



## A cross sectional study of stress and aggression among adolescent orphans

Gyan Nihal N<sup>1</sup>, Raghuram Macharapu<sup>2\*</sup>, Pramod Kumar Reddy Mallepalli<sup>3</sup>, Ravulapati Sateesh Babu<sup>4</sup>

<sup>1</sup> Post graduate, Department of Psychiatry, Mamata Medical College, Khammam, Telangana, India

<sup>2</sup> Associate Professor, Department of Psychiatry, Mamata Medical College, Khammam, Telangana, India

<sup>3</sup> Professor, HOD, Department of Psychiatry, Mamata Medical College, Khammam, Telangana, India

<sup>4</sup> Professor, Department of Psychiatry, Mamata Medical College, Khammam, Telangana, India

### Abstract

**Introduction:** As the population in our country is increasing so as the orphan and abandoned children number. There are more than 25 million orphan or abandoned and about 44 million destitute children in India as per UNICEF 2012 report. An orphan's life is very critical as they lack proper care and support leading to stressful events.

**Objective:** To assess stress and aggression among orphans and to assess the relationship between stress and aggression in orphans.

**Materials and Methods:** This cross-sectional study was conducted among 60 orphans (30 males and 30 females) at orphanage homes, Khammam, Telangana from January to July 2019. The samples were drawn using convenience sampling method. The study was conducted using Perceived Stress Scale and The Aggression Questionnaire post ethics committee approval.

**Results:** The analysis revealed that female orphans (M=22.93) had significantly more stress than male orphans (M=20.4). No significant interaction effect found between gender in overall aggression but significance varied among sub traits of aggression. Results also showed that stress was positively correlated with aggression ( $r=.511$ ).

**Conclusion:** Stress and aggression are positively correlated among orphans so there is a need for attention regarding psychological problems through psychosocial management towards this vulnerable and neglected section of the society.

**Keywords:** stress, aggression, orphans

### Introduction

Adolescence is the fast track phase of human development period. It is also a time to enhance knowledge and skills, learn to manage relationship and emotional feelings, and acquire attributes and abilities that plays a vital role in the adolescent years and assuming adult roles<sup>[1]</sup>.

The most accepted definition for an orphan is "a child who has lost both parents through bereavement. However, this definition also includes demise of parents through desertion or dereliction by parents who are not willing to provide for the child"<sup>[2]</sup>.

Orphanage is residential place for the short-term or long-term care and support to an orphan. Adolescents in orphanage homes are one of the sensitive groups in this society where many of them live with repeated abuse, fear and ignorance<sup>[3]</sup>.

As the population in our country is increasing so as the orphan and abandoned children number. There are more than 25 million orphan or abandoned and about 44 million destitute children in India as per UNICEF 2012 report<sup>[3, 4]</sup>. Adoption rates of children in India have been declined from 6286 to 2762 during 2010-2016, making the situation alarming as per Ministry of Women and Child Development (Mo WCD)<sup>[5, 6]</sup>. The miserable fact is that most of these orphans suggested to be abandoned by the parents.

Parental care and support have a fulfilling effect on their children. Parental care and love determine the social initiative, social connection, adjustment, aspirations, and achievements of children<sup>[7]</sup>. Even if the socio-economic factors responsible for child's development and

achievement are eliminated from the equation, parental attachment as well as involvement during the changeover phase from childhood to adolescence and adulthood remains an important predictor of child's social well-being.<sup>8</sup> Parental loss or separation and abandonment during childhood proved to show impact on child's social as well as mental growth and development<sup>[9, 10]</sup>

Orphans face a very critical life as they lack of parental care as well as support and also are neglected and abused leading to stress. These stressful events might have impact on their life and mood leading to irritability and hopelessness.

Stress, anger and decreased consciousness can sometimes lead to side line of orphans from their mainstream. This down fall has its impact on their their self-esteem as well as their developmental period. These orphans may also involve in drug addiction or anti-social activities which are not accepted in our country<sup>[11]</sup>.

Early mother-infant interaction is necessary in children's development and orphans lack such affection and care which might become manifest later by aggression or other conduct problems. These adolescents are then usually nurtured in institutional homes which provide care and support. Life isn't easy for orphans because in such homes there are issues of overcrowding, inadequate care and substandard academic environment, which may affect the mental health of these children<sup>[12]</sup>.

Adolescents raised in orphanages are at higher risk for emotional problems (anxiety and depression), behavioral problems (hyperactivity and aggressiveness), social problems (greater loneliness and lower social competence)

and lower school attainment than children brought up in families<sup>[13, 14]</sup>. Mental health, including social and emotional well-being, is the foundation of childhood and adolescent health development<sup>[15]</sup>.

Studies have shown adolescents brought up in foster care homes and orphanages are exposed to roller coaster ride of behavioural and emotional issues, such as anti-social behavior, aggression, anxiety and depression<sup>[16, 17]</sup>. They suffer from emotional and behavioral problems three to seven times more often than others of their age and from the same socio-economic status<sup>[18]</sup>.

Orphans employed various tactics to overcome stress and develop resilience. More studies found Most of the children followed a spiritual path to overcome difficulties and bad experiences of their life by praying and talking to the God. Orphans also tried to overcome distress by getting over their past, parents, and orphan hood. Majority of the fellow adolescent residents of the orphanage had turned into their family and used to help and support each other through various challenges. Some orphans deviated themselves by performing activities of their choice which made them happy to get out of their bad memories and thoughts. There were some orphans who felt themselves remorseful for their circumstance and preferred to stay all alone and weep for their fate. Others would lash out at other orphans in the orphanage homes by showing their aggressiveness so as to cope up with problems and some orphans were engaged into bad habits (smoking, chewing tobacco and inhalants) to cope up to their problems. Substance abuse was a way to forget the misery in a trance. Many studies have reported similar findings<sup>[19, 24]</sup>.

### Aims & Objectives

1. To assess stress among orphans and compare between males and females.
2. To assess aggression among orphans and compare between males and females.
3. To assess relationship between stress and aggression among orphans.

### Materials & Methods

This is a descriptive, cross sectional study conducted at various orphanage homes in Khammam, Telangana with a sample size of 60 orphans where 30 were males and 30 were females were selected conveniently from various orphanage home. The study had the approval of the institutional research ethics committee. The data collection was done from January to May 2019.

Orphans willing to participate in the study, orphans above 14 years and below 20 years, orphans who are educated are included in this study. Orphans not willing to participate in the study, orphans below 14 years and above 20 years, orphans with psychiatric illness, orphans whose duration of stay in the home was <1 month and juvenile delinquents are excluded from this study.

For collecting data from the participants, at first permission from the orphanage home authorities and respondents were taken. Respondents were told that the purpose of this investigation was purely academic and the names as well as

the institutional homes would be confidential. A written informed consent was obtained from respondents included in the study. Before administration of the questionnaire, necessary rapport was established with respondents. Perceived stress scale and the aggression questionnaire were then administered to respondents and requested 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. There was no time limit for the respondents to answer all the items of the scale. After completing their tasks, the answered questionnaires were collected from them.

Perceived Stress Scale (PSS) was administered to assess stress in orphans. It is the most widely used psychological instrument for measuring the perception of stress. This 10-item questionnaire was designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. Participants are asked to respond to each question on a 5-point Likert scale ranging from 0 (never) to 4 (very often), indicating how often they have felt or thought a certain way within the past month. Scores range from 0 to 40 with higher composite scores indicative of greater perceived stress. This scale also includes a number of direct queries about current levels of experienced stress. The items are easy to understand, and the response alternatives are simple to grasp. Moreover, the questions are of a general nature and hence are relatively free of content specific to any subpopulation group. The questions in the PSS ask about feelings and thoughts during the last month. In each case, respondents are asked how often they felt a certain way.<sup>25</sup>

The Aggression Questionnaire was administered to assess aggression among orphans. It is one of the most widely used scales that measure trait aggression. The Buss-Perry Aggression Questionnaire (BPAQ) is a 29-item self-report measure of aggression was administered in orphans. It yields a minimum score of 29 points and a maximum score of 145. Each item is rated from 1 (very unlike me) to 5 (very like me). The BPAQ has four empirically derived subscales—Physical Aggression (9 items), Verbal Aggression (5 items), Anger (7 items), and Hostility (8 items) — that Buss and Perry proposed are sub traits of aggression. They described anger as the emotional or affective component of aggressive behaviour (involving “physiological arousal and preparation for aggression”), hostility as the cognitive component of behaviour (consisting of “feelings of ill will and injustice”), and verbal and physical aggression as the motor components of behavior (composed of “hurting or harming others”)<sup>[26, 27, 28]</sup>.

### Statistical Analysis

It was done using SPSS software for statistical analysis version 22. Socio-demographic data of the orphans were obtained using frequencies, descriptive statistics. Student t test was done to verify differences between the categorical variables. Means for scales were calculated. Pearson correlation test was done to see the co-relations between different parameters. P-value was set at significance of <0.05.

**Result**

**Table 1:** Stress and aggression among male and female orphans

Factors		Females (n=30)		Males (n=30)		P value
		Mean	SD	Mean	SD	
Stress		22.93	3.68	20.4	3.00	<0.001*
Aggression	Physical Aggression	19.56	5.80	23.93	5.25	<0.001*
	Verbal Aggression	16.8	4.55	17	3.16	0.84 (n.s)
	Anger	20.03	3.94	20.9	4.97	0.45 (n.s)
	Hostility	23.97	2.76	22.06	3.85	<0.001*
Total		80.37	12.83	83.9	10.73	0.25 (n.s)

Data were collected from 60 participants in which 30 are females and 30 are males respectively. Both the groups were compared across different variables.

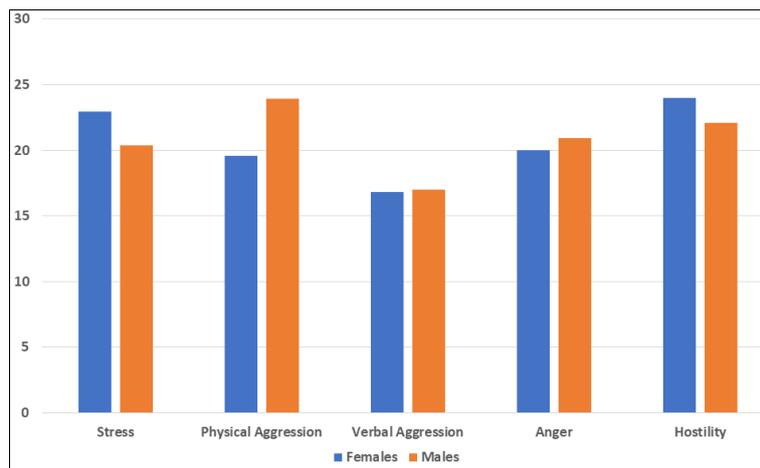
Table 1 shows that mean stress score of study sample of Perceived Stress scale of female orphans was 22.93 (SD=3.68) and male orphans was 20.4 (SD=3.00) which indicates that stress was significantly higher in females than males (p= <0.001) (Fig.1)

Table 1 also shows that overall mean aggression score of study sample of Buss-Perry Aggression Questionnaire of female orphans was 80.37 (SD=12.83) and male orphans was 83.9 (SD=10.73) which indicates that aggression was higher in males than females but not significant. The four sub traits were also measured. The first sub trait, Physical

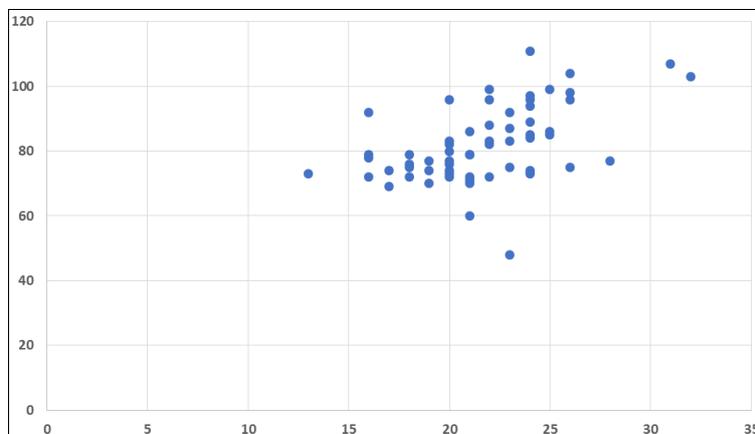
Aggression was found to be significantly higher in males (M=23.93; SD=5.25) than females (M=19.56; SD=5.80). The second sub trait, verbal aggression was higher in males (M=17; SD=3.16) than females (M=16.8; SD=4.55) but not statistically significant. The third sub trait, anger was also higher in males (M=20.9; SD=4.97) than females (M=20.03; SD=3.94) but again it wasn't statically significant. The last trait, hostility was significantly lower in males (M=22.06; SD=3.85) compared to females (M=23.97; SD=2.76).

**Table 2:** Correlation between stress and aggression among orphans

Stress	Aggression	
	R value	P value
	0.511	<0.001*



**Fig 1:** Graph showing stress and aggression among orphans



**Fig 2:** Correlation between stress and aggression among orphans

The last aim of the study was to assess any relationship between stress and aggression of orphans, Pearson Correlation Coefficient was done. Table 2 suggests positive

correlation (r =.51) was found between stress and aggression in orphans with an alpha level of p<.001 which indicates that the increase of stress of orphans, aggression increases

and vice versa. (Fig.2)

### Discussion

This study has shown that stress was significantly higher in females than males as males socialize more comparatively than females and relieve their stress but could be at risk of substance abuse. Orphans are deprived of love, affection from their parent or family and reared by orphanage home through neglecting or depriving situation with strict rules and restriction by caregivers or supervisors which can lead to increased stress among orphans. This stress will be more when orphan has to adjust with physical, social, emotional changes [29].

Care takers under certain circumstances encourage boys to be aggressive and unemotional and females to be emotional and nonaggressive. The reinforcement of these gender differences in the expression of anger/hostility [30].

This study has also shown that aggression was lower in female orphans than male orphans but not significant. The four sub traits were also measured. The first sub trait, Physical aggression was found to be significantly higher in males than females. The second sub trait, verbal aggression was higher in males than females but not statistically significant. The third sub trait, anger was also higher in males than females but again it wasn't statically significant. The last trait, hostility was significantly lower in males compared to females.

There is evidence suggesting that hostility may be expressed differently by men and women and that identical levels of hostility may also be interpreted differently in men and women [30, 32].

This study also assessed the relationship between stress and aggression of orphans. A positive correlation was found between stress and aggression in orphans which indicates that the increase of stress of orphans, aggression also increases and vice versa.

Without parental involvement and guidance, orphans face problems in choosing good companion, amiability or affection, lack of close monitoring leading to stress. The process by which they cope up with this stress can have remarkable short as well as long-term effects on their physical and mental health such as chronic fear and anxiety, poor interpersonal relations, aggression and other social disorders [32].

Masten *et al.* (1990) [34] found that under stress conditions, adolescents tend to show more disruptive or aggression which is similar to the current study [33].

Buss AH and, Perry M (1992) [27] found that males had significantly higher scores on physical aggression, verbal aggression and hostility but not on anger compared to females. Men had significantly higher scores on Physical Aggression, Verbal Aggression, and Hostility, but not on Anger [26].

Barnow and Freyberger (2003) [35] compelling evidence from numerous studies suggests that stress at early life had a major role in development of excessive and impulsive aggression [34].

Biplob Kumar *et al.* (2017) showed that female orphans more stressed than male orphans and urban orphans had more stress than rural orphans. But, male orphans had significantly higher aggression than female orphans and urban orphans were significantly more aggressive than rural orphans. No significant interaction effect found between gender and residence according to stress as well aggression.

Results also showed that stress was positively correlated with aggression [11].

### Limitations

The limitations in this study are being a cross sectional study and small sample size with study confining to one single city and literates.

### Conclusion and Future Directions

Adolescent's encounters determine the future social, emotional and psychological elements and functioning of individuals in their adulthood life.

Adolescents live in orphanage homes represent a special group with special environment in this society, so they need special attention. Therefore, community health providers are more likely to recognize those who require special emphasis in order to avoid developmental and psychological problems.

Findings are also helpful for teachers and authorities of orphanage homes to recognize the concerns faced by these bereft adolescents, so that they can help them to cope up with their problems through proper counseling and guidance services arrangements with the help of a psychiatrist.

Future investigations should develop and establish an official framework to address the orphan's issues within the community and strengthen these social support services. Considering the very fact that psychosocial management is a vital part of psychiatric care.

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