

ORPHAN'S STRESS AND AGGRESSION

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ABSTRACT

The present study attempted an empirical investigation to explore the stress and aggression of orphans as a function of gender and residence. A total of 120 respondents constituted the sample of the study. Among them 60 orphans were male (30 were urban and 30 were rural) and 60 orphans were female (30 were urban and 30 were rural). An adapted Bangla version (Fahim 2001) of 'How stressful your life stress' scale and Bangla version (Rahman 2003) of Measure of Aggressive Behavior (MAB) scale were used for data collection. Data were analyzed by mean, standard deviation, Pearson Product Moment Correlation and two-way analysis of variance (ANOVA). The findings of the present study showed that female orphans had significantly more stress ($F=6.73$, $df=1$, $p<0.05$) than male orphans and urban orphans had significantly more stress ($F=24.36$, $df=1$, $p<0.01$) than rural orphans. No significant interaction effect was found between gender and residence according to stress. On the other hand, male orphans had significantly more aggression ($F=33.46$, $df=1$, $p<0.01$) than female orphans and urban orphans had significantly more aggression ($F=9.41$, $df=1$, $p<0.01$) than rural orphans. No significant interaction effect was found between gender and residence in relation to aggression. Results also showed that stress was positively correlated ($r=.38$, $p<0.01$) with aggression.

Keywords: Orphan, Stress, Aggression.

INTRODUCTION

An orphan (comes from the Greek word 'Orfanos') is a child permanently bereaved of or abandoned by his or her parents. In common usage, only a child who has lost both parents is called an orphan. Case *et al.* (2003) defined orphan as a boy or girl child under the age of 18 years who lost one parent (maternal or paternal orphan) or both parents (total orphan). Children are brought to the orphanage home for one of three reasons: First, the parents have abandoned them. Second, the parents have had their parental rights removed by the state because they are in prison, are drug abusers, or abused the child and third, the child who has parents died (Lowdermilk and Perry 2004).

Stress typically describes a negative concept that can have an impact on one's mental and physical well-being. Stress is viewed as a negative emotional, cognitive, behavioral and physiological process that occurs as a person tries to adjust to or deal with stressors (Bernstein *et al.* 2008). Stress can take on entirely concrete or abstract meanings

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with highly subjective qualities. Auerbach and Grambling (1998) regarded stress as an unpleasant state of emotional and physiological arousal that individuals experience in situations that they perceive as dangerous or threatening to their well-being.

Aggression, in its broadest sense, is behavior or a disposition that is forceful, hostile or attacking. Aggressive behavior is central to most theories of human behavior. Baron (1977) has conceived aggression as any form of behavior directed toward the goal of harming or injuring another living being who is motivated to avoid such treatment. This definition expresses the interpersonal and social nature of organism. It has emphasized upon three aspects. These are: (1) aggression is goal directed behavior, (2) intention of injuring another person is there; and (3) it involves a victim motivated to avoid such treatment by an aggressor. Chugani *et al.* (2001) studied on infants who were raised in orphanage home, when compared to never-institutionalized children, exhibit abnormal neuronal function in limbic areas including the hippocampus, as shown by functional (Magnetic Resonance Imaging) MRI studies.

Richter (1959) studied the phenomenon of unexplained sudden death in animals and man. He described that most orphans are at risk of being confronted by powerful cumulative and often negative social changes in their lives over which they have no personal control. Experiences in continuously adverse circumstances do not make life appear to be subject to control through one's own efforts. Perceived lack of control produces a feeling of helplessness and loss of hope, and diminishes an individual's power. Johnson *et al.* (2006) studied on young children in institutional care at risk of harm and explained that the lack of a one-to-one relationship with a primary caregiver is the major cause of disturbed social and emotional development in children in institutional care. Ahmad *et al.* (2005) followed-up of Orphans' competence, socio emotional problems and post-traumatic stress symptoms in traditional foster care and orphanages in Iraqi Kurdistan. They found that orphans were more likely to be anxious, depressed and to display anger and showed significantly higher feelings of hopelessness and suicidal ideation. Garmezzy (1986) reviewed research on developmental aspects of children's responses to the stress of separation and loss of their parents and found children in the 5-10 year-old range to be most vulnerable to loss parents, often experiencing significant adaptive difficulties in adulthood. An adolescent who has experienced loss may perceive, sometimes out of conscious awareness, The adolescent may then develop a lifestyle based on this perception, and may become angry, defiant and increasingly vulnerable to the influence of others outside the home to fill the void (Cramerus 1990).

An experimental study was conducted by Hermenau *et al.* (2011) to assess the childhood adversity, mental ill-health and aggressive behavior in an orphan in Africa. The samples of 38 children were assessed at two time points. In the first study, result shows that violence experienced in the orphan had a positive relationship with the aggressive behavior of the children at time point. In the second study, with the help of the pre-post assessment of the study, the implementation of a new instructional system and psychotherapeutic treatment for trauma-related illness were evaluated. The results indicate that the experience of violence in an orphan also plays a crucial role in aggressive behavior of the orphans. The

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study suggests that mental health can be improved by implementing a new instructional system and psychotherapeutic treatment in an orphan. Hodges and Tizard (1989) conducted a research on the social, behavioral and emotional developments of a group of approximately 40 orphans from the preschool period to adolescence. They found that these children were overly friendly to adults; quarrelsome and unpopular with peers; anxious, fearful and aggressive before adolescence. They followed this group until 16 years of age, and found that they had such characteristics as being more adult oriented than peer oriented, having difficulty with peers, not having close friends, being unlikely to turn to peers for emotional support, and being indiscriminate in choosing friends. Ex-institutional children were found to be 10 times more likely to have several of these features than control children did. The authors concluded that long-term effects persist in all of the individuals of ex-institutional group although they are more subtle among the children adopted into privileged homes than in groups returning to their impoverished biologic families or remaining in institutions. The effect of early institutional rearing on behavioral problem and relational relationships of 4th year old children was investigated by Tizard and Rees (1975). They observed that in orphanage home setting, children's emotional and behavioral status worsen and even in well run institute children develop a range of negative behavior including aggression and indiscriminate affection towards adult. Regardless of particular epoch or particular country, age and gender predict the likelihood of different types of aggression and violent behaviors.

Coie and Dodge (1997) worked on aggression and antisocial behavior. They showed that males are more aggressive than females. Relating to the effects of gender on aggressive behavior, there are empirical evidences that males are quicker to aggression. Laboratory studies often show the same type of sex effect, but provocation dramatically reduces sex differences in physical aggression and specific types of provocation differentially affect male and female aggression. Barnow and Freyberger (2003) compelling evidence from multiple studies demonstrates that early life stress significantly contributes to the development of excessive and impulsive aggression. An orphan's life is very critical because of their lacking of care and support. Therefore, many kinds of stressful events occur among orphans; such as deprivation in family, aggression, physical and psychological stress and so on, which may influence on their life, mood and they become irritable and hopeless person. Sometimes, orphans may fall down from their mainstream because of anger, stress and lack of consciousness which is threatening to their self-esteem and developmental period. These orphans may involve with drug addiction or anti social activities which is not expected in our society. Most of the studies in this area have been done in western culture, but in Bangladesh there are very few studies. Now, the findings of the present study will be helpful to understand the stress and aggression level of orphans. The study would have some applied values and would give new theoretical knowledge about stress and aggression level of orphans. Therefore, it will help us to provide such information which is very essential for mental health worker (psychologist, sociologist, counselor, clinical psychologist) and policy maker to provide intervention program and make an effective step to facilitate their development.

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With respect to the rationale of the study, the main objective of the present study is to find out relation between stress and aggression of orphans as a function of gender and residence. Other objectives are; a. to investigate whether stress of orphans varies as a function of gender and residence and b. to see whether aggression of orphans varies as a function of gender and residence.

MATERIALS AND METHODS

Sample

For the present study two-stages sampling procedure was used.

Orphanage home and areas selection

Orphanage home and areas were taken purposively from Chittagong district in Bangladesh. The names of the orphanage home are Islamabad girl's orphanage, Bitushsaraf kamil madrasa and etimkhana, Alhera girl's madrasa, Imam azamabuhanifa (R) hefzokhana and etimkhana etc. And the residential areas were jawtola, dewanhat, mirerhat and hathajari.

Respondents selection

For the present study, 120 orphans were selected purposively from the above mentioned orphanage home and areas. Age of the respondents ranged from 10-18 years. Among them 60 orphans were male (30 were urban and 30 were rural) and 60 orphans were female (30 were urban and 30 were rural).

Measuring Instruments

In the present research the following two questionnaire were used such as Bangla version (Fahim 2001) of 'How stressful of your life stress' original version (Cohen 1999) was used to measure life stress of women in rural and urban areas.

Bangla version (Rahman 2003) of Aggressive Behavior (MAB) original version of (Buss and Perry 1992) was used to measure aggression.

These scales are described in below:

Life Stress Scale

The questionnaire was consisted of 10 items. The correlation coefficient of the Bangla version of the Life Stress Questionnaire with the English was found to be $r=0.90$ was significant at 0.01 levels. Test-retest reliabilities over a period of the two weeks were $r=0.94$, which was significant at 0.01 levels. This means that the reliability of the scale was satisfactory. The scoring was easy and simple. For items number 1, 2, 3, 7, 9 and 10 respondents got '0' for never, '1' for almost never, '2' for sometimes, '3' for fairly often, 4 for very often and for items number 4, 5, 6 and 8 respondents got '4' for never, '3' for almost never, '2' for sometimes, '1' for fairly often, '0' for very often responses. The sum was the Life Stress score of the respondents. The scale scores range from 0 to 40. Higher score means high level of stress and lower score means low level of stress.

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Measure of Aggressive Behavior Scale

It contains 25 items which were used for data collection. The items were divided into five dimensions such as physical aggression (5 items), verbal aggression (9 items), hostile aggression (5 items), anger aggression (3 items) and indirect aggression (3 items). Hypothetical situations were constructed on each item. Each item was followed by 5 alternatives ranging from totally true to totally false. Totally true was given 5 points, true was given 4 points, neutral was given 3 points, false was given 2 points and totally false was given 1 point. The Highest Possible Score (HPS) was $25 \times 5 = 125$ and the Lowest Possible Score (LPS) was $25 \times 1 = 25$. Aggressive Behavior Score (ABS) was worked out using the following formula.

$$ABS = \frac{HPS - LPS}{2} + LPS = \frac{125 - 25}{2} + 25 = 75$$

Hence, a score following on 75 or above was regarded as Aggressive Behavior Score. The correlation coefficient for split-half reliability was found 0.37. When Spearman-Brown formula was used, the correlation coefficient was found to increase from 0.37 to 0.54. The Measure of Aggressive Behavior was confirmed by validation at several stages. Items were constructed through open-end questionnaire. This indicated the content validity of MAB. Secondly, the scrutiny of each item was done by the judges. This procedure provided face validity for the Measure of Aggressive Behavior.

Design

A cross-sectional survey research design was followed for conducting present study.

Procedure

For collecting relevant data from the participants, at first permission from the orphanage home authorities and respondents were taken. Respondents were told that the sole purpose of the investigation was academic and their response would be kept confidential. Before administration of the questionnaire, necessary rapport was established with respondents. Then, the life stress scale and aggressive behavior scale were administered to respondents and requested a silent reading at the instruction provided with the scale before starting to answer. They were also requested not to omit any item in the scale and they were encouraged to answer all the items by telling that, there is no right or wrong answer to any item. All possible clarifications were made to the problems if faced by the respondents. There was no time limit for the respondents to answer all the items of the scale. After completing of their tasks, the answered questionnaires were collected from them. Finally, they were given thanks for their sincere co-operation.

RESULTS AND DISCUSSION

The data were analyzed by using mean, standard deviation, Pearson Product Moment Correlation and two-way analysis of variance (ANOVA). All statistical analyses were carried out using the statistical program SPSS version 16.0.

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TABLE 1: DESCRIPTIVE STATISTICS OF STRESS SCORE ACCORDING TO GENDER AND RESIDENCE.

| Gender | Residence | | |
|--------|------------------------|------------------------|------------------------|
| | Urban | Rural | Total |
| Male | M = 20.80 SD = 2.22 | M = 19.17 SD = 2.96 | M = 19.98 SD = 2.72 |
| Female | M = 23.13 SD = 3.31 | M = 19.57 SD = 2.94 | M = 21.35 SD = 3.59 |
| Total | M = 21.97 SD = 3.03 | M = 19.37 SD = 2.93 | |

Table 1 indicates that mean stress score of male orphans was 19.98 ($SD=2.72$) and female orphans was 21.35 ($SD=3.59$) and mean stress score of urban orphans was 21.97 ($SD=3.03$) and rural orphans was 19.37 ($SD=2.93$). To determine whether the differences observed between the means in Table 2 were statistically significant, two-way analysis of variance (ANOVA) was computed.

TABLE 2: SUMMARY OF THE ANALYSIS OF VARIANCE OF STRESS ACCORDING TO GENDER AND RESIDENCE.

| Source of Variance | df | SS | MS | F | Sig. (p-value) |
|--------------------|-----|----------|--------|-------|----------------|
| Gender | 1 | 56.03 | 56.03 | 6.73 | 0.01 |
| Residence | 1 | 202.80 | 202.80 | 24.36 | 0.01 |
| Gender*Residence | 1 | 28.03 | 28.03 | 3.37 | 0.07 |
| Error | 116 | 965.80 | 8.33 | | |
| Total | 120 | 52506.00 | | | |

Table 2 shows that gender had significant effect on orphan's stress ($F=6.73$, $df=1$, $p<0.05$) and also residence had significant effect on orphan's stress ($F=24.36$, $df=1$, $p<0.01$). Female orphans had more stress than male orphans, and urban orphans had more stress than rural orphans. The result also shows no significant interaction effect between gender and residence.

TABLE 3: DESCRIPTIVE STATISTICS OF AGGRESSION SCORE ACCORDING TO GENDER AND RESIDENCE.

| Gender | Residence | | |
|--------|------------------------|------------------------|------------------------|
| | Urban | Rural | Total |
| Male | M = 79.63 SD = 5.45 | M = 74.50 SD = 7.62 | M = 77.07 SD = 7.06 |
| Female | M = 71.40 SD = 6.49 | M = 69.53 SD = 5.12 | M = 70.47 SD = 5.88 |
| Total | M = 75.52 SD = 7.25 | M = 72.02 SD = 6.91 | |

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Table 3 shows that mean aggression score of male orphans was 77.07 ($SD=7.06$) and female orphans was 70.47 ($SD=5.88$) and mean aggression score of urban orphans was 75.52 ($SD=7.25$) and rural orphans was 72.02 ($SD=6.91$). To investigate whether the differences observed between the means in Table 4 were statistically significant, two-way analysis of variance (ANOVA) was computed.

TABLE 4: SUMMARY OF THE ANALYSIS OF VARIANCE OF AGGRESSION SCORE ACCORDING TO GENDER AND RESIDENCE.

| Source of Variance | <i>df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | Sig. (<i>p</i> -value) |
|--------------------|-----------|-----------|-----------|----------|-------------------------|
| Gender | 1 | 1306.80 | 1306.80 | 33.46 | 0.00 |
| Residence | 1 | 367.50 | 367.50 | 9.41 | 0.003 |
| Gender*Residence | 1 | 80.03 | 80.03 | 2.05 | 0.155 |
| Error | 116 | 4531.13 | 39.06 | | |
| Total | 120 | 659268 | | | |

Table 4 shows that gender has significant effect on orphans aggression ($F=33.46$, $df=1$, $p<.01$) and residence has also significant effect on aggression ($F=9.41$, $df=1$, $p<.01$). Male orphans had more aggression than female orphan. And urban orphans had more aggression than rural orphans. The result also shows no significant interaction effect between gender and residence.

Finally, to find out whether there is any relation between stress and aggression of orphans Pearson Product Moment Correlation was conducted. Positive correlation ($r=0.38$) was found between stress and aggression in orphans with an alpha level of $p<0.01$. It reveals moderately significant relationship between the stress and aggression levels of the orphans. That means, with the increase of orphan's stress, orphan's aggression increases.

The present study has focused on exploring stress and aggression of orphans as a function of gender and residence. The first objective of the present study was to investigate whether stress of orphans varies as a function of gender and residence. The mean score indicate that female orphan's stress score ($M=21.35$, $SD=3.59$) was higher than the score of male ($M=19.98$, $SD=2.72$). Orphans are deprived of love, affection from their parent or family. That time, they can get love or affection from their family, now they are reared by orphanage home through neglecting or depriving situation. The major characteristics of orphanage home are poor care giving, absence of a constant caregiver. The poor orphan who are not able to solve their own problems; the peer pressure, conflict with peers, opposition authority figures, often show insecure, avoidant, or ambivalent attachment to their primary adult caregivers. Due to school demands like administration of time for homework, demand of teachers for good grades, emotional rejection, failure in academic achievement and also due to the fact that because of daily routine was determined by strict rule and schedule by caregivers or supervisors facilitate stress among orphan. This stress will be more when orphan has to adjust with physical, social, emotional changes (Copeland 1987). Female orphan cannot adjust on these issues like males. Because, male orphan

expresses and shares his problems to his friends or other nearest person that female can't do it. Due to difference in gender socialization, female are supposed to be submissive, well-mannered, docile and repressive-minded while the boys are supposed to be aggressive, independent. For this reason, girls do not express their emotion and it leads to the emotional problem including stress, depression and anxiety which is similar to Roberts *et al.* (2005). He stated that repressed emotion leads to stress, and depression and it was more among girls than boys.

On the other hand, mean score indicates that orphan's stress score of urban ($M=21.97$, $SD=3.03$) was higher than score of rural ($M=19.37$, $SD=2.93$). This finding is supported by (Atkins and Krantz 1993). Rural life is simple and less pressured environment, on the other hand, urban life is crowding, noisy, violence and anomic. The orphan of urban areas gets more stimulation than rural areas. Technologically developed but unfavorable environment, available telecommunication and internet access, poor interaction and poor emotional attachment among peer groups and with caregivers, drug availability affect on orphan's life and emotion. This phenomenon leads to stress and depression among orphans (Isaranurug and Chompikul 2009). Moreover, in urban areas, many non-orphan children who interact with their family members, get modern facility, live in a supportive environment, enjoy better life pattern. By observing these phenomena orphan feels jealous. Because, they think that many children can get facilities, but why I can't get these. It leads to inferiority complex, low self-esteem, low self-perception, stress, juvenile delinquency (Draper and Hancock 2011) and in extreme cases suicidal tendency which is similar to Mark *et al.* (2000). He stated that 6.7% of 13–17 year olds in orphanage home reported a suicide attempt that required medical treatment because of stress and hopelessness.

The second objective of the present study was that to see whether aggression of orphans varies as a function of gender and residence. The mean scores indicate that male orphan's aggression score was higher ($M = 77.07$, $SD = 7.06$) than score of female ($M = 70.47$, $SD = 5.88$). It was supported by Cox *et al.* (2000). In general, much research has suggested that males use more physical aggression than females and females use more verbal aggression than males. Coie and Dodge (1997) showed that males were more aggressive than females. Maccoby and Jaklin (1974) have reported similar findings. According to theories of aggression by Parke and Slaby (1983), gender role and learning play a key role for anger and aggressive behavior of males. Males are exposed to parenting practices that promote rough-and-tumble, anger and aggressive behaviors whereas females are exposed to parenting practices that promote caring and close interpersonal relationships. These differential socialization practices appear to foster orphans' aggression to a greater extent in males than in females. Early mother-infant interaction is very important in children's development. Orphans lack mother's proper affection. This deficit becomes apparent later by aggression or other conduct problems (Cohn 1989). On the other hand, mean scores indicate that orphan's aggression score of urban ($M=75.52$, $SD=7.25$) was higher than score of rural ($M=72.02$, $SD=6.91$). These findings were supported by Rahman (2003). These findings showed that both gender and residential background have

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moderating effect on aggression. Male showed more aggression than female adolescents and urban residential background expressed more aggression as compared to rural residential background. Life in inner city is characterized by numerous factors such as violence, physical aggression, poor housing, drug using that can affect the safety, psychological development of the orphans that are exposed to those factor on a daily basis. Social learning theories of aggression (Bandura 1973) can account for the link between violence exposure and subsequent engagement in violence. Children may learn to adapt aggressive behaviors by observing aggressive models, and by appraising the at-time personally advantageous outcomes that can be achieved via expressions of aggression or infliction of violence. Studies of orphans adolescents have shown that higher exposure is associated with greater violent behavior (Flannery *et al.* 2001, Gellman and Delucia-Waack 2006), violence exposure predicts aggressive behavior over 1-year (Hughes 1999) and 2-year periods (McCabe *et al.* 2005). So, urban orphan shows more aggression than rural orphan.

The final objective of the study was to observe whether there is any relationship between stress and aggression of orphans. Positive correlation ($r = 0.38$) was found between stress and aggression of rural and urban orphans with an alpha level of $p < 0.01$. It reveals moderately significant relationship between the stress and aggression of orphans. Orphans who were reared in foster care institutions demonstrated measurable delays in social, emotional, and language development (Zhao *et al.* 2010). Therefore, lack of parental involvement and guidance, school pressure, problem in choosing best friends, warmth or affection, lack of close supervision, orphan suffers from stress (Draper and Hancock 2011). The way in which they cope with this stress can have significant short and long-term consequences on their physical and emotional health such as chronic fear and anxiety, poor interpersonal relations, aggression and other social disorders. This is similar to Masten *et al.* (1990). They found that under stress conditions, adolescents tend to show more disruptive or aggression.

This study may have important recommendations; adolescents living in orphanage homes represent a special group with special environment, and they need special care. Therefore, community health providers are more likely to identify those who need special care in order to avoid developmental and psychological problems. The findings of this study are also helpful for teachers and owner of orphanage homes to identify what problems are faced by these bereaved adolescents that they can help them to cope up with their problems through proper counseling and guidance services.

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