolic modeling to develop emotional intelligence skills and the results of learning new cognitive and emotional behaviors forming an objective all countries seek to achieve.

Importance to experience modern teaching strategies to assure their effectiveness including the symbolic modeling strategy in developing emotional intelligence and its influence on children's life problems solving.

### Recommendations

The necessity for engaging the kindergarten's female teachers in developmental courses in how to prepare and use this strategy.

Including emotional intelligence topics in the core of the studying curriculum for the preschool stage, in order not to leave emotional learning and problems solving skills solely to



chance or randomly, rather teaching the students basics of dealing with different feelings in the human, such as anger to be more effective and feasible, to teach the children positively solve the problems.

Developing the preparation of the kindergarten female teacher during the studying years to be qualified and a model presenting the emotional intelligence of the kindergarten child.

Conducting studies focusing on the effectiveness of the family role in training their children on how to have emotional intelligence and problems solving skills.

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