Depression and aggression in 11 to 13-year old relinked with families kids from Bam and kids based in Orphanages

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ABSTRACT
The purpose of this research was to understand the depression and aggression in 11 to 13-yearold relinked with families’ kids from Bam and kids based in Orphanages. So, 60 students of on the second grade of secondary school in Bam were selected randomly among 5000 ones. Data were collected by two questionnaires: Aggression measurement test and Beck’s depression test. Pearson correlation coefficient was used to get the results. The results showed that the mean depression and aggression of the kids in orphanages is more than the mean depression of kids relinked with family. There was no meaningful difference in terms of depression and aggression among 11 to 13-year old boys and girls from Bam. There was a meaningful correlation among depression and aggression variables of 11 to 13-year old boys and girls from Bam., it could be stated that as depression increases, the amount of aggression increases as well. Since people who suffer from depression based on having failures and incorrect beliefs, they also possess aggression; and, the more depression the more aggression. Therefore, the existence of the correlation between depression and aggression seems logical.

Key words: Depression, aggression, relinked, families kids, Orphanages

INTRODUCTION
Disasters are of great difficulties in human societies and humankind, despite scientific industrial and technological advances, has not still been able to dominate disasters and it effects. Although industrial and technological advances have been effective in some of the preventive aspects of disaster, but it has added to the dimensions of catastrophic events itself. Every year, a lot of accidents occur around the world that at least part of them is accompanied by severe financial, physical and mental effects. The importance of destructions and damages caused by the events is to the extent that several international centers’ attention has been drawn by it, so that United Nations has called 1990s ‘accidents and natural disasters reduction and’ (Najarian 2000). Our country has also seen upsetting and traumatic incidents since a long time ago, so that some of them have been mentioned in ancient Persian texts. One of these incidents took place in Bam in January, 2003 that according to statistics, more than 20 thousand people of our dear compatriots lost their lives. Regardless of its enormous and irreversible consequences, a large number of kids have been left forlorn and some of them were given to the families who were remained and some others were placed in orphanages. Now these kids, besides losing their dearest ones, they have to live in new neighborhoods, families and a new city and all of these happenings befell the them within just 12 seconds and the life of these kids have completely changed within these 12 seconds. Through the UNICEF and the welfare organization’s effort, attempts have been made so that kids who have relatives either near or distant could be given to them so these children will grow up in a family environment. Unfortunately this earthquake has taken place in the area of our country where it is one of the main turnpikes through which drugs are transported from Afghanistan to Europe and a large percentage of the people living there are opium addicts and these kids are faced with the risk of drugs either as a consumer or as a distributor in addition to diseases and traumas. All of these point as well as living in a place like home, health status and complications after earthquake damage and losing dearest ones like parents have caused the researcher to clarify that whether giving these kids to near o distant families as a project called families relink is useful or not, and with regard to existing issues would compare aggression and depression which are two cases of psychological consequences of theses disasters with two groups of kids included in families relink project.

MATERIALS AND METHODS
The present research project is causal-comparative.
Research population
The statistical population of this research involves all the students on the second grade of secondary school in Bam who have enrolled in 2006-07 academic year. The sample size of this study was 5000 students including 2000 boys and 3000 girls.

Research sample
According to the t statistical method, independent groups and Pearson correlation coefficient, the decision was made so that a sample with the size of 60 people was randomly used.

Sampling method
Random cluster sampling method was used in this study. For this purpose, in this research, 2 female and male secondary schools called Farvardin 12th female Secondary School and Baqer al Olum male Secondary School were randomly chosen from all the secondary schools in Bam and a class was chosen from all the second grade classes; after the kids who had been relinked with the families were specified, a number of 15 girls and 15 boys were randomly selected. In addition, 2 orphanages named Fatemieh Center and Mashiz were chosen from orphanages in Bam and 15 girls and 15 boys among the 11-13 year age group were selected randomly and according to its being even or odd.

Research tool
Aggression measurement test
The tool which was applied to gather experimental data was a 30-question questionnaire which was designed by Dr. Bahman Bokharian in Iran and it has been validated. It's needed to mention that the implementation method of this questionnaire was done in group. The questionnaire is marked objectively and includes multiple choices under the headings "never," "rarely," "sometimes," "always" and the questions of the questionnaire have been presented as a statement which has been selected based on the assumptions of self-assessment questionnaires and with regard to suggested multiple choice and will be filled out according to the subject's view. The aggression questionnaire consisting of 3 factors and 30 articles was designed based on factors analysis in which there are 14 articles put on the first factor (anger and wrath), 8 articles on the second factor (invasion and insulting) and 8 articles on the third factor (obstinacy and malice).The reliability of this questionnaire has been satisfactory based on Cronbach's alpha and retest coefficient. According to the obtained results, Cronbach's alpha coefficient is 0.87 for the whole scale of aggression. In order to measure reliability, retest was used which its coefficient has been (r = 0.70) for the whole scale and retest coefficient and Cronbach's alpha coefficient for female people are 0.64 and 0.86 respectively and for the female ones, retest is 0.9 and Cronbach's alpha is 0.89. In addition, the validity of this questionnaire has been assessed using criterion questionnaires including Eyzenk's Personality Questionnaire, Minesota's multidimensional questionnaire and BDVI questionnaire so that correlation coefficients and the summarized results of multi-variable regression tests on the mentioned questionnaires suggest that the validity of this questionnaire has been satisfactory.

Beck's depression test
This test measure the degrees of depression. The highest score in the test which indicates the deepest state of depression is 63. It means that a person who has gained 63 in the test, his/her amount of depression is 100% based on the test.
This test includes 21 questions and is an arrange calibrated scales that it measures the degrees of depression from 0-30 on each level and is scored from 0 indicating the lack of depression up to 3 indicating severe depression. The validity and reliability of this questionnaire has also been constantly considered (Beck, 1988). The internal consistency coefficient of the articles in the questionnaire has been reported from 0.73and the correlation coefficient of the Beck’s questionnaire was reported 0.73 using the Hilton’s psychiatric rating scale for depression and 0.74 using MMPI scale (Hirmand, 1998; quoted by Farhadi).

Data Analysis Method
According to the proposed hypothesizes of their testing, statistical methods, independent groups and Pearson correlation coefficient have been used.

RESULT

Table 1 - Summarized results of the t-test of independent groups

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Groups Variable</th>
<th>number</th>
<th>average</th>
<th>St.Dev (SD)</th>
<th>D. f</th>
<th>T</th>
<th>Sig</th>
<th>Averages differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>Relinked with family</td>
<td>30</td>
<td>14.46</td>
<td>8.03</td>
<td>58</td>
<td>-3.573</td>
<td>0.001</td>
<td>-7.30</td>
</tr>
<tr>
<td></td>
<td>orphanage</td>
<td>30</td>
<td>23.76</td>
<td>7.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to the measured value of $t (-3.573)$ and significance level (0.001) with 99% of certainty, Null hypothesis could be rejected; on the other hand, looking at 99% of certainty, it could be concluded that the mean depression of the kids in orphanages is more than the mean depression of kids relinked with family.

### Table 2 - Summarized results of the t-test of independent groups (the second hypothesis)

<table>
<thead>
<tr>
<th>Indicators Groups variable</th>
<th>number</th>
<th>average</th>
<th>St. Dev. (SD)</th>
<th>Df</th>
<th>$t$</th>
<th>Sig</th>
<th>Averages differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relinked with family</td>
<td>30</td>
<td>38.50</td>
<td>10.51</td>
<td>55.013</td>
<td>-2.420</td>
<td>0.019</td>
<td>-7.50</td>
</tr>
<tr>
<td>Orphanage</td>
<td>30</td>
<td>46.00</td>
<td>13.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the measured value of $t (-2.420)$ and significance level (0.019) with 99% of certainty, Null hypothesis could be rejected; on the other hand, looking at 99% of certainty, it could be concluded that the aggression amount of kids in orphanages is more than kids relinked with family.

### Table 3 - Summarized results of the t-test of independent groups

<table>
<thead>
<tr>
<th>Indicators Groups Variable</th>
<th>number</th>
<th>average</th>
<th>St. Dev. (SD)</th>
<th>Df</th>
<th>$T$</th>
<th>Sig</th>
<th>Averages differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>30</td>
<td>21.40</td>
<td>9.67</td>
<td>58</td>
<td>-1.150</td>
<td>0.225</td>
<td>-2.56</td>
</tr>
<tr>
<td>Boys</td>
<td>30</td>
<td>18.83</td>
<td>7.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the measured value of $t (-2.420)$ and significance level (0.019) with 95% of certainty, Null hypothesis could not be rejected; on the other hand, there is no meaningful difference in terms of depression among 11 to 13-year old boys and girls from Bam.

### Table 4 - Summarized results of the t-test of independent groups

<table>
<thead>
<tr>
<th>Indicators Groups Variable</th>
<th>number</th>
<th>average</th>
<th>Standard Deviation (SD)</th>
<th>Df</th>
<th>$t$</th>
<th>Sig</th>
<th>Averages differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>30</td>
<td>40.43</td>
<td>12.97</td>
<td>58</td>
<td>1.130</td>
<td>0.293</td>
<td>3.63</td>
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<tr>
<td>Boys</td>
<td>30</td>
<td>44.06</td>
<td>11.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the measured value of $t (0.130)$ and significance level (0.293) with 95% of certainty, Null hypothesis could not be rejected; on the other hand, there is no meaningful difference in terms of aggression among 11 to 13-year old boys and girls from Bam. Therefore, there is not enough evidence to confirm the fourth hypothesis.

### Table 5 - Summarized results of correlation coefficient test

<table>
<thead>
<tr>
<th>Indicators Variables</th>
<th>Number</th>
<th>$Df$</th>
<th>Correlation coefficient</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression and aggression</td>
<td>60</td>
<td>59</td>
<td><strong>0.531</strong></td>
<td>0.000</td>
</tr>
</tbody>
</table>

According to the measured value of correlation coefficient (0.531) and its significance level with 99% of certainty, Null hypothesis could be rejected; on the other hand, there is a meaningful correlation among depression and aggression variables of 11 to 13-year old boys and girls from Bam.

**DISCUSSION AND CONCLUSION**

Disasters are of great difficulties in human societies and humankind, despite scientific industrial and technological advances, has not still been able to dominate disasters and its effects. Although industrial and technological advances have been effective in some of the preventive aspects of disaster, but it has added
to the dimensions of catastrophic events itself. Every year, a lot of accidents occur around the world that at least part of them is accompanied by severe financial, physical and mental effects. The importance of destructions and damages caused by the events is to the extent that several international centers’ attention has been drawn by it, so that United Nations has called 1990s ‘accidents and natural disasters reduction and’ (Najarian 2000). Our country has also seen upsetting and traumatic incidents since a long time ago, so that some of them have been mentioned in ancient Persian texts. One of these incidents took place in Bam in January, 2003 that according to statistics, more than 20 thousand people of our dear compatriots lost their lives. Regardless of its enormous and irreversible consequences, a large number of kids have been left forlorn and some of them were given to the families who were remained and some others were placed in orphanages. Now these kids, besides losing their dearest ones, they have to live in new neighborhoods, families and a new city and all of these happenings befall them within just 12 seconds and the life of these kids have completely changed within these 12 seconds. Through the UNICEF and the welfare organization’s effort, attempts have been made so that kids who have relatives either near or distant could be given to them so these children will grow up in a family environment. Unfortunately this earthquake has taken place in the area of our country where it is one of the main turnpikes through which drugs are transported from the neighbor country to Europe and a large percentage of the people living there are opium addicts and these kids are faced with the risk of drugs either as a consumer or as a distributor in addition to diseases and traumas. All of these point as well as living in a place like home, health status and complications after earthquake damage and losing dearest ones like parents have caused the researcher to clarify that whether giving these kids to near o distant families as a project called families relink is useful or not, and with regard to existing issues, it would compare aggression and depression which are two cases of psychological consequences of theses disasters with two groups of kids included in families relink project and the ones including in the project. Thus, in order to answer to the questions in this study, two schools were randomly chosen from the secondary schools in Bam. The subjects in this study were assessed by the depression and aggression test and were analyzed using the t statistical model of independent groups and Pearson correlation coefficient. The results of the present study indicated that the amount of depression among the kids in orphanages is more than the relinked kids. Another assumption considered in this study was confirmed with 99% of certainty suggesting that the amount of depression among the kids in orphanages is more than the family relinked kids, but with regard to the obtained results, there is no a meaningful difference between 11 to 13-year old boys and girls from Bam in terms of depression and aggression. Another finding of this study was that there is a correlation between 11 to 13-year old kids’ depression and aggression and according to the direction of the correlation, it could be stated that as depression increases, the amount of aggression increases as well. Since people who suffer from depression based on having failures and incorrect beliefs, they also possess aggression; and, the more depression the more aggression. Therefore, the existence of the correlation between depression and aggression seems logical.

REFERENCES
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