

**COMPARATIVE STUDY OF PSYCHOLOGICAL HEALTH STATUS, EMOTIONS
AND COGNITIVE TRANSFORMATION OF CHILDREN HELD IN FOSTER
CENTERS ASSOCIATED WITH YAZD PROVINCE'S WELFARE ORGANIZATION
WITH THOSE OF THE ORDINARY CHILDREN**

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ABSTRACT

The importance of paying attention to children's psychological health, in general, and the children under the coverage of the Welfare Organization, in specific, is considered inevitable as one of the determinants of the society's and the forthcoming generations' general health. Thus, the present study tries investigating and comparing the psychological health status, emotions and cognitive transformation of the children held in foster centers associated with Yazd Province's Welfare Organization with those of the ordinary children. The study population included 122 foster family and normal family children. The data related to the psychological health were compiled using GHQ-28 questionnaire and the data pertinent to the emotions and cognitive transformation of the children were collected, respectively, through analyzing their paintings and Royer's Draw-A-Person (DAP) test. All the gathered data were subjected to analysis in SPSS software. The study results indicated that the psychological health and emotions are significantly different in children raised by foster families and normal families ($P=0.001&0.002$); but, no significant difference was document between the children raised by foster families and those raised in normal families in terms of the cognitive transformation level.

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Therefore, it can be stated that the sole taking care of the children from damaged families and families with bad parents in round-the-clock centers associated with Welfare Organization does not lead to the improvement of these children's emotional and psychological health statuses. The enhancement of the wellbeing and health of these children entails the devising of more precise and more comprehensive plans by the welfare organization.

Keywords: psychological health, emotion, cognitive transformation, children from foster families

INTRODUCTION

Children are the most vulnerable group that needs the support of the other social institutions when their family system is found inflicted with damage and crisis. It is sometimes the case that their lives are threatened when there are no such supportive individuals, groups or organizations. Based on UNICEF reports, 19% of the world's children have lost one or two of their parents. The figure is 24% for the poor classes as compared to 5% for the affluent and wealthy classes and this is well-indicative of a close relationship between poverty and orphanhood (UNICEF, 2011). Children who are kept in foster care centers are usually the ones who are assigned to these centers due to such reasons as malfunctioning of the family, misbehavior, apathy, physical molestation, drug abuse of the parents, indigence, being single-parented, dereliction, parent's death or divorce and a large percentage of them belongs to the lower social-economical classes of the society. In fact, it can be said that these children are freed from the dangerous environments of their parents' negligence to simultaneously face other problems upon entering these centers. The entry to these foster care systems make the children encountered with crucial psychological challenges. The institutionalized children have to adapt themselves to the heart-rending incidents that have made them dwell these centers; they have to cope with their temporary or permanent losses of their parents, their life environments, schools, friends, siblings and so forth. Accepting the coverage by these foster families is like a huge revolution in the lives of these children. Living in groups, the insufficiency of the caretakers and the foster children and lower accountability to their affective, social and emotional needs, on the one hand, and experiencing a stressful life before and after entering these centers altogether intensify the problems and issues. The human workforce working in these centers is mostly of the same gender type (single-gender environment); male caretakers work in boys' centers and female caretakers work in girls' centers. Therefore, these children are deprived of their possible opportunities for developing relationships with the adults of both genders and also of the patterns required for

identification. The instruction method and the sociability of the children held in foster family centers are dramatically different. Frequent displacements and changes of any type disrupt any sort of learning. Therefore, either these children should be prevented from entering these centers or their fostering conditions should be made healthier, more stable and more sustainable. This is while the statistics are signifying a daily increase in the number of children supported by the round-the-clock boarding centers under the coverage of Welfare Organization. The number of these children has been informally estimated to be about ten thousand children. Based on 2015's journal of statistics, a total of 147 children with no parents were being kept in foster care centers associated with Yazd Province's Welfare Organization. The number is reflective of a 10% increase and all of the cases were found having no effective parent or guardian (Iran's Center of Statistics, 2015).

The Welfare Organization in Iran is responsible for wellbeing and welfare of the children and families and wherever the families are found falling short of properly fulfilling their duties, it is the foresaid organization that does not hesitate to assist them. The foster care unit of the Welfare Organization is recognized for its delivery of psychological and supportive services, social and legal caretaking and round-the-clock maintaining of the children who have no parents or have bad parents. Of course, from the perspective of Fisher and Gillian (2012), keeping the children who are per se a source of behavioral and psychological problems and issues all in one place cannot be an appropriate intervention for supporting them. From their viewpoints, the antisocial behaviors of the children cause the synergy of negative behaviors amongst the children residing the foster care families or centers. On the other hand, many studies have shown that long-term residence in round-the-clock centers causes these children doubled problems (Vuriya, 1998; Wolf, 1998; Scalt, 1997; Marcovic, 1995, cited in Chavushifar and Rasoolzadeh Tabataba'ei, 2000). Some of these adverse effects include the increase in emotional problems, lack of acquiring behavioral, ethical and value-related patterns from the parents, creation of abundant changes in life, absence of proper cognitive and social growth. Therefore, keeping the children with no parent or without effective parents in a round-the-clock center can be a factor giving rise to the intensification of psychological tensions, inappropriate role-modeling and a greater deal of harm to their psychological health. Based thereon, the Welfare Organization has offered a model of the round-the-clock foster centers under the title of "children Homes" that endeavors to provide these children with an environment similar to the natural families so as to reduce the harms to the maximum extent possible.

Nowadays, healthiness and unhealthiness are not envisioned as absolute and independent states of the human beings rather they are seen as processes that not only encompass such aspects as physical and somatic but also are consisted of such dimensions as psychological and social. The psychological health of a person has to be examined in a vast spectrum or extent, meaning that the human beings be healthy or sick in various degrees featuring different intensities (Marmot and Wilkinson, 2009). Cognition is a term that refers to the process of acquiring and organizing and using the mental knowledge in the real life and emotion is a complex psychological state constituted of three separate indicators, named mental experience, emotional response and vivid behavior originating from the experience that is largely expressed in the form of fear, wondering, anger, hatred, dejection and happiness (Atkinson et al, 2007). An individual's Cognitive evaluation of a given situation can influence his or her intensity and type of emotional experience. Now, the question has formed in the researcher's mind as to how do the health status, emotions and cognitive transformation of the children who have been separated from their families for whatever the reason and kept in round-the-clock centers associated with Welfare Organization differ? For the same reason, the following three hypotheses are sought in the current research paper:

- There is a difference in the psychological health of the children present in the foster care centers associated with Yazd Province's Welfare Organization and the ordinary children.
- There is a difference in the cognitive transformation of the children present in the foster care centers associated with Yazd Province's Welfare Organization and the ordinary children.
- There is a difference in the emotions of the children present in the foster care centers associated with Yazd Province's Welfare Organization and the ordinary children.

STUDY BACKGROUND

The investigation of the studies performed regarding the institutionalized children in Iran and abroad demonstrates that such variables as attachment and its styles, physical, psychological and social health, behavioral problems, establishment of social communication and skillfulness in sympathy, self-regulation and self-control capabilities and self-esteem of the children raised in foster families have been the most frequently-researched areas.

Chavushifar and Rasool Tabataba'ei dealt in 2000 with comparing the amount of tenseness and coping styles of the adolescents from round-the-clock centers associated with Welfare Organization and normal adolescents in Tehran. Their study sample volume was composed of 100 adolescents in an age range from 14 to 17 years. The results indicated that the tenseness

rate of the adolescents present in the round-the-clock centers is higher than that of the adolescents who live with their parents ($P < 0.01$). The adolescents who lived with their own parents made more use of problem-centered approaches in confrontation with tense situations ($P < 0.05$) and the adolescents from the round-the-clock centers were most predominantly emotion-centered in confrontation when tensed ($P < 0.01$) (Chavushifar and Rasoolzadeh Tabataba'ei, 2000).

Salary and Sajjadi, as well, in a study they conducted in 2006, compared the anxiety rates of the adolescents residing in round-the-clock foster centers with those of the adolescents living in their homes. In total, 267 adolescents, ranging in age from 13 to 19 years, were investigated in Zahedan and Gonabad and the results show that there is a significant difference between the girls and boys in terms of intensive anxiety ($P < 0.001$) and moderate anxiety ($P < 0.04$); furthermore, a significant difference was also observed between the two groups, namely the group residing the round-the-clock foster center and the group living in home ($P < 0.05$) (Salary and Sajjadi, 2005).

Numerous studies have dealt with the investigation of the attachment styles and the harms by the children residing the round-the-clock foster centers, including the study by Razeghi et al (2005) who compared the attachment patterns of the children supported by the round-the-clock foster centers and the family-supported children to demonstrate, unlike what was expected, that the attachment styles of the children under the coverage of the round-the-clock centers do not differ from the attachment styles of the normal children and that the insecure avoidant attachment pattern was only found significantly higher (14%) in children from round-the-clock foster centers in respect to the children supported by their natural families (6%) (Razeghi et al, 2005).

Nejat, Kashaniniya and Me'emariyan (2009), compared the healthcare behaviors of young girls under the guardianship of the round-the-clock foster centers associated with Tehran's Welfare Organization with those of the normal family-supported girls in a 110-individual sample volume. Their results were suggestive of a significance difference between the girls supported by the Welfare Organization and normal girls in terms of nutrition-related healthcare behaviors ($P < 0.0003$), sleep and rest ($P < 0.001$), playing sports ($P < 0.0013$) and personal hygiene ($P < 0.001$). The study also indicated that the majority (62.7%) of the girls residing the round-the-clock foster centers had visitors who came to meet them in very long intervals. The study assessed the relationships between such variables as age and education grade, birth rank, occupation and education levels of the parents and the length of stay in the center, age of entry to the center with the total score of the girls' healthcare behaviors; the

only significant relationship was found between the age of the group members supported by their own natural families ($P < 0.01$) (Nejat, Kashaniniya and Me'emariyan, 2009).

Mika'eili (2010) performed a study on 772 students from boarding schools and day schools in Azerbaijan-e-Gharbi Province the results of which are of a considerable importance in regard of the institutionalized children's issues and problems. The study findings indicated that the boarding schools' students significantly outperform the day schools' students in such variables as responsibility, cooperation spirit and academic achievement; but, the day schools' students exhibited better performance in terms of such variables as physical problems, general health status and being satisfied with friends and place of living and schooling (Mika'eili, 2010).

In a study that was conducted based on a census method, Bayat et al (2010) investigated the behavioral problems and physical disorders of 105 7 to 11-year-old children residing in round-the-clock foster care centers in Tehran. Over 28% of these children were found with psychological health disorders. Also, a significant relationship was documented between attention problems and psychological health with gender ($P < 0.05$) in such a way that the number of the psychological health disorders was higher in girls (35.4%) than in boys (19.3%); but, no significant relationship was evidenced between the psychological health and attention problems with age and the length of center stay. The most prevalent physical disorder present in these children were mouth and tooth disorders (90%), skin disorders (76.4%), eye disorders (51.4%) and pulmonary system disorders (40.1%) and no significant difference was found between the physical health and gender as well as between age and length of center stay (Bayat et al, 2010).

The findings of the study by Shakiba and Zia'ei (2012), as well, show that there is a significant difference between the girl students under the guardianship of the round-the-clock foster centers associated with Welfare Organization and the girl students residing the dormitories in Zahedan's dormitory in terms of the psychological health ($P < 0.001$). The most common disorders found in the girl students from round-the-clock foster centers by order of prevalence were depression (90%), phobia (90%), anxiety (80%) and sensitivity in personal relationship (80%) (Shakiba and Zia'ei, 2012).

Razzaghi et al, as well, took advantage of a qualitative research in 2012 to investigate the sexual health of the 15 to 18-year-old adolescents under the protection of round-the-clock foster centers in Tehran. The study findings demonstrated that these adolescents are severely exposed to special misunderstandings regarding the sexual issues and relations and the sexual health challenges of the adolescents under the coverage of these foster centers encompass an

array of behaviors such as engaging in early and risky sexual relations and peer sexual exploitation and negative sexual attitudes that are considered as serious threats to their health statuses (Razzaghi et al, 2012).

Sharifi, Sarandi and Moheb also performed a similar study in 2012 on 360 students from foster care centers and normal families in the city of Orumia. The study results indicated that the students from the foster care families have developed lesser secure attachment and higher avoidance levels ($P < 0.01$). Also, amongst the foster family centers' students, the girls displayed more avoidant attachment style and the boys exhibited more bidirectional attachment styles ($P < 0.05$) (Sharifi, Sarandi and Moheb, 2012).

San'atnegar et al in 2012 used a quasi-experimental design to evaluate the effect of group story therapy on the reduction of feeling lonely and frustrated in 125 primary school girl students from Mashhad's foster family centers. The study results were reflective of the success of story therapy on the reduction of feeling frustrated in the girl students from foster family centers (San'atnegar et al, 2012).

Mohammadlou et al (2014) conducted a survey on 297 8 to 12-year-old children from foster family centers associated with Tehran's Welfare Organization and the results signified the relatively high prevalence of learning disabilities amongst the study population. Also, the learning disabilities were found more common amongst the foster family girls than foster family boys; 13.2% versus 6% ($P < 0.03$) which is a rather new and notable finding because the entire researches carried out on the normal population are reflective of a three times higher prevalence of learning disabilities amongst the boys as compared to the girls (Mohammadlou et al, 2014).

Fisher et al (1997) assessed three subject groups, namely round-the-clock foster centers' children, stepchildren and children living with their families, based on the children's behavioral list. The highest introversion and extraversion scores were found belonging to the children from round-the-clock foster care centers. The orphanage children were found having more nutritional problems than the other two groups; moreover, these children had more problems developing relationships with their peers. It is worth mentioning that no significant difference was evidenced between the stepchildren and normal children in regard of the study variables (Fisher et al, 1997, cited in Chavushifar and Rasoolzadeh Tabataba'ei, 2000).

Pecora et al investigated in a national survey the psychological health of the individuals dismissed from foster family centers for a 12-month period; 1087 dismissed individuals and 3547 American citizens who had been paired based on age, gender and race participated in the study. The preliminary results of the study that were released in 2003 showed that the

expression of all the psychological disorders is higher in dismissed individuals in contrast to the general population; the expression rates of panic disorders were nearly three times higher in the individuals dismissed from round-the-clock foster centers than in normal population (11.4% versus 3.6%); post-accident stress (21.5% versus 4.5%); severe depression (15.3% versus 10.6%); social phobia (11.9% versus 8.9%); general anxiety (9.4% versus 5.1%); alcohol abuse (3.7% versus 2.0%); substance abuse (3.6% versus 0.5%). Also, the post-accident stress treatment chance was reported equal to 28.2% in the dismissed individuals while the rate was 47% in the general population (Pecora et al, 2003).

The study by Hussi and Gu (2005) indicated that the psychological disorders, behavioral and academic problems of the children and adolescents under the protection of round-the-clock foster care centers are higher than their counterparts living with their families and they have lower self-esteem, communication and social skills (Hussi and Gu, 2005, cited in Mika'eili, 2011).

Leslie et al concluded in 2010 in an investigation of the psychological and behavioral problems of the adolescents separated from their homes and protected by the Child Welfare System that half of the study sample volume has one of the risky behaviors in the healthcare area such as risky sexual behaviors, depression, suicide, antagonism and affray, smoking cigarette, drinking alcohol and using drugs (Leslie et al, 2010, cited in Razzaghi, 2012).

Lupu in a study of 10 to 11-year-old Romanian children evaluated the negative outcomes of parents' separation on the cognitive and physical growth of the children and codified a special sport program for the physical and psychological health of these children. The results were suggestive of the weight deficit and delay in motor and balance movements in all of the children present in the round-the-clock foster centers. Lupu's intervention plan for the improvement of the children's body image, methods of correct sitting, walking and standing and, generally, motor growth incorporated a diverse array of exercises, including gymnastic, performing traditional dancing moves, constructing buildings using plastic blocks and so forth and it was evaluated successful (Lupu, 2010).

In another study on 9 to 10-year-old children, Lupu investigated the effect of physical sports on the physical and emotional balance of the institutionalized children. He believed that playing sports and physical preparation of these children have direct influences on their physical growth and psychological health and lead to increase in their self-confidence, problem-solving abilities and developing relationships with others. The study results, as well, displayed the success of the claim (Lupu, 2011).

Verza et al in 2012 investigated the aspects of the affective life and effective communications of the children present in round-the-clock institutions. They examined a study sample volume consisted of 102 children ranging in age from 6 to 18 years and acquired very interesting results regarding the institutionalized children; 63.5% of the children were found suffering from one or several affective disorder. Depression was the most common affective problem in these children and tendency towards displaying antisocial behaviors was the problem with the lowest prevalence amongst these children (Verza et al, 2012).

A longitudinal research was undertaken during the years from 2000 to 2008 in which the statuses of parentless children from 19 European countries were investigated. The study results indicated that about 12.5% of the foster children who were either assigned to surrogate families, returned to foster care centers, or otherwise had their living arrangements changed lose their social skills and withdrew. (Holtan et al, 2013). Generally, the lack of stability in the dwelling place of the children from foster care families is considered as a reason behind low self-esteem (Ryan and Testa, 2005) and weak academic performance, behavioral problems, substance abuse and destruction of social network (Berger et al, 2009; Carlson, 2002, Harden, 2004, and Rubin, 2004, cited in Holtan et al, 2013).

Surugiu and Musayo compared the aggressive behaviors of 14 to 18-year-old children from round-the-clock foster care centers with those of the normal children. The results indicated that there is a significant difference ($P < 0.01$) between the institutionalized children and normal children in terms of aggressive behaviors and conflict with the social norms (Surugiu and Musayo, 2013).

The study by Lehmann et al, as well, indicated the high prevalence of the psychiatric disorders amongst the children under the round-the-clock foster care protection. Based on the study, 50.9% of these children are diagnosed with at least one of the DSM-IV disorders; affective disorders (24%), ADHD (19%) and behavioral disorders (21.5%), while the children who are taken as stepchildren enjoy better affective, physical and social growth in comparison to the institutionalized children (Lehmann et al, 2013).

Zeanah knows the secure attachment style of a value equal to 20% amongst the institutionalized children (Zeanah, 2004, cited in Vural et al, 2014). Also, the prevalence of the behavioral problems of the children who live with their natural families as compared to those of the stepchildren and institutionalized children are reported equal to 9.7% versus 12.9% and 43.5%, respectively (Ostaner, 2005, cited in Vural et al, 2014).

Mihaela, in an article called “the role of environment in self-esteem, general intelligence and emotional intelligence of the adolescents”, compared these indices amongst the foster family

and normal family children. He investigated a 70-people sample of the children ranging in age from 16 to 19 years to conclude that the children who live with their natural families enjoy better self-esteem, general intelligence and emotional intelligence (Mihaela, 2014).

Vural et al dealt in a cross-sectional survey with the investigation of sympathy skills amongst the Turkish families. The study that was conducted during early 2014 estimated the number of children under the protection of Turkish institutions to be equal to 11484 individuals, the number of the stepchildren was reported 3496 individuals and the number of families that have adopted a child was reported equal to 2895 families. Amongst them, 124 families that had adopted a child were selected based on snowball method and subjected to further examination. 23.4% of these families were applicants of adopting boy children and 76.6% of the families had applied for adopting girl children. 76.6% of these families had their own natural children other than the children they had adopted from the foster care centers and, of course, no significant relationship was observed between the existence of natural children in families and sympathy level of the families (Vural et al, 2014).

Albuquerque et al (2014) studied resilience and protective factors of the institutionalized adolescents in Portugal; they investigated a 40-individual sample volume from among 12 to 17-year-old adolescents present in two round-the-clock foster care centers and found out that there is a significant relationship between self-esteem, self-image, feeling competent socially and resilience. The boys present in these centers showed a larger deal of resilience in respect to the girls ($P < 0.001$) and no significant relationship was documented between age, education status, religious behaviors and resilience levels. In the end, the researchers came up with the opinion that the formal instruction might be able to enhance the supportive sources of the children from foster families but these children need to be flourished in their resilience in order to elevate their capabilities (Albuquerque et al, 2014).

Lindquist and Santavirta (2014) assessed the effect of foster family children's stay in boarding centers on the exhibition of behaviors against the law during adulthood; the study results indicated that the presence of above 13-year-old boys in boarding centers is an important variable for predicting the crime perpetration likelihood during adulthood; whereas, no significant relationship was found between crime occurrence and keeping below 13-year-old boys and girls in boarding centers (Lindquist and Santavirta, 2014).

Sheppard et al, as well, in 2014, analyzed the interviews with more than 11 thousand American males and females for a second time to examine the effect of the individuals' past lives on the sexual health of the parentless and bad-parented children. They figured out that the marriage and sexual relations of the bad-parented children whose parents had had a

history of child abuse or tensed relationships were seriously harmed. This group got married later than all of the others and the children who were assigned to stranger families got married earlier (Sheppard et al, 2014).

Vávrová (2015) examined self-regulation of the children under the protection of boarding institutions in Czech Republic. In Czech Republic, the government, in adherence to the Law No.109 passed in 2002, is obliged to offer preventive and supportive instructions to all children exposed to harm as well as to all minorities in boarding institutions, including child homes, child homes delivering educational services, exceptional instruction institutes and foster care centers. Based thereon, 219 boarding institutes, with a capacity of accommodating 7966 individuals, were created countrywide offering services to 6549 children. In his study that was conducted based on a qualitative method and made use of concentrated group interviews and discussions, Vávrová prepared an instrument to assess the self-regulation of the children and 11 to 18-year-old minorities residing the boarding institutions; next, he dealt with the investigation of self-regulation skills of the institutionalized children. He is of the belief that while these social institutions are expected to correct dangerous behaviors of the children, they are not only found not as successful but also reproducing these behaviors (Vávrová, 2015).

Hrbackova & Safrankova (2016), as well, in their study investigated the use of the same assessment tool to compare the self-regulation of 2776 children and adolescents from the boarding schools with those of the normal children and examined the relationship between the self-regulation and behavioral problems of these children. The results signified a significant difference between the two groups of boarding institutions' children and normal children in terms of all of the self-regulation subscales, including attention regulation, motivation, emotion and coping with failure. The highest difference between the two groups pertained to the emotion regulation ($P < 0.003$). In other words, the children under the protection of boarding institutions were found having a larger deal of problem controlling their emotions. On the other hand, there was seen an inverse and strong relationship between the high levels of behavioral problems and emotion regulation ($P < 0.008$ and $r = -2.36$). No significant relationship was observed between the institutionalized children's behavioral problems and the other aspects of self-regulation (Hrbackova & Safrankova, 2016).

STUDY METHOD

The participants of the present causal-comparative study ($N = 122$) were sixty one 10 to 15-year-old bad-parented or parentless children from boarding centers associated with Yazd

Province's Welfare Organization and 61 children living with their own families. The study sample volume was selected based on a purposive method and paired in terms of age, gender and dwelling place. The participants were chosen from among the individuals who have had at least one month of presence in the boarding centers and were capable of reading, writing and speaking in Persian. The average month-based ages of the institutional children and normal children were 150.59 ± 16.84 and 149.51 ± 15.67 , respectively.

To gather the data, besides the personal information form (asking for age, gender, education status, center name, center stay duration, center stay reason and the frequency of meeting main family), there was made use of general health GHQ-28 questionnaire as well as Royer's test of drawing a colored figure.

To administer the GHQ-28 questionnaire that is one of the most credible screening tests for psychological signs countrywide and worldwide, the respondents were asked to mark what they have sensed during the past two weeks in a range from "A" to "D". Every item in the questionnaire was scored from zero to three based on Likert's scale. Thus, the total score of every individual ranges from zero to 84 and, in general, the scores above 22 are suggestive of the existence of morbid symptoms. Ya'aghubi reported in 1996 a general reliability coefficient equal to 0.88 for the questionnaire and also a reliability coefficient in a range from 0.51 to 0.81 for the subscales that was obtained based on test-retest method (Ya'aghubi, 1996).

Drawing a colorful figure test was invented and normalized in 1977 by Jaqueline Royer who is a French psychologist. Dadsetan, as well, evaluated the reliability and validity of the test in a sample volume consisted of 480 boy and girl children who had been selected randomly from the kindergartens, primary and secondary schools in Tehran and obtained satisfactory results (Dadsetan, 2014). In the study by Khodayarifard et al (2007) reported a value equal to 80% as the Alpha coefficient of Royer's test of drawing a colorful figure. In a more recent research, Yazdani and Bakhshi Bejod on 250 students, the test's alpha coefficient was found equal to 76% (Yazdani and Bakhshi Bejod, 2011). After the determination of the child's cognitive transformation level in drawing a colorful figure test, the general and analytical aspects of the painting are investigated and the child's type of emotion are categorized into three levels of happy, sad and anxious and angry.

STUDY FINDINGS

The results indicated that out of the 61 foster family children (52.5% boy and 47.5% girl) who were present in Yazd Province's Welfare Organization, 59% had been admitted due to their

either or both of the parents' misbehaviors; 13.1% had no proper IDs and 11.5% had been accepted by the foster family center for the death of either or both of the parents. The reason behind the presence of 6.6% of the children was the imprisonment of either or both of the parents and 9.8% of them had been admitted for the disease of one or both of the parents.

Based on the information given in table (1), there is a significant difference between the psychological health of the children from foster care centers and the normal children. In other words, the children who are kept in foster care centers belonging to Yazd Province's welfare organization enjoy a lower psychological health than their evidence counterparts ($P=0.001$); but, no significant difference was documented between the foster family children and normal family children in terms of the cognitive transformation ($P=0.066$).

Table 1. comparing the psychological health and cognitive transformation scores of the two groups

Variable	Foster family children		Normal children		Dependent t-test results		
	Mean	SD	Mean	SD	t	DF	Likelihood value
Psychological health	24.13	4.50	20.39	3.36	5.78	60	0.001
Cognitive transformation	76.68	13.59	80.82	13.46	-1.87	60	0.066

To test the third hypothesis, there was made use of contingency or cross-tables and chi-square test. The results have been summarized in table (2).

Table 2. comparing the emotions of the foster family children and the normal family children

Child emotion		Foster family child	Normal child	Total sum	Chi-square test results
Happy	Number	38	53	91	X ² =12.139 DF=2 Sig=0.002
	Percentage	62.3	86.9	74.6	
Sad	Number	16	8	24	
	Percentage	26.2	13.1	19.7	
Anxious and angry	Number	7	0	7	
	Percentage	11.5	0	5.7	
total	Number	61	61	122	

As it is seen in the above table, the relationship between the emotions and presence or absence of children in welfare organization's boarding centers has become meaningful (sig=0.002). thus, the third hypothesis is also confirmed.

DISCUSSION AND CONCLUSION

Using scrutiny in the present study results, the clinical experiences of the researcher when doing the current research paper and analyzing the thought contents, paintings and utterances of the foster family children provided for a general overview of the cognitive growth, psychological health and emotion statuses of them. From among the three hypotheses proposed in the present study and investigated the differences between the children present in the foster care centers associated with Yazd Province's Welfare Organization and the normal children in terms of their psychological health, cognitive transformation and emotion, only two hypotheses indicating the differences of the foster family children and normal family children in terms of psychological health and emotions were confirmed and this finding conforms to what was obtained in the studies by Shakiba and Zia'ei (2012) in Sistan va Baluchestan Province, Mihaela (2014), Verza et al (2012) and Pecora et al (2003).

The second hypothesis questioning the cognitive transformation of the normal children as compared to that of the foster family children was rejected with a probability level of P=0.06 despite the foster family children's mean scores being found below the mean scores of the natural family children. Of course, Mohammadlou et al (2014) in their study had observed more learning disabilities amongst the foster family children. It seems that such factors as misbehavior, imprisonment, death or disease of either or both of the parents have the highest

devastating effects on the emotions and health statuses of these children but the cognitive transformation was found less influenced.

The ancillary findings of the current research paper are also worthy of contemplation; 59% of all the participating children had been admitted to the boarding institute for the misbehavior of either or both of their parents. Undoubtedly, the parents' psychological health and their types of familial relations are enumerated as the most important factors contributing to the foster family children's health, emotions and cognition. Also, a significant difference was observed in the size of the paintings between the normal family and foster family children. The foster family children who predominantly used to seek for an anxious and weak mental patterns in their paintings had drawn the smallest possible figures (2cm to 3cm on an A4 paper sheet). It seems as if some sort of a force prevents them from expanding and developing their wishes and desires. The clinical observations show that the foster family children try to finish their painting as soon as possible and do not care for the details and giving value to their paintings while some normal children spent a lot of time on only coloring the painting and paid a greater deal of attention to the details and expansion of their paintings. The normal children as compared to the foster family children enjoyed a greater deal of space for drawing their own figures and evaluated their painted figure as being happier. Some foster family children drew injured and wounded and bleeding figures.

In a glance at the entire results offered herein, it can be noted that there is a clear-cut difference between the children residing the boarding centers associated with Welfare Organization and the normal family children in terms of their psychological health status and emotions. Of course, it seems that the past misbehaviors of the parents and their separation from them still have lingering effects on their today's psychological health and emotions. The enhancement of the health and wellbeing of the individuals as the mission of the welfare organization of our country is feasible but it necessitates making investments and efforts by the experienced workforces and more precise planning. This is while the high prevalence of the social harms in the families has caused a daily increase in the number of the children and adolescents being assigned to centers associated with Welfare Organization and the Welfare Organization's staff members have only sufficed to the reduction of the children's psychological and social harms and ignored the elevation of their health and wellbeing. The most important accomplishment of the current research paper is that the sole maintenance of the children from damaged families and bad-parented families in boarding centers does not seem to bring about any improvement in the emotional and health statuses of these children.

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REFERENCES

- Atkinson, Rita, L.; Smith, Edward; Bam Dariel, Nolen and Hoksma, Suzan, (2005), "Hilgard's psychological background", tr. Muhamamd Naghi Baraheni, Tehran, Roshd
- Bayat, Mahbubeh et al (2010), "physical and psychological disorders of 7 to 11-year-old children residing boarding centers in Tehran", *journal of Iran's nursing*, 23(3): 8-17
- Chavushifar, Jalal and Rasoolzaddeh Tabataba'ei, Kazem, (2000), "comparative study of stressing factors and confrontation methods in adolescents from boarding centers and adolescents with natural parents", 4(2): 169-184
- Khodayarifard, Saba; Abedin Alireza; Yazdandoust, Rokhsareh; Pourshahriyari, Mahsima and Ghara'ei, Banafsheh, (2005), "comparing the projective drawing tests in children subjects of child abuses with normal children", *journal of family research*, (9): 23-35
- Dadsetan, Parirokh, (2014), "evaluating the children's personality based on drawing tests", Tehran, Roshd
- Razeghi, Narges; Ghiyari Bonab, Bagher and Mazaheri, Muhammad Ali, (2005), "comparing the attachment patterns of children under the protection of boarding centers and family supported children", *research in the area of exceptional children*, 5th year, 16(2), pp.165-183, Summer
- Razeghi, Reza; Borjali, Ahmad; Sohrabi, Faramraz and Delavar, Ali, (2012), "the sexual health challenges of children separated from their families", *social welfare*, 13(48): 71-90, Fall
- Salary, Hadi and Sajjadi, Sayyed Alirerza, (2005), "comparing the anxiety in adolescents residing the boarding centers with that of the adolescents residing their families", *Tabib-e-Shargh*, 7(1): 15-19, Spring
- Sharifi, Rasool; Sarandi, Parviz and Moheb, Na'eemeh, (2012), "comparing the secure, avoidant and two-way attachment styles amongst the students from foster family children and normal family children", *women and family studies*, 4(16): 91-103
- Shakiba, Mansour and Zia'ei, Maryam, (2012), "comparing the psychological health of the students under the guardianship of the boarding centers associated with Welfare

Organization and that of the normal high school girl students in the city of Zahedan”, Zahedan’s Medical Sciences Research Center, 14(2): 56-60

- San’atgar, Sara; Hassan Abadi, Hussein and Asghari, Sayyed Muhammad, (2012), “the effectiveness of group story therapy on the reduction of desperation and loneliness in girl children from foster family centers”, seasonal journal of applied psychology, (4): 7-23
- Marmot, Michael and Wilkinson, Richard, (2008), “social indicators of health”, tr. Ali Montazeri, Tehran, University Jihad
- Mohammadlou, Ebrahiim Ali; Niusha, Beheshteh and Farghadani, Azadeh, (2014), “prevalence of learning inabiliteis in foster family children based on demographic variables”, journal of social welfare, 15(58): 237-267
- Iran’s center of statistics, (2015), “a selection of the economical, social and cultural indices and indicators of Yazd Province”, Tehran, office of statistics and planning
- Mika’eili, Farzaneh, (2010), “comparing responsibility, cooperation spirit, general health, life satisfaction and academic performance of the boarding schools’ students and day schools’ students in Azerbaijan-e-Gharbi Province”, educational innovations, 9(34): 61-88, Summer
- Nejat, Nazi; Kashaniniya, Zahra and Me’emariyan, Robabeh, (2008), “comparative study of the healthcare behaviors of the young girls from boarding centers associated with Welfare Organization and the family supported young girls”, journal of Hayat, (1): 49-59
- Ya’aghubi, Nura, (1996), “epidemiological study of psychological disorders in urban and rural regions in Gilan Province”, MA dissertation, clinical psychology department, Tehran’s Medical Sciences Univeristy, Tehran, Iran
- Yazdani, Sepideh and Bakhshi Bejod, Fereshteh, (2011), “comparing the psychological reactions of the normal and gifted children through drawing test”, thought and child, 2(2): 127-148, Fall and Winter
- Albuquerque, Carlos et al, (2015), “Protective resilience factors in institutionalized Portuguese adolescents”, Social and Behavioral Sciences, 171: 276 – 283
- Holtan, Amy et al, (2013), “Placement disruption in long-term kinship and non-kinship foster care”, Children and Youth Services Review, 35:1087–1094
- Hrbckova, Karla and Safrankova, Anna Petr, (2016), “Self-Regulation of Behavior in Children and Adolescents in the Natural and Institutional Environment”, Social and Behavioral Sciences, 217: 679 – 68

-
- Lehmann S, Havik O.E, Havik T, Heiervang E.R, (2013), “Mental disorders in foster children: a study of prevalence, comorbidity and risk factors”, *Child Adolesc Psychiatry Mental Health*, 21:7-39
 - Lindquist, Matthew J. Santavirta, T., (2014), “Does placing children in foster care increase their adult criminality?” *Labor Economics*, 31: 72–83
 - Lupu, Elena, (2010), “Motion activities and their importance in the physical and intellectual development of the institutionalized children”, *Social and Behavioral Sciences*, 5: 2140–2145
 - Lupu, Elena, (2011), “Metric Balance – a Reflection of Emotional Balance for the Institutionalized Children”, *Social and Behavioral Sciences*, 12: 448–456
 - Mihaela, Stomff, (2014), “The effects of the growth environment on the adolescents’ self-esteem, general intelligence and emotional intelligence”, *Social and Behavioral Sciences*, 127: 864 – 867
 - Pecora, P. J., Williams, J., Kessler, R. C., Downs, A. C., O’Brien, K., Hiripi, E., & Morello, S., (2003), “Assessing the effects of foster care: Early results from the Casey National Alumni Study”, Seattle, WA: Casey Family Programs
 - Sheppard, Paula et al., (2014), “Fostering relations: first sex and marital timings for children raised by kin and non-kin caregivers”, *Evolution and Human Behavior*, 35: 161–168
 - Surugiu, Sorin Ionel and Moşoiu, Corneliu, (2013), “The Aggressive Behavior of Adolescents in Institutionalized System”, *Social and Behavioral Sciences*, 78: 546 – 550
 - UNICEF/South African Human Rights Commission, (2011), “South Africa's Children: A Review of Equity and Child Rights”, South African Human Rights Commission and UNICEF South Africa
 - Vávrová, Soňa, (2015), “Children and Minors in Institutional Care: Research of Self-Regulation”, *Social and Behavioral Sciences*, 171: 1434 – 1441
 - Verza, Florin et al, (2012), “Aspects of emotional life and communication in institutionalized children”, *Social and Behavioral Sciences*, 33: 687 – 691
 - Vural, Bilgin Kıray et al, (2014), “An Investigation of Empathic Skills of Foster Families”, Turkey, *Social and Behavioral Sciences*, 159: 570 – 576

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