Clinical Depression
ISSN: 2572-0791

Mundukottackal and Ravindranadan, Clin Depress
2019, 5:1
DOI: 10.4172/2572-0791.1000138

Research Article Open Access

Correlates of Mental Health in Sexually Abused Adolescent Girls

John Jacob Mundukottackal[1*] **and Vidhya Ravindranadan**[2]

[1]*Department of Psychology, Bharathiar University, Tamil Nadu, India*

[2]*Department of Psychology, Union Christian College, Mahatma Gandhi University, India*

[*]**Corresponding author:** John Jacob Mundukottacka, Department of Psychology, Bharathiar University, Coimbatore, Tamil Nadu, India, Tel: +91-422-2428465; E-mail: agapecounselling@gmail.com

Received date: January 11, 2019; **Accepted date:** January 31, 2019; **Published date:** February 7, 2019

Abstract

Sexual abuse is a universal problem that occurs across gender, caste, colour, and religion, ethnic and socio-economic group. Sexual abuse creates intense trauma and emotional problems which create serious short term and long term psychological and behavioral problems. 81.53% of the total incidence of child sexual abuse was reported amongst children between 11 and 18 years of age. The pre-adolescent to the adolescent child seems to be most at risk. Child sexual abuse could have a severe impact on the different aspects of mental health such as depression, stress tolerance, emotional intelligence, resilience, self-esteem and psychological well-being. The present study intends to understand the impact of sexual abuse on mental health correlates of adolescent girls. For this study, a sample of 177 adolescent girls aged 12-18 years from two districts of Kerala, the southern-most state of India was studied. 57 sexually abused girls from Government children's home, 66 non-abused girls from a destitute home and 54 non abused girls staying with parents were selected for the study. These groups match in terms of socio-economic status and age. Instruments used for this study are Beck's Depression Inventory, Stress Tolerance Scale, Emotional Intelligence Inventory, Brief Resilience, Self-Esteem Scale and Psychological Well-being Scale. Data were analyzed using One-Way ANOVA and Post Hoc Test. The results indicate that there is significant difference among the three groups in the six variables under study. Sexually abused girls show moderate level of depression while the other two groups show mild depression. All the three groups show moderate stress tolerance level but the sexually abused girls show comparatively low stress tolerance. Emotional intelligence of sexually abused children in institution is very low and significantly different from the other two groups of non-abused children. Sexually abused children have low resilience, low self-esteem and low psychological well-being than the other two groups. Thus, this study highlights the severe negative impact of sexual abuse on the mental health correlates of adolescent girls.

Keywords: Child sexual abuse; Adolescent girls; Depression; Stress tolerance; Emotional intelligence; Resilience; Self-esteem; Psychological well-being

Introduction

Child Sexual Abuse (CSA) has been a global problem from the beginning of mankind. But only recently, it has been acknowledged as a social and mental health problem. Now it is one of the major problems discussed worldwide. Four decades of research has certainly contributed a better knowledge on the experience of victims of sexual abuse. More than twenty thousand research papers on CSA listed in the most renounced research data basis. In the review of the current rates of CSA across 55 studies from 24 countries, Barth et al. [1] found much heterogeneity in studies they reviewed and concluded that rates of CSA for females ranged from 8 to 31% and from 3 to 17% for males. Another meta-analysis study by Pereda et al. [2], showed an alarming rate of CSA with an average of 18-20% for females and 8-10% for males. A study conducted in Netherlands by Stoltenborgh et al. [3] found there is a big difference between self- reported studies and official reports. 1 in 8 children reported as abused in self-report studies but only 1 in 250 in government reports.

Every 5th child (19%) of the world children lives in India. According to the 2017 census total population in India is 1342 million, Some 472 million people in the country today are aged below eighteen years and constitute 41 percent of India's total population i.e., four out of every ten persons. Every 2nd child in India is undergoing CSA, among them, 52.94% were boys and 47.06% girls [4]. According to Krishna kumar et al. [5], 36% of boys and 35% of girls had experienced sexual abuse at some point during their lifetime. It has been reported that among 13 states, the gender-wise break up of children who were subjected to one or more forms of sexual abuse in Kerala is 55.04% for boys and 44.96% for girls [4]. It has also been reported that the prevalence of sexual abuse at some point in their life time, among boys it is 38.67% and among girls 37.7% [6].

Child has been defined as any person below the age of 18 years (Juvenile Justice Act, 2015). The word 'Abuse' is based on a Latin word "abusus" meaning 'misused'. The United Nations has defined child sexual abuse as contacts or interactions between a child and an older or more knowledgeable child or adult (a stranger, sibling or person in position of authority, a parent or a caretaker) when the child is being used as an object of gratification for the older child's or adult's sexual needs. These contacts or interactions are carried out against the child using force, trickery, bribes, threats or pressure (UNICEF, 2003). Child sexual abuse is classified into Type I (contact abuse) Type II (non-contact abuse) as Peters classification. Type I involves penetration abuse like rape and sodomy as well as touching and fondling of genitals etc. Type II involves exposing the child to pornography, talking sexually explicit things and exhibitionism in front of the child [1]. Present study focused on Type 1(contact abuse) children. According to POCSO Law, all cases of child sexual abuse should be reported to Child Welfare Committee (CWC). Child Welfare Committee is the

competent authority to dispose of all matters in relation to children in need or care and protection (Juvenile Justice Act, 2000). The sexually abused children who are not willing to go to their home or parents are not willing to take back to their own home or parents are inadequate or unfit and home is not fit place for children, are declared as children in need of care and protection by CWC and kept in children's home. The Child Rights Commission, Kerala report, showed an upward trend in reporting cases of child sexual abuse, 1002 in 2013 to 2093 in 2016. There is rapid increase in reported cases after the exhibition of POCSO law in 2012.

In Kerala, it has been observed that though there are residential destitute home for sexually abused children, there is a lack of professional help for their recovery and well-being. Their financial and physical needs are met to some extent but emotional needs are left unmet. This research is intended to understand the mental health scenario of the sexually abused children and it give scope for further researches and therapeutic intervention.

Adolescence is typically viewed as the preparation for adulthood. The term adolescence comes from the Latin word 'Adolescere', meaning 'to grow' or 'to grow to maturity'. The term adolescence has a broader meaning. It includes mental, emotional, social as well as physical maturity. The most commonly used chronologic definition of adolescence includes children from the age group of 10-18, but may incorporate a span of 9 to 26 years depending on the source [7]. Adolescence, the second decade of life, is a period in which an individual undergoes major physical and psychological changes. There are enormous changes in the person's social interactions and relationships. Adolescence is a time of opportunity, but also one of risk. Finding self-identity is the central characteristic of adolescence. Physical and sexual abuse of adolescents is becoming a major health problem. In infants, the sex distribution is approximately equal, but adolescent females are twice as likely to be abused as adolescent males, largely because of the frequency of sexual abuse. An earlier study conducted in Kerala proved that girl children were victims of contact abuse more (26.02%) in comparison to boys (14.06%) [6].

The potential negative effects of CSA on children are many and may continue throughout the lifespan [8-12]. Research has documented that child sexual abuse (CSA) may interfere with human growth and development [13-15] and place children at risk for a wide array of mental and emotional disorders. These disorders may include anxiety (e.g., panic disorder, OCD and PTSD), depression, anger, cognitive distortions, posttraumatic stress, dissociation, identity disturbance, affect dysregulation, interpersonal problems, substance abuse, self-mutilation, bulimia, unsafe or dysfunctional sexual behavior, somatization, aggression, suicidality, and personality disorders [10,12,16-19]. Some common consequences for adult survivors of CSA include: mental health problems (e.g., depression, anxiety, substance abuse, posttraumatic stress), relational challenges (e.g., sexual health, intimacy, and increased risk for sexual assault and domestic violence), and spiritual concerns (e.g., shattered assumptions about life, people, and self, and changing belief systems following the trauma) [20-22]. However, research has shown that some adult survivors of CSA are able to overcome the effects of their abuse and demonstrate resiliency and posttraumatic growth [23]. The following mental health correlates are identified to understand the psychological impact of Child Sexual Abuse.

Depression is a complex mood disorder involving the entire psychobiological organism and characterized by persistently negative view of the self, the world, and the future [24]. Depression is a mood disorder that causes persistent feeling of sadness, loss of interest also called major depressive disorder or clinical disorder, it affects how you feel, think and behave and can lead to a variety of physical and emotional problem. It can decrease a person's ability to function at work, school and home. Continuous exposure to violence and neglect, abuse or poverty may make some people vulnerable to depression. Ratican [25] describes the symptoms of child sexual abuse survivors' depression to be feeling down much of the time, having suicidal ideation, having disturbed sleeping patterns, and having disturbed eating patterns. Survivors often experience guilt, shame, and self-blame. It has been shown that survivors frequently take personal responsibility for the abuse. When the sexual abuse is done by an esteemed trusted adult it may be hard for the children to view the perpetrator in a negative light, thus leaving them incapable of seeing what happened as not their fault. Survivors often blame themselves and internalize negative messages about themselves. Survivors tend to display more self-destructive behaviors and experience more suicidal ideation than those who have not been abused [26].

Stress is the wear and tear on the body one experiences as he/she adjusts to the continually changing environment. It is the internal response caused by the application of a stressor. The severity of stress depends on the stressor's characteristics and on the resources of the person facing stressful situations. These are called situational and personal characteristics. Thus a person who is sure of his/her capacities and feels confident and secure is less likely to experience stress than a person who is not. An emotionally mature person can adjust to reasonable amount of stressful situations. If, however, a person is only marginally adjusted, the slightest frustration or pressure may be highly stressful. Stress tolerance is a tolerance of any adverse stimulus, internal or external, that tends to disturb homeostasis [27]. In other words it is the ability to withstand stress without becoming seriously impaired [28]. Stress and anxiety are often long-term effects of childhood sexual abuse. Childhood sexual abuse can be frightening and cause stress long after the experience or experiences have ceased. Many times survivors experience chronic anxiety, tension, anxiety attacks, and phobias [25]. A study compared the posttraumatic stress symptoms in Vietnam veterans and adult survivors of childhood sexual abuse. The study revealed that childhood sexual abuse is traumatizing and can result in symptoms comparable to symptoms from war-related trauma.

Resilience is the capacity to recover quickly from difficulty and toughness. According to APA [7], resilience is a process of adapting well in the face of adversity, trauma, tragedy, threats, or significant source of stress. It means "bouncing back" from difficult experiences. In a longitudinal study of women survivors of CSA, Hyman and Williams [29] found resilience to be associated with a stable family environment and less severe SA. Banyardand and Williams [30] identified social connection, life satisfaction and adaptive coping as correlates of resilience in adulthood in adult survivors of SA. Ability to form a secure attachment in childhood and to maintain it through adulthood also appeared to be a predictor of positive adaptation in women survivors of child [31].

Emotional intelligence is a term created by Peter Salvo and John Meyer and popularised by Daniel Goleman in his book of the same name, emotional intelligence. Emotional Intelligence is defined as the ability to identify, assess, and control one's own emotions, the emotions of others, and that of groups. In practical terms this means being aware that emotion can drive our behaviour and impact people positively and

negatively and learning how to manage the emotions of both our own and others especially when we are under pressure.

The five components of emotional intelligence are self-awareness, regulation, motivation, empathy and social skills. Some researchers say that it is an inborn characteristic while others suggest that it can improve with proper guidance and practice.

Self-esteem is related to feelings and thinking of one individual about his own value and competencies, which reflect a positive or negative attitude about himself [32]. Self-esteem refers to individual's sense of value or worth or the extent to which a person values, approves of, appreciates, prizes or likes himself/herself. Childhood sexual abuse is a problem that is known worldwide and can have various adverse effects on victims and survivors. Numerous studies suggest that being sexually abused can have a negative effect on self-esteem. In the study a group of sexually abused victims was compared to a group of individuals without a history of sexual abuse. The results showed that female college students who had been sexually abused had lower self-esteem, had more negative attitude towards life, were less assertive, and had higher depression and anxiety scores than women in the comparison group' [33].

According to Pavot and Diener [34], psychological well-being refers to the subjective experience of two aspects of one's psychological experience: Emotional or affective experience (i.e., positive and negative affect) and Conceptual or cognitive experience (i.e., satisfaction with life, relationships, work, and leisure). Research studies conducted by Garnefski and Arends [35], Garnefski and Diekstra [36] etc. have consistently found that adolescent survivors of child sexual abuse report greater depression and general psychological distress, more conduct problems and aggression, lower self-esteem, and more substance abuse problems. This reflects that the adolescent's psychological well-being is affected.

In particular, the Christchurch longitudinal study in New Zealand shows that exposure to childhood sexual abuse was related to "clear increases in the risks of later mental health problems". These included suicidality and depression, as well as anxiety disorders, conduct/anti-social personality disorder, and substance use. This association, from age 16 to 25 years, persisted after taking account of other adverse factors in childhood such as physical abuse, problematic parent-child attachment, and parental history of illicit drug use [37,38].

Objectives and hypothesis

The objective is to identify the correlates of mental health viz. depression, stress tolerance, emotional intelligence, resilience, self-esteem and psychological well-being of sexually abused adolescent girls and to compare them with healthy controls. The hypothesis is that there is significant difference between sexually abused and healthy controls on mental health correlates such as depression, stress tolerance, resilience, emotional intelligence, self-esteem and psychological well-being.

Materials and Methods

Sample

The sample consists of 176 adolescent girls of age group 12-18 years. The study was conducted in the state of Kerala in India among three different groups of 54, 57 and 66 each. The 1st sample group was randomly selected from sexually abused girls staying in government children's home, Kerala State. The 2nd sample group was selected from non-abused girls staying in destitute homes. The 3rd group was non-abused children staying with own parents at home selected from schools. All the three groups belong to low socio-economic background. All sexually abused children staying in institutions at least for a period of six months to six years were included.

The three study groups were simultaneously selected from Kerala. The 1st group of sexually abused girls was formed with help of CWC report. The 2nd group of non-abused girls in institution consists of girls from two charitable institutions run by single mothers with personal care and attachment. The children from these institutions were selected as per the report of the mothers. The 3rd group of non-abused girls was selected from different schools.

Procedure

An awareness class about child sexual abuse was conducted in charitable institutions and schools. A questionnaire was handed out individually and based on their self-report; the instruments were administered to access their mental health of these adolescent girls.

Instruments

The Beck Depression Inventory (BDI) is developed by Aaron T. Beck. There are three versions of the BDI-the original BDI, first published in 1961 and later revised in 1978 as the BDI-1A, and the BDI-II, published in 1996. The BDI is widely used as an assessment tool by health care professionals and researchers in a variety of settings. The BDI test includes a 21 item self-report using a four-point scale ranging which ranges from 0 (symptom not present) to 3 (symptom very intense). When the test is scored, a value of 0 to 3 is assigned for each answer and then the total score is compared to a key to determine the depression's severity. The interpretations are as follows: 0-9: indicates minimal depression; 10-18: indicates mild depression; 19-29: indicates moderate depression; 30-63: indicates severe depression. Higher total scores indicate more severe depressive symptoms.

Reliability and Validity: The BDI test is widely known and has been tested for content, concurrent, and construct validity. High concurrent validity ratings are given between the BDI and other depression instruments as the Minnesota Multiphasic Personality Inventory and the Hamilton Depression Scale; 0.77 correlation rating was calculated when compared with inventory and psychiatric ratings. The BDI-II positively correlated with the Hamilton Depression Rating Scale, r=0.71, had a one-week test– retest reliability of r=0.93 and an internal consistency=0.91.

Stress Tolerance Scale: The scale consisted of 24 items. The scale contains both positive and negative items, the positive statements carrying a weightage of 5, 4, 3, 2, and 1 for answers A, B, C, D, and E respectively and it is reversed for negative items. The scores of the 24 items were added to get a final score. It is interpreted as follows: 0-24=Very Low; 25-48=Low; 49-74=Moderate; 75-100=High; 101-120=Very High [30].

Reliability and Validity: The reliability of the whole test was estimated using Spearman-Brown formula. The reliability coefficient thus obtained was 0.89. This index of reliability showed that Stress Tolerance Scale is highly reliable. This value of reliability is significant at 0.01 level. The validity of the test was estimated with the help of empirical/criterion related validity. It was found out by correlating the "Stress Tolerance Scale" with "Stress Tolerance Inventory" developed

by Balagangadharan (1988). The correlation coefficient was estimated as 0.87. This index of validity showed that Stress Tolerance Scale is adequately valid. This value is significant at 0.01 levels.

The Brief Resilience Scale (BRS) developed by Smith et al. was used in this study. The BRS consists of six items; three negative items and three positive items. According to Smith et al., items 1, 3 and 5 are positively worded and items 2, 4, and 6 are negatively worded. Respondents were asked to answer each question by indicating their agreement with each statement by using the following scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree [39]. The responses are added varying from 1-5 for all six items giving a range from 6-30 and then divide the totalsum by the total number of questions answered i.e., 6.

Reliability and Validity: Smith, et al. also reported the reliability and validity of the instrument. The BRS demonstrated good internal constancy with the value of Cronbach's alpha ranging from 0.80-0.91. Convergent validity and discriminant predictive validity were also reported by Smith et al. as part of the validation analysis [39].

Emotional Intelligence Inventory (EII) developed by Dr. Immanuel Thomas and Sushama SR, (1998). The aim of this test is to know how the respondents evaluate their own habitual behavior styles. This contains 50 statements with 5 possible assertions out of which the candidate is directed to tick any one. The marks are 5,4,3,2 and 1 respectively as for completely agree, agree, undecided, disagree and completely disagree respectively. This is the way mark is given when the statement is in positive order. If the statement is in negative order, the order of marks will be just the reverse. In this set, there are 29 positive order statements and 21 negative order statements.

Reliability and Validity: Reliability has been established using Cronbach alpha, the coefficient is 0.88(N=432).The odd-even, split – half reliability after correction for attenuation is to be found at 0.86 (N=432).

Self Esteem Scale (SES) developed by Dr. Santosh Dhar and Dr. Upinder Dhar (2015). A 23-item scale measures global self-worth by measuring both high and low feelings about the self. All items are answered using a 5-point Likert scale format ranging from strongly agree to strongly disagree with a view to measure several factors such as positivity, openness, competence, humility, self-worth and learning orientation. Each item which is checked as strongly disagree, disagree, not sure, agree or strongly agree is awarded the score 1,2,3,4 and 5, respectively. Higher the total score, higher the self-esteem. The scoring scale interpretation is 98 and above=High, 81-97=Normal and 80 and below=Low.

Reliability and Validity: The reliability of this scale was determined by spilt-half method corrected for full length by applying Spearman Brown Prophecy formula. The reliability coefficient was found to be 0.87. The scale has high content validity of 0.93.

Psychological Well-Being Scale (PWBS) developed by Sisodia and Choudhary (2012) was used to measure psychological well-being among the participants. It contains 50 items measuring five dimensions (subscales) of well-being i.e., Life satisfaction, Efficiency, Sociability, Mental health, and Interpersonal relations. Each subscale has 10 items, each item with the five-point response category ranging from strongly agree to strongly disagree. Thus the scale provides scores on five dimensions/subscales, in addition to a score on the total psychological well-being. High score indicates high psychological well-being.

Reliability and Validity: For the total well-being score, the internal consistency reliability coefficient is reported to be 0.90 and the test-retest reliability is reported to be 0.87 for the normative sample. The test manual claims face and high content validity.

Statistical analysis

Data were analyzed using SPSS; One-way ANOVA and Post-Hoc test have been conducted to verify the hypotheses.

Results and Discussions

From Table 1, The ANOVA results show the F values of different mental health correlates as Depression-133.250, Stress Tolerance-7.222, Emotional Intelligence-76.476, Brief Resilience-122.610, Self Esteem-124.443, and Psychological Well Being-256.290.

		Sum of squares	Df	Mean square	F	Sig.
BDI	Between Groups	4327.924	2	2163.962	133.25	**0**
	Within Groups	2825.737	174	16.24		
	Total	7153.661	176			
STS	Between Groups	1996.866	2	998.433	7.222	0.001
	Within Groups	24054.863	174	138.246		
	Total	26051.729	176			
EII	Between Groups	59236.809	2	29618.405	76.476	**0**
	Within Groups	67388.083	174	387.288		
	Total	126624.893	176			
BRE	Between Groups	1897.561	2	948.781	122.61	**0**
	Within Groups	1346.45	174	7.738		

	Total	3244.011	176			
SES	Between Groups	34596.883	2	17298.441	124.443	**0**
	Within Groups	24187.162	174	139.007		
	Total	58784.045	176			
PWBS	Between Groups	209762.456	2	104881.228	256.29	**0**
		71205.827	174	409.229		
	Total	280968.282	176			

Table 1: Result of one-way ANOVA of the study groups on depression, stress tolerance, emotional intelligence, brief resilience, self-esteem and psychological well-being.

All F-values are found significant at 0.01 levels. Thus, the result indicates that there exists significant mean difference among the groups on all the variables under study. In order to understand which group means are statistically significant, post hoc-test has been done and the results are given below.

Groups	**N**	**Subset for alpha=0.05**		
		Sexually abused girls in Institution	**Non-abused girls in Institution**	**Non-abused girls staying at home**
Non-abused Girls staying at home	54	15.02		
Non-abused Girls in Institution	66		19.53	
Sexually Abused Girls in Institution	57			27.32
Sig.		1	1	1

Table 2: Result of post-hoc test among different groups on depression.

The results given in Table 2 indicate that the mean depression score of three groups (Sexually Abused Girls in Institution, Non-abused Girls in Institution, and Non-Abused Girls staying at home) is significantly different from each other. Sexually abused girls in institutions have the highest depression mean score of 27.32. This shows that they have a moderate level of depression. Non-abused adolescent girls in institutions also have a mean score of 19.53, which also indicate a moderate level of depression. Non-abused girls staying at home have the mean score of 15.02, which shows that they have a mild level of depression. There is a significant difference in the level of depression between these three groups.

Based on these result, it can be concluded that sexual abuse can contribute to depression in adolescent girls. The highest mean depression score among sexually abused girls in institutions shows that moderate depression is prevalent among adolescent girls who experience sexual abuse. This is consistent with several other research studies.

The results given in Table 3 indicate that the mean score of stress tolerance among sexually abused girls in institutions (63.02), non-abused girls staying at home (64.04), and non-abused girls in institutions (70.41) have a moderate level of stress tolerance. The result shows that non-abused girls in institutions have significantly higher stress tolerance when compared to the other two groups. It is noteworthy that the sexually abused adolescent girls in institutions have the lowest stress tolerance when compared to the other two groups.

Groups	**N**	**Subset for alpha=0.05**	
		1	**2**
Sexually Abused Girls in Institution	57	63.02	
Non-abused Girls staying at home	54	64.04	
Non-abused Girls in Institution	66		70.41
Sig.		0.896	1

Table 3: Result of post hoc test among groups on stress tolerance scale.

Groups	**N**	**Subset for alpha=0.05**	
Sexually abused girls in institution	57	105.58	
Non-abused girls staying at home	54		143.26
Non-abused girls in institution	66		145.82
Sig.		1	0.781

Table 4: Result of post hoc test among groups on emotional intelligence.

Table 4 describes the result of emotional intelligence. The mean score of sexually abused girls in institutions (105.58) is significantly different from the other two groups. The mean score of sexually abused girls in institutions shows that they have a very low level of emotional intelligence. The mean score of non-abused girls in institutions (145.82) and non-abused girls staying at home (143.26) indicate that they have a low level of emotional intelligence. The sexually abused girls in institutions have significantly lower levels of emotional intelligence when compared to non-abused girls staying in institutions

and homes. Therefore, based on this result, we can conclude that sexually abused girls have a negative impact on emotional intelligence.

Groups	N	Subset for alpha=0.05		
		1	2	3
Sexually abused girls in institution	57	12.12		
Non-abused girls in institution	66		17.3	
Non-abused girls staying at home	54			20.26
Sig.		1	1	1

Table 5: Result of post hoc test among groups on resilience.

The result of Table 5 shows that there is a significant difference between the three groups. The mean score of non-abused girls staying at home (20.26) shows that they have normal resilience. The mean score of non-abused girls in institutions (17.30) and sexually abused girls in institutions (12.12) shows that they have low resilience. This result shows that the institutionalized abused and non-abused girls have low resilience when compared to non-abused adolescent girls living with parents. It is noteworthy that the sexually abused girls have the lowest score in resilience. All the three groups are significantly different in resilience.

Groups	N	Subset for alpha=0.05		
		1	2	3
Sexually abused girls in institution	57	49.46		
Non-abused girls staying at home	54		72.91	
Non-abused girls in institution	66			82.48
Sig.		1	1	1

Table 6: Result of post hoc test among groups on self-esteem.

The result of Table 6 shows there is a significant difference in self-esteem between the three study groups. The self-esteem mean score of sexually abused girls in institutions (49.46), non-abused girls in institutions (72.91), and non-abused girls staying at home(82.48) indicates that non-abused girls in institutions show a Normal level of self-esteem. Sexually abused girls' self-esteem means scores also indicate that they have the lowest level of self-esteem when compared to the other two groups. All the groups show a significant difference in self-esteem. This result is consistent with other research studies (write authors with similar results) that show that sexual abuse has a negative impact on the self-esteem of adolescent girls.

The result of Table 7 shows that sexually abused girls in institutions have the lowest mean score (96.61) when compared to non-abused girls in institution and home. The result indicates that all the three groups have moderate levels of psychological well-being. It can be stated that sexual abuse has negative impact on the psychological well-being of adolescent girls.

Groups	N	Subset for alpha=0.05	
		1	2
Sexually abused girls in institution	57	96.61	
Non-abused girls staying at home	54		165.33
Non-abused girls in institution	66		173.68
Sig.		1	0.086

Table 7: Result of post hoc test among groups on psychological well-being.

Conclusion

Sexually abused adolescent girls have significantly high level of depression and low level of stress tolerance, emotional intelligence, resilience, self-esteem and psychological well-being compared to healthy controls. The study highlights need for preventing sexual abuses and intervention to enhance the mental health of sexually abused adolescent girls.

References

1. Barth J, Bermetz I, Heim E, Trelle S, Tonia T (2012) The current prevalence of child sexual abuse worldwide: a systematic review and meta-analysis. Int J Public Health 58: 469-483.
2. Pereda N, Guilera G, Forns M, Gòmez-Benito J (2009) The international epidemiology of child sexual abuse: A continuation of Finkelhor(1994). Child Abuse Negl 33: 331-342.
3. Stoltenborgh M, Van IJzendoorn MH, Euser EM, Kranenburg BMJ (2011) A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. Child Maltreat 16: 79-101.
4. Kacker L, Varadan S, Kumar P (2007) Study on Child Abuse in India 2007. Ministry of Women and Child Development.
5. Krishnakumar P, Satheesan K, Geeta MG, Sureshkumar K (2013) Prevalence and Spectrum of Sexual Abuse Among Adolescents in Kerala, South India. Indian J Pediatr 81: 770-774.
6. Nair BA, Devika J (2014) Self -reported sexual abuse among a group of adolescents attending life skills education workshops in Kerala. Academic Medical Journal of India 16: 3-6.
7. APA (2002) Developing adolescents: A reference for professionals. Washington, DC: American Psychological Society.
8. Deb S (2006) Children in Agony. New Delhi: Concept Publishing Company.
9. Deb S (2009) Child Protection: Scenario in India. International Journal of Child Health and Human Development 2: 339-348.
10. Deb S, Mukherjee A (2009) Impact of Sexual Abuse on Mental Health of Children. New Delhi: Concept Publishing Company.
11. Kacker L, Kumar P (2008) Child Abuse in India. In: Daro D editor. WorldPerspectives on Child Abuse (8th edn.), International Society for Prevention of Child Abuse and Neglect (ISPCAN), Chicago, pp: 98-100.
12. Priyabadini S (2007) Child Abuse in Indian families. In: Carson DK, Carson CK, Chowdhury A editors. Indian Families at the Crossroads: Preparing Families for the New Millennium. New Delhi, Gyan Pub. House, pp: 107-121.
13. Cicchetti D, Toth SL (2006) Building Bridges and Crossing Them: Translational Research in Developmental Psychopathology. Developmental Psychopathology 18: 619-22.
14. Foster JM (2011) An Analysis of Trauma Narratives: Perceptions of Children on the Experience of Childhood Sexual Abuse. Electronic Theses and Dissertations.

15. Goodman GS, Quas JA, Ogle CM (2010) Child Maltreatment and Memory. Annu Rev Psychol 61: 325-351.
16. Briere J, Lanktree C (2008) Integrative Treatment of Complex Trauma for Adolescents(ITCT-A): A Guide for the Treatment of Multiply-traumatized Youth. MCAVIC-USC Child and Adolescent Trauma Program National Child Traumatic Stress Network.
17. Foster JM, Carson DK (2013) Child Sexual abuse in the United States: Perspectives on Assessment and Intervention. American Journal of Humanities and Social Sciences 1: 97-108.
18. Goodyear-Brown P (2011) Handbook of Child Sexual Abuse: Identification, Assessment, and Treatment. New York: John Wiley.
19. Tomlinson P (2008) Assessing the Needs of Traumatized Children to Improve Outcomes. J Soc Work Pract 22: 359-374.
20. Malley-Morrison K (2004) International Perspectives on Family Violence and Abuse: ACognitive Ecological Approach. Mahwah, NJ: Lawrence Erlbaum Publishers.
21. Davidson GC, Mulholland C , Campbell J, DClinPsych SC (2009) A Longitudinal Study of the Effects of Childhood Trauma on Symptoms and Functioning of People with Severe Mental Health Problems. J Trauma and Dissociation 10: 57-68.
22. Deb S (2005) "Child abuse and Neglect: The Indian Scenario". Social Science International 21:3-19.
23. Wright MO, Crawford E, Sebastian K (2007) Positive Resolution of Childhood Sexual Abuse Experiences: The Role of Coping, Benefit-finding and Meaning-making. J Fam Violence 22: 597-608.
24. Fairchild RW (1990) "Sadness and Depression". In Dictionary of Pastoral Care and Counseling Edited by Rodney J. Hunter A bingdon Press: Nashville: 1103- 1106.
25. Ratican K (1992) Sexual abuse survivors: Identifying symptoms and special treatment considerations. Journal of Counseling and Development 71: 33-38.
26. Browne A, Finkelhor D (1986) Impact of child sexual abuse: A review of the research. Psychological Bulletin 99: 66-77.
27. Paton JA (1999) The Liverwort Flora of the British Isles.UK: Harley books.
28. Carson RC, Butcher J N (1930) Abnormal Psychology and Modern Life 9th edn. New York: HarperCollins Publishers Incorporated.
29. Hyman B, Williams L (2001) Resilience among women survivors of child sexual abuse. Affilia 16: 198-219.
30. Banyard VL, Williams LM (2007) Women's voices on recovery: A multi-method study of the complexity of recovery from child sexual abuse. Child Abuse & Neglect 31: 275-290.
31. Leifer M, Kilbane T, Kalick S (2004) Vulnerability or resilience to intergenerational sexual abuse: The role of maternal factors. Child Maltreat 9:78-91.
32. Rosenberg M (1989) Society and the adolescent self-image. American Psychological Association.
33. Birgisdóttir ÍH (1990) The Effect of Sexual Abuse on Self-esteem Among Adolescents: The impact of gender ,Parental support and type of perpetrator.
34. Pavot W, Diener E (1993) Review of the satisfaction with life scale. Psychological Assessment 5: 164-172.
35. Garnefski N, Diekstra RF (1997) Child sexual abuse and emotional and behavioral problems in adolescence: gender differences. J Am Acad Child Adolesc Psychiatry 36: 323-329.
36. Garnefski N, Arends E (1998) Sexual abuse and adolescent maladjustment: Differences between male and female victims. J Adolesc 21:99-107.
37. CFCA paper no.11 (2013) The long-term effects abuse. Retrieved July 12, 2018, from australian institue of family studies: sexual of child.
38. Reshmi CS, Sananda Raj HS (1999) Stress Tolerance Scale and Manual. Thiruvananthapuram: Department of Psychology, University of Kerala.
39. Smith BW, Dalen J, Wiggins K, Tooley E, Christopher P et al. (2008) The brief resilience scale: assessing the ability to bounce back. Int J Behav Med 15:194-200.