

Effectiveness of Queen's Parenting Program on Psychological Well-Being of Pre-School Children with Neuropsychological/Developmental Learning Disabilities

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Abstract

The present study aimed to examine the effectiveness of the Queen's Parenting Program on psychological well-being of pre-school children with neuropsychological/developmental learning disability (NDLD). The population included all pre-school children with (NDLD). To conduct the research, using the stratified random sampling, 40 children with inclusion criteria were selected and then randomly put in the experimental and control groups. To collect data, the Wechsler Pre-school and primary Scale Intelligence (WPPSI) and Behavior Rating Inventory for Executive Function-Pre-school (BREIEF-P) for determining the inclusion criteria and the Ages and Stages Questionnaire (ASQ) for measuring psychological well-being were used. The results of analyzing data using ANCOVA and MANOVA indicated that psychological wellbeing and its dimensions improved significantly in children of the experimental group in comparison with the control group ($p < 0.05$). Therefore, Queen's program is effective on the psychological wellbeing of children with pre-school children with neuropsychological/developmental learning disability.

Keywords: neuropsychological/development learning disability, psychological well-being, Queen's Parenting Training Program

1. Introduction

Children's psychological development is the most important determiner of health in lifetime and pre-school years is considered as a very important opportunity for developing and preventing developmental disorders (Anderson & Reidi, 2012). In this period of time, children are influenced by their surrounding environments and particularly by their parents. These environments are influenced by socioeconomic statuses, parents' educational level, and educational centers such as kindergartens and pre-school institutes. Therefore, a lot of state and private institutes have developed programs for reinforcing and enhancing emotional and social development and academic preparedness for pre-school children (Snow and van Hemel, 2008). Pre-school period as a sensitive one which is very important in development in all dimensions and ages of primary learning which is along with brain flexibility, learning experience and providing environmental stimuli (Malekpour, 2013), and experiences formally or informally, have a lot of roles in enhancing mental growth and preventing future problems (Bernier, Carlson & Whipple, 2001). Physical, cognitive, linguistic, social, and emotional health of children is important basis of academic preparedness and health in next stages of their lives. In this line, comprehensive intervention programs in the field of children's development are the most important resources for enhancing children

psychological wellbeing (Schiller, 2009).

Children's psychological wellbeing is among the components which have effects on learning their s, attitudes and behaviors and are effective on children's learning and development (Huebner, Suldo & Gilman, 2006). Psychological wellbeing is a kind of cognitive evaluation process by which an individual evaluates mentally his life quality based on particular criteria (Sheldon & King, 2001). Psychological wellbeing in children are called by the names of wellbeing, social and emotional development, and psychological health and means the ability of children in guiding their thoughts, emotions, and positive behaviors which cause them to enjoy their lives, keep positive relations, and work for their aims (Australian Institute of Health and Welfare, 2012).

Development of social-emotional abilities is very important during childhood and particularly in pre-school years. Most parents and instructors or even pre-school programs emphasize the enhancement of academic skills and increase in intelligence and neglect social and emotional learning. Children, socially and emotionally developed have better performance in schools, are more self-confident, have better treatment with others, and are more persistent to do challenging tasks (Pahl & Barrett, 2007). Low-level psychological wellbeing is along with negative catastrophic consequences such as externalizing problems (such as depression and anxiety) and academic challenges. Reversely, high-level satisfaction with life is a psychological ability which actively enhance resiliency and psychological wellbeing (Hobner et al. 2006). Pre-school children emotionally and socially developed in academic and nonacademic situations have better performances. Social and emotional adequacy is the protecting factor for pre-school children and acts as a buffer against stresses and prevents the formation of emotional and behavioral challenges in next stages of life (Pahl & Barrett, 2007). Attaining social and emotional adequacy is one of the most important tasks in pre-school periods which predicts psychological and scholastic adaptability in next periods in life (Denham, 2006, as cited in Mashford-Scott, Church & Tayler, 2012).

According to Mashford et al. (2012), the interest in children psychological wellbeing has increasingly more than before and now, this issue can be observed in development of national and international documents regarding life quality (Adela, Mihaelab, Adriana & Monica, 2013). Most researches related to psychological wellbeing have been conducted on adults, but recently, this concept has been started to be investigated on children. Research indicates that most children and adolescents usually are satisfied with their lives and have high psychological wellbeing, but some of them suffer from problems (Hobner et al. 2006). The study done by Granholm & Olszewski (2012) indicates that 60% of pre-school children entering primary schools have the quality of cognitive skills for academic achievement, but 40% of pre-school children achieved social and emotional skills required for being successful in pre-school periods in the beginning of entering schools.

In recent decades, a lot of studies have been conducted on the role of cognitive abilities as a variable moderated by social and emotional adequacy in predicting academic achievement, and consequently, in a lot of countries, these abilities are considered in pre-school and primary school curricula (Denham, 2006 as cited in Mashford et al., 2012). The powerful sense of psychological wellbeing enables children to be positively and confidently involved with their environments and consequently they can utilize learning opportunities in the best way. In fact, psychological wellbeing has a basic role in learning and learning has roles in psychological wellbeing. Psychological wellbeing has positive correlations with involvement and participation in learning and development of preparedness for learning behaviors (Huebner et al., 2006), positive relations with peers and teachers and effective treatment with changes of childhood and adolescence (Mashford et al., 2012).

Social and emotional adequacy is a key component in preventive programs to reduce behavioral problems in children. Emotional adequacy refers to experiencing emotions in a mode which is suitable for interacting and communicating step-by-step over time (Denham, 2006, as cited in Mashford et al., 2012). This adequacy refers to a set of skills (such as understanding and representing emotions and emotional regulation). For compatibility with social contexts, pre-school children needs to understand, interpret, and label emotions in themselves and others to be able to follow social norms (Mashford et al., 2012).

The quality of parents' relations and attachment s and parenting are factors affecting the degree of social and emotional development. In addition, it is indicated that social and emotional development in children depends significantly to their parents' social and emotions (Granholm & Olszewski, 2012). Parents have the most important roles in enhancing social-emotional development in children and their psychological wellbeing can be raised by training them. Social-emotional skills are effective on academic performance in schools and job successfulness; it can be changed easier than IQ (Thom, 2010). Hackman (2000, as cited in Thom, 2010), from an economic point of view, states that spending one dollar for a child compared to spending one dollar for an old person, is a kind of return of human capital. He believes that investing on children can be conducted by

interventions which enhance social-emotional adequacy in their primes and particularly in pre-school periods. Pre-school periods of life is a very important life in the formation of skills (Thom, 2010). Research indicates that about 20% of pre-school children in general suffers from low to high levels of emotional and behavioral problems. These problems intervene in acquiring proper skills in this age and negatively influence cognitive and emotional development and increase the probability of occurrence of more severe problems in the future (Granholm & Olszewski, 2012). Evidence indicates that these components can be enhanced and their representations can be facilitated via intervention activities. Parent's training, individual and group exercises, performing programs of development enhancement (such as the beginning program), reinforcing family values and systems, local security, enhancement of accessing services, fulfilling basic requirements, improvement of economic status, etc. are among methods of wellbeing enhancement.

On the other hand, developmental problems in pre-school children are increasing and in recent decade, a lot of studies have paid attention to them. One of these problems can be neuropsychological/developmental learning disabilities (Gartland & Strosnider, 2007). NDL D include that group of prerequisite skills which children require for achieving and learning new issues such as academic issues (kirk et al., 2006). Experts believe that (NDLD) refers to the problems in prerequisite skills in pre-school periods. In addition, these disabilities are preludes to academic learning disabilities which will occur later (Lerner, 2003). Children with normal developmental skills easily can access academic prerequisite skills, but developmental and neuropsychological deviations may be introduction to learning disabilities and these children need early interventions to acquire prerequisite skills for successfulness in future academic learning (Abedi, 1997). Therefore, it is necessary that these problems be early diagnosed in pre-school children and early intervention programs be applied for increasing these skills (Sidman, 2006). So far, a lot of intervention programs have been provided for empowering parents of children aged below 6 years old among which one can refer to Executive Skills Training (Lisa et al. 2009; Bierman, 2010), Parenting Skills Training (Hajebi et al., 2005), and Multiple Intelligences Training (Ghalijaber, 2010). Kirk et al. (2006) believe that early interventions should be in relation with children, their parents, families, and a more expansive network of the society. In the agenda of "The New York State Early Intervention Program (EIP)" (2005), an early intervention program is a program concentrated on family which provide evaluations and services for children which suffer from development delay from birth to the age of 3 years old or are at high risks of delays and for their families. Therefore, if children suffering from delays in their real or potential development should be identified and evaluated in order that their physical and mental development can be maximized (Faramarzi, 2006).

Queen's Parenting Training Program is an educational and interactional program among between mothers and children for increasing psychological wellbeing and reinforcing cognitive abilities with the aim of increasing achievement in schools for pre-school children. In this program, modelling, responding, and tutoring as well as other behavioral techniques are used for enhancing cognitive and emotional development. This program, with emphasis on pre-school periods as the most important and vital periods of development, believes that in the first years of life, necessities of cognitive and emotional should be founded (Queen, 2010). Queen's program is based on reinforcing measured abilities in intelligence tests which include 7 skills of conceptual-reception language, knowledge-reception, memory, mathematics, visual-spatial reasoning, cognitive skills, and sensorimotor skills. This program, in addition to these seven abilities, includes two complementary skills of processing speed and control. Furthermore, according to Queen (2010), children, in addition to the mentioned skills which are required for achievement in intelligence tests and academic achievement, should access five personality traits including curiosity, pursuing one's interests, perseverance, Failure tolerance, and self-control which are necessary for achievement in life. Therefore, Queen teaches skills in developing and designing his own program for training these traits in children to parents (Queen, 2010). Research indicates that parent-centered programs such as Queen's program cause the reduction in anxiety, stress, depression, and increase in sympathy in parents and this increase and improvement in parents' psychological wellbeing have positive relationship with the improvement in children's psychological wellbeing (Havighurst et al. 2004). Although recently a lot of countries have developed programs for the development of social and emotional skills in pre-school children, in Iran, pre-school educational system is mostly depend on traditional training whose dominant aspect is the reinforcement of cognitive abilities. Therefore, the present study is to answer this question that whether Queen's Parenting Training Program is effective on psychological well-being of pre-school children with NDL D?

2. Method

The present study was an experimental design. The research was conducted by two experimental and control groups and in two pretest-posttest stages. The population included all 4 to 5 year old children with neuropsychological disabilities in the City of Isfahan, who were registered in the academic year 2014-2015 in

pre-school centers. In the present study, to select subjects, the stratified random sampling method was used in such a way that firstly from among 218 pre-schools in the 14 areas of education of Isfahan, 4 areas were selected and from these four regions, 20 pre-schools were randomly selected. Then, the questionnaire of rating executive functions for pre-school children were distributed among the parents of 700 children. Then, the scores of these questionnaire were changed into standard t-scores and children whose scores in this questionnaire were as one SD higher than the mean scores (i.e. higher than 60) were identified; then from among this group, 40 subjects were randomly selected and were divided into experimental and control groups. In the next stage, a briefing was held for parents about the research design and intervention programs; in this session, all questions of parents were answered. In addition, parents were explained that every time and in each stage of the process of the research, their children and they could leave the experiment if they wanted. Then, proofs of parental consent for participating in the research were distributed among them. After receiving proofs of parental consent, for differential diagnosis of neuropsychological learning from the shortcomings of intelligence, children were tested by the Wechsler Pre-school and primary Scale Intelligence (WPPSI) and their IQ were extracted. It should be noted that the inclusion criteria were as follows:

Have neuropsychological /developmental learning disability based on scores of the questionnaire of BRIEF-P for pre-school children- parents' form (one SD higher than the mean scores)

Achieve a moderate to high score (i.e.85) in WPPSI

Being 4 years to 5 years and 11 months old

Physical health (regarding the health ID of children in pre-schools, their physical-movement, visual and auditory disabilities were investigated).

Then, nine 90 minute training sessions were held in pre-school centers. The presented exercises and trainings were summarized in table 1. At the end of session, regarding the fact that some subjects were absent for more than three sessions, tended to leave the experiment, or some questionnaires had not been answered appropriately, some of the subjects were excluded from the groups and at last, the scores of 18 subjects of the experimental group and 15 subjects of the control group were analyzed. The collected data were analyzed using descriptive statistics including frequency, percentage, mean scores, and SD as well as inferential statistics such as ANCOVA and MANOVA by SPSS-19.

Table 1. Contents of training sessions

Sessions	Content
First	Introducing session and creating familiarity and friendly relations between members and the psychologist Stating regulations dominating sessions, familiarity of members with the significance of the design and objectives of Queen's program Brief introduction of 7 abilities required in Queen's program and stating their significance in children's academic achievement
Second	Familiarity with the concept of linguistic skills in children academic achievement Stating the training methods which contribute to reinforcing linguistic skills Introducing games and activities to parents for reinforcing children linguistic skills at home
Third	Dialogue with parents about discussions and tasks of the previous session Familiarity with the concept of knowledge/reception (comprehension) in children's academic achievement Stating the educational methods which contributes to the reinforcement of comprehension skills in children. Introducing games and activities to parents for reinforcing children's comprehension skills at home
Fourth	Dialogue with parents about discussions and tasks of the previous session Familiarity with the memory skills in children's academic achievement Stating the educational methods which contributes to the reinforcement of comprehension skills in children. Introducing games and activities to parents for reinforcing children's comprehension skills at home
Fifth	Familiarity with mathematical skills in children's academic achievement Stating educational methods which contributes to reinforcement of mathematical talent Introducing games and activities to parents for reinforcing children's mathematical talent skills at home
Sixth	Dialogue with parents about discussions and tasks of the previous session Familiarity with the visual-spatial reasoning in children's academic achievement Stating the educational methods which contributes to the reinforcement of the visual-spatial reasoning in children. Introducing games and activities to parents for reinforcing children's the visual-spatial reasoning at home

Seventh	Dialogue with parents about discussions and tasks of the previous session Familiarity with fine motor skills in children's academic achievement Stating the educational methods which contributes to the reinforcement of Fine motor skills in children. Introducing games and activities to parents for reinforcing children's Fine motor skills at home
Eighth	Dialogue with parents about discussions and tasks of the previous session Familiarity with cognitive skills in children's academic achievement Stating the educational methods which contributes to the reinforcement of cognitive skills in children. Introducing games and activities to parents for reinforcing children's cognitive skills at home
Ninth	Familiarity with five personality traits for success in children's future life (curiosity, pursuing one's interests, perseverance, Failure tolerance, and self-control) Stating educational methods which contributes to reinforcing these five traits in children Reviewing activities done in the 8 previous sessions and discussing their comments and ideas about the program. Finally, concluding the discussed issues as well as acknowledging for cooperation and presence of parent sin session, then distributing tests

2.1 Instrumentation

Instruments used in the present study are as follows:

A. The Wechsler Pre-school and primary Intelligence Scale for Children (WPPSI) developed by Wechsler (1967) for children aged at 4 to 6/5 years old. The WPPSI provides the measurement of general intelligence and full scales including verbal comprehension, Visual Spatial, Fluid Reasoning, working memory, and processing speed. This test was adapted and normalized on an Iranian sample of children by Abedi. The validity of sub-tests in the test-retest was reported in the range of 0.65 to 0.95 and the split-half validity coefficient in the range of 0.71 to 0.86. In investigating the concurrent validity of this scale with the WPPSI, the correlation coefficient of verbal, practical, and total IQs of the two scales are 0.84, 0.74, and 0.85 respectively (Shahim, Harunrashidi, 2008). In the present study, the WPPSI was used for measuring children's IQs.

Behavior Rating Inventory of Executive Function—Pre-school (BRIEF-P) of Students: this questionnaire was developed by Gioia et al. (2002) in two teacher's and parent's forms. It is one of the most valid scales for measuring and screening executive functions in pre-school students. It has 63 items for children aged at 2 to 5 years and 11 months old, and measures five domains of executive functions: inhibition (11 items), shift (10 items), emotional control (10 items), working memory (17 items), planning and organization (10 items). The time required to complete this questionnaire is 10 to 15 minutes, and the minimum literacy level of is to hold a degree in elementary schools. Parents and teachers, in answering the items related to children should tick the items ranged from mostly (3), sometimes (2), and never (1). These indicators were calculated and indicated in the form of t-scores, percentage, and confidence interval of 90% for indicators. Gioia et al. (2002) reported Cronbach's alpha coefficients for scales in the parents' study as follows: inhibition (0.90), shift (0.85), emotional control (0.86), working memory (0.88), planning and organization (0.80), total indicator (0.95). These coefficients for teachers are as follows: inhibition (0.94), shift (0.90), emotional control (0.91), working memory (0.94), planning and organization (0.97), total indicator (0.97). In the present study, validity and reliability of the inventory for parents were calculated.

Table 2. Chornbach's alpha coefficients for each of the subscales of BRIEF-P in terms of gender and in general

Subscale	Chronbach's alpha		
	Females	Males	Total
Inhibition	0.82	0.82	0.82
Shift	0.71	0.75	0.73
Emotional control	0.80	0.79	0.79
Working memory	0.88	0.89	0.89
Planning	0.77	0.79	0.78
Total score	0.93	0.93	0.93

3. Results

Most of children participating in the present study in experimental group (66.6%) and control group (73.3%) are 5 years old, and most of them were male both in the experimental group (83.3%) and in the control group (60.0%). Most of mother in both groups were housewives and most of fathers in the experimental group (55.6%) had state jobs and in the control group (53.3%) were self-employed. Regarding the significance of the IQ in individuals' performance in investigated tests and to be sure of the issue that there is no significant difference between groups in terms of IQ, the significance of the difference in IQ levels of the two groups was investigated. Regarding the fact that the calculated F-value have the significance level lower than 0.05, ($p > 0.05$ and $F(1, 31) = 0.02$), it can be said that there is no significant difference between the two groups in terms of IQ.

Table 3. Descriptive indicators of psychological wellbeing in the pretest and posttest in terms of different groups

Variable	Pre-Post Test	SD ± Mean	
		Control group	Queen's group
Self-regulation	Pretest	5.16±16.33	6.05±14.72
	Posttest	6.77±15.67	4.50±5.56
Cooperation	Pretest	4.57±9.33	5.57±9.17
	Posttest	6.11±8.68	3.76±3.61
Relationship	Pretest	5.27±8.00	5.49±7.50
	Posttest	6.51±7.67	4.71±3.89
Adaptive behavior	Pretest	9.61±27.33	9.48±26.11
	Posttest	9.78±28.00	8.82±19.72
Autonomy	Pretest	5.16±15.33	5.14±13.33
	Posttest	4.95±14.33	6.37±8.61
Emotion	Pretest	4.03±21.00	9.82±21.39
	Posttest	20.33±7.66	7.56±14.72
Interactions with others	Pretest	7.51±22.00	7.82±21.39
	Posttest	5.62±22.67	7.52±12.50
Total score	Pretest	22.90±119.33	28.53±113.61
	Posttest	21.394±117.33	22.99±68.61

In the Ages and Stages Questionnaire, the higher score a participant obtains, the more the problems are. As observed in table 3, the mean total scores and also the scores of psychological wellbeing dimensions in most dimensions of the experimental group (Queen's program) have been decreased in the posttest compared in the pretest, while there has been no significant differences in the control group. The results of the ANCOVA for comparing the mean total scores of psychological wellbeing between the experimental and control group are reported as follows:

Table 4. The results of ANCOVA of comparing scores of psychological wellbeing in experimental (Queen) and control groups

Source of variation	Sum of squares	Df	Mean squares	F	Sig.	Partial Eta	Statistical power
Pretest	8588.83	1	8588.83	36.06	0.001	0.54	1.00
Group	16418.47	1	16418.47	68.93	0.001	0.69	1.00
Error	7144.77	30	238.15	--	--	--	--
The total modified score	35156.06	32	--	--	--	--	--

$p < 0.05$

As observed in table 4, after deleting the effect of the pretest of F-score in the ANCOVA, the comparison of the experimental (Queen's program) and control groups in the total scores of psychological wellbeing is significant at the significance level 0.05 ($F(1, 30) = 68.93$ and $p < 0.05$). Therefore, according to the results, there is a

significant difference between children psychological wellbeing in pre-school children in the Queen's program and control groups, and it can be concluded that the Queen's Training Program is effective o the improvement of the psychological wellbeing of pre-school children with neuropsychological learning disabilities. In addition, the eta-squared coefficient indicates that 69% of the variations of psychological wellbeing can be explained by group membership. In addition, the statistical power of the test is equal 1 which indicates the sufficiency of sample size and the power of the test in measuring group differences. Below, the results of MANOVA for comparing the experimental and control groups in each of the dimensions of psychological wellbeing are reported:

Table 5. The results of MANOVA for comparing the total scores of the dimensions of psychological wellbeing in the two experimental and control groups

Effect	Multivariate tests	Value	F-score	Sig.	Partial Eta	Statistical power
Executive functions	Pillai's trace	0.80	10.76	0.001	0.80	1.00
	Wilks' Lambda	0.19	10.76	0.001	0.80	1.00
	Hotelling's trace	4.18	10.76	0.001	0.80	1.00
	Roy's greatest root	4.18	10.76	0.001	0.80	1.00

$p < 0.05$

The results of table 5 indicate that after excluding the pretest effect in MANOVA, there is a significant effect for the group factor. This effect indicates that at least in one of the dimensions of psychological wellbeing, there is a significant difference between the two groups (Wilks' Lambda=0.19, $p < 0.05$, and $F = 10.76$). Since the multivariate effect is statistically significant, the separate unilabiate F-test can be used for each dimension of psychological wellbeing. The results of this test is reported in table 6:

Table 6. The results of ANCOVA for comparing the total scores of the dimensions of psychological wellbeing in the two experimental and control groups

Source of variation	Sum of squares	df	Mean of squares	F	Sig.	Partial Eta	statistical power
Self-regulation	538.81	1	538.81	24.80	0.001	0.50	0.99
Cooperation	142.91	1	142.91	4.91	0.03	0.17	0.56
Relationship	72.13	1	72.13	2.59	0.12	0.09	0.34
Adaptive behavior	282.21	1	282.21	7.73	0/01	0.24	0.76
Autonomy	157.14	1	157.14	8.02	0.009	0.25	0.77
Emotion	202.31	1	202.31	8.31	0.008	0.25	0.79
Interaction	690.01	1	690.01	35.20	0.001	0.59	1.00

$P < 0.05$

As observed in table 6, after deleting the effect of the pretest of F-score in the ANCOVA, the difference of groups in all dimensions of self-regulation, cooperation, adaptive behavior, autonomy, emotion, and interaction is significant at the significance level 0.05 ($p < 0.05$). Therefore, according to the results, it can be concluded that Queen's Training Program is effective o the improvement of self-regulation, cooperation, adaptive behavior, autonomy, emotion, and interaction in pre-school children with neuropsychological learning disabilities. No significant difference was observed between the mean scores of relationship in the two experiential and control groups ($p < 0.05$).

4. Discussion

Pre-school period is very sensitive for physical, motor, cognitive, social, and emotional-behavioral development for children because this period is the basis of next stages of development for them. In this period, children are influenced by their surrounding environments; therefore, a lot of state and private institutions have developed programs for reinforcing and enhancing different developmental aspects and academic preparedness for pre-school students (Snow & van Hammel, 2008). The present study was conducted to investigate the effect of the Queen's Parenting Training Program on psychological well-being of pre-school children with neuropsychological/developmental learning disabilities. The results obtained from comparing psychological

wellbeing between the experimental and control group after deleting the effect of pretest (table 4) indicated that there is a significant difference between the psychological wellbeing of pre-school children of the two experimental and control groups ($F(1, 30) = 68.93$ and $p < 0.05$) and it can be concluded that Queen's program is effective on the improvement of psychological wellbeing of children with neuropsychological/developmental learning disabilities. In addition, the results of MANOVA for each dimension of psychological wellbeing (table 6) indicated that the difference of groups in all dimensions of self-regulation, cooperation, adaptive behavior, autonomy, emotion, and interaction is significant at the significance level 0.05 ($p < 0.05$). Therefore, it can be concluded that Queen's Training Program is effective on the improvement of self-regulation, cooperation, adaptive behavior, autonomy, emotion, and interaction in pre-school children with neuropsychological learning disabilities. No significant difference was observed between the mean scores of relationship in the two experimental and control groups ($p > 0.05$).

The results of the present study are consistent with the results of Miller et al. (2012), Halberstadt (1991), Aksoy & Baran (2012), Pickens (2004), Havighurst et al. (2004), Coie & Dodge (1998) Eisenberg, Cumberland & Spinrad (1998), Denham et al. (2000), Sanders (1996), Bernier, Carlson & Whipple (2010), and Liew & McTigue (2010) which all confirmed the capability of increasing psychological wellbeing and psychological health via parental interventions. Havighurst et al. (2004), by holding six sessions of training for parents of children aged at 4 and 5 years old indicated that these trainings cause the reduction of emotional negativism and behavioral problems and increase in happiness in children. In addition, Oskoi and Baran (2012), by training family-based social skills, reported that these parent-centered programs have significant effects on social behaviors and psychological wellbeing of children. In addition, Pickens (2009) conducted the program of supporting social and emotional development including training mothers for how to apply activities and how to encourage children for expressing their ideas, principled games, avoidance from discrepancies, controlling anger, and establishment of positive interactions with others. The results indicated that the effects of these programs on these skills are significant and cause the promotion of children's psychological wellbeing.

In explaining these results, it can be said that achieving the ability to regulate emotions and its dimensions such as autonomy, cooperation, relationship with others, and self-regulation are key skills rooted in social and behavioral interactions particularly with parents in childhood and are main indicators of predicting psychological wellbeing and happiness (Boyed et al. 2005). Parent-centered interventions similar to Queen's program cause stable behaviors, less punishment, parents' responsibilities and encouragement to explore, training basic skills, encouragement of advancement, exercising and expanding new skills, rich relationship and behavioral discipline and these characteristics cause the increase in children's development in different aspects (Ramey & Ramey, 2004). Queen's program teaches parents directly how to behave with children at home. This program includes: a) Proper information about age (both in written and visual forms) related to children's development and parents' adequacy, b) Proper resources of age including verbal dialogues, booklets and c) Supporting parents in relations with parenting and observing children's development and responding to parents' and children's needs. In his program the information presented to parents causes the changes in attitudes, knowledge, and skills in them in line with enhancing parental behaviors and this facilitates and enhances cognitive and emotional development in children (Miller et al. 2012).

Furthermore, some researchers indicated that if the aim of parent-centered interventions is to enhance children's psychological wellbeing, then the concentration of these interventions should be on emotional interactions between parents and children. In fact, active, involving, responsive relationships and mothers' sensitivity are main predictors of brain development and social behavior as well as psychological wellbeing (Havighurst et al. 2004). Therefore, regarding the results of the mentioned research, Queen's parent-centered program with training skills of how to passionate, cognitive motivation, express emotions, pay attention to interests and satisfy children's needs, cooperate in children's everyday activities, ask and answer, pay attention to children's attitudes, encourage with the aim of more hardworking, and neglect failures, play and train simple issues and how to structure environment to parents can be effective on the scores of children's psychological wellbeing.

In this line, research indicated that three certain parenting styles are correlated with children's psychological state and particularly their psychological wellbeing. These three styles are a). Giving samples, b) conditional answers, and c) ability to tutoring (Halberstadt, 1991). The children of parents who use tutoring have higher cognitive abilities, more powerful social skills, more acceptable social behaviors, and less physical diseases (Eisenberg, 1998). Therefore, intervention programs such as Queen's program are effective on changes in behaviors and attitudes of mothers in their interactive and communication methods. In addition, they have significant effects on enhancing their psychological development (Sanders, 1996). Further, components of paying with children, answering their questions, reinforcing their linguistic skills, enhancing their skills of

problems solving, expanding their vocabulary treasury, etc. cause the increase in their cognitive and emotional development and its feedbacks cause reinforcing and increasing mothers' self-esteem for enriching the environment of homes, and then giving feedbacks this cycle results in increasing enhancement in cognitive and emotional development as well as psychological wellbeing of children (Miller et al. 2012).

The overall results indicate that Queen's program has the potential to increase on Psychological well-Being of Pre-school Children with Neuropsychological/Developmental Learning Disabilities. Preliminary evidence indicates that Pre-school Children with NDLN may benefit from programs that make changes in behaviors and attitudes of mothers in their interactive and communication methods. In addition, regarding the effectiveness of Queen's program on the improvement of psychological wellbeing of children with NDLN, using this program by parents, tutors, psychologists and psychiatrists is highly recommended.

Also, There are two limitations to the conclusions of this study. First, although in the present study, to sampling and selecting children into the experimental and control groups were randomly, there were not using follow-up tests in the research. Principally, to evaluate the long effect of interventions, the existence of follow-up tests seems necessary. Therefore, to investigate the strengths and weaknesses as well as to evaluate the continuity of improvement in children's psychological wellbeing, follow-up tests are recommended. Second, in the present study, evaluation of children psychological wellbeing was conducted via questionnaires completed by parents; therefore, it is suggested that researches be conducted in which direct evaluation of children is considered.

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