



ACROPHOBIA IN HIGH SCHOOL STUDENTS, GUNTUR, ANDHRA PRADESH, INDIA

Sankara Pitchaiah Podila* and Nazia Sultana

Department of Geology, Acharya Nagarjuna University, Andhra Pradesh, India

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ABSTRACT

Phobias are common in human life. Acrophobia, The present study was aimed to know the Acrophobia among 8th to 10th studying students in rural and urban Government schools. The response was taken from 3399 students (8th:1175, 9th:1095, 10th:1129). The study found that the phobia was more in Namburu and Ponnekallu school students (24.39%). In the urban schools the highest percentage was noticed in SK school (25.87). Homeopathy, Exposure based therapy, Cognitive therapy are some of the useful treatment methods. Recently Ophobia has been proposed for better treatment.

Key words:

Acrophobia, specific phobia, anxiety disorder, treatment, rural and urban high school students

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INTRODUCTION

A phobia is a type of anxiety disorder, defined by a persistent and excessive fear of an object or situation. The phobia typically results in a rapid onset of fear and is present for more than six months (American Psychiatric Association, 2013). A Phobia can have a serious impact on well-being. include panic, rapid breathing, nausea or vertigo. The American Psychiatric Association identifies three different categories of phobia: social phobia, agoraphobia, and specific phobia. When people talk about having a phobia of a specific object, they are referring to a specific phobia (<https://www.verywellmind.com>). Acrophobia is one type of specific phobia. Acrophobia is an extreme and sometimes irrational fear of heights. One of a specific group of phobias classified by space and motion discomfort, this fear has many root causes and can be severe in its intensity. Acrophobic behavior typically involves the avoidance of a variety of height-related situations, including stairs, terraces, apartments and offices located in high buildings, bridges, elevators and plane trips (Menzies, 1997).

However, there are more specific and less known symptoms that can include the fear of getting a chair, a ladder, or any scenario where one's feet are not touching the ground (<https://www.gomentor.com>). Symptoms Coelho, and Wallis (2010) found that the fear of heights is an expression of a largely sensory phenomena, which can produce strong feelings

of discomfort and fear in the otherwise calm individuals. Given the striking breadth of aversive situations and stimuli avoided, it is not surprising that individuals with acrophobia feel extremely impaired and restricted in their movements (Menzies, 1997). With lifetime prevalence estimates of between 8 and 15% (Graaf *et al.*, 2012; Kessler *et al.*, 2012) specific phobias rank among the most prevalent mental disorders, along with depressive disorders and social phobia (Graaf *et al.*, 2010). Specific phobias have a high prevalence rate in epidemiological data, both in adolescents (Essau, Conradt, & Petermann, 2000) and in adults (Boyd *et al.*, 1990). Specific phobias were studied by Ollendick *et al.*, (2010); Curtis *et al.*, (1998); de Oliveira-Souza (2018); Naveed *et al.*, (2015); Pull (2008) Singh and Singh (2016). Vertigo should not confuse with acrophobia because both have almost similar feeling, but both are different situations. It may reserve the individual's common activities.

The present study was carried out to know the extent of the Acrophobia among 8th to 10th class students, studying in rural and urban Government schools.

METHODOLOGY

A total of 3399 students was participated, out of them 1175 are studying 8th, 1095 are 9th and 1129 are 10th class. 1342 were studied in seven rural schools and 2057 in seven urban schools. Details are shown in Tables 1 and 2. Students were assembled in a classroom of the respective schools and asked them to give their response to a single question-“Do you have a fear of height?”. The purpose of the study and the details regarding the phobia were explained in their mother tongue. The response was analyzed using statistical analysis. Percent

*Corresponding author: **Sankara Pitchaiah Podila**
Department of Geology, Acharya Nagarjuna University,
Andhra Pradesh, India

variation was observed and presented under results and discussion.

Table 1 Class Wise Rural School Student's Strength

Place/School	8th School Strength	No. of students with Acrophobia	9th School Strength	No. of students with Acrophobia	10th School strength	No. of Students with Acrophobia
Chinakakani	59	6	56	9	49	1
Namburu girls'	30	5	21	3	30	7
Namburu	97	26	96	22	86	12
Ponnekallu	92	20	78	19	86	21
Takkellapadu	64	9	47	7	47	8
Tadikonda girls'	49	13	57	11	49	6
Venigalla	79	16	69	9	101	16

RESULTS AND DISCUSSION

A percent variation of the rural and urban students, those suffering from Acrophobia was shown in tables 2 and 3 and figures 1 and 2 and is explained below.

Rural Schools

8th class

Highest percent of Namburu school (26.80) were marked the Acrophobia, followed by Tadikonda girl (26.53%) and Ponnekallu (21.74%). The lowest percent was noticed with Chinakakani school (10.17%).

Table 2 Class Wise Urban School Student's Strength

School	8th School Strength	No. of students with Acrophobia	9th School Strength	No. of students with Acrophobia	10th School strength	No. of Students with Acrophobia
SK	173	61	159	19	189	46
SGNKR	66	17	89	17	77	22
SJRR	130	36	93	40	93	27
SKS	100	26	94	27	116	39
P	92	23	83	13	77	1
KSR	51	5	77	14	53	7
SCMP	93	9	76	19	76	19

9th Class

24.36% of Ponnekallu school students had expressed the Acrophobia, followed by Namburu school students (22.92%) and Tadikonda girl (19.30%). Comparatively, the problem is low in Venigalla (13.04%) and Namburu girls (14.29%).

Table 3 Acrophobia among Rural School Students (%)

Schools	8th	9th	10th
Chinakakani	10.17	16.07	2.04
Namburu girls	16.67	14.29	23.33
Namburu	26.80	22.92	13.95
Ponnekallu	21.74	24.36	24.42
Takkellapadu	14.06	14.89	17.02
Tadikonda girl	26.53	19.30	12.24
Venigalla	20.25	13.04	15.84

10th Class

Highest percent of Ponnekallu students (24.42) were marked the Acrophobia, followed by Namburu girls (23.33%) and Takkellapadu (17.02%). The problem is low in Chinakakani (2.04%).

Urban Schools

8th Class

35.26% of SK students were pointed Acrophobia, followed by SJRR (27.69%) and SKS (26.00%). The lowest percent was observed with SCMP (9.68%).

9th Class

Highest percent of SJRR (43.01) school students had Acrophobia, followed by SKS (28.72%) and SGNKR (19.10%). The lowest percent was observed in SK students (11.95%).

10th Class

33.62% of SKS students were suffering from Acrophobia, followed by SJRR (29.03%) and SGNKR (28.57%). The lowest percent was observed in P (1.30%).

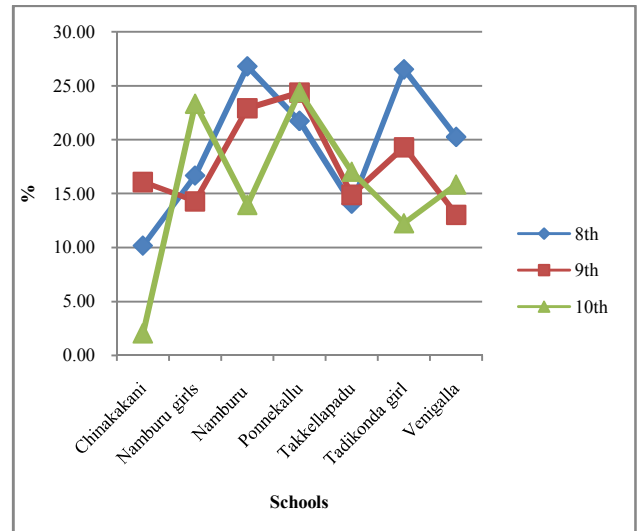


Figure 1 Percent variation of Acrophobia in rural school students

Table 4 Acrophobia among Urban School Students (%)

Schools	8th	9th	10th
SK	35.26	11.95	24.34
SGNKR	25.76	19.10	28.57
SJRR	27.69	43.01	29.03
SKS	26.00	28.72	33.62
P	25.00	15.66	1.30
KSR	9.80	18.18	13.21
SCMP	9.68	25.00	25.00

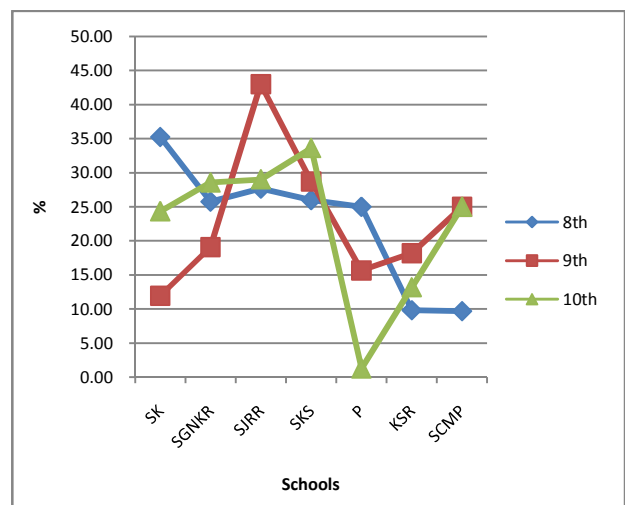


Figure 2 Percent variation of Acrophobia in urban school students

Comparative study

Rural schools

Comparison of Acrophobia among 8th to 10th class rural and urban students was shown in table 5 and figure 3). Among the

rural schools, high percent of Namburu and Ponnekallu students (24.39) had Acrophobia followed by Venigalla (16.67%) and Tadikonda girls' (12.20%). The lowest percent was observed with Nambur girls' (6.10%) and Chinakakani (6.50%).

Table 5 Comparative Study of Acrophobia (%)

Rural Schools (%)		Urban Schools (%)	
Chinakakani	6.50	SK	25.87
Namburu girls	6.10	SGNKR	11.50
Namburu	24.39	SJRR	21.15
Ponnekallu	24.39	SKS	18.89
Takkellapadu	9.76	P	7.60
Tadikonda girl	12.20	KSR	5.34
Venigalla	16.67	SCMP	9.65

Urban schools

In the case of urban schools, high percent of SK students (25.87) had an Acrophobia (Table 4 and Figure 4), followed by SJRR (21.15%), SKS (18.89%) and SGNKR (11.50%). The lowest percent was observed with KSR (5.34%).

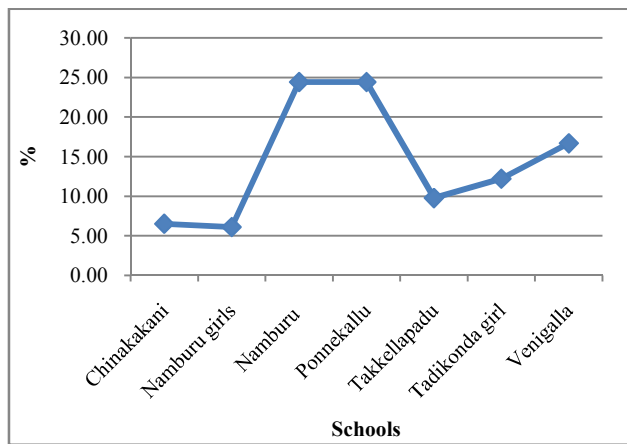


Figure 3 Comparison within the rural school students

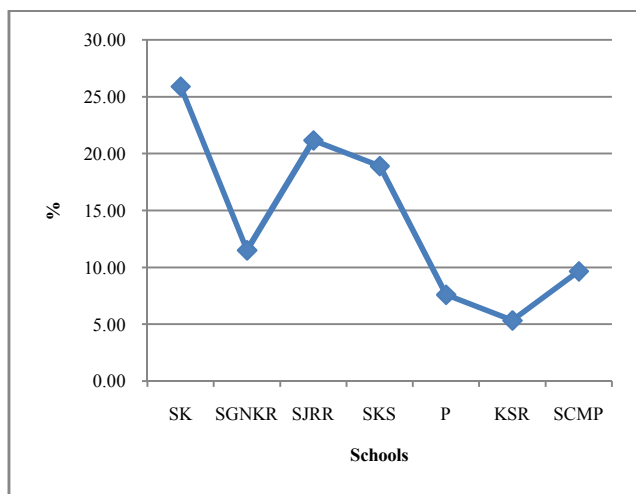


Figure 4 Comparison within the Urban school students

Treatment Methods

There are certain therapies by which this phobia is treatable. Cause of Acrophobia may be any traumatic experience involving heights. The main treatment of choice for specific phobias is Cognitive-behavioral (CBT). Behavioral techniques by which survivor exposes to feared situations (gradually or rapidly) are frequently used. In addition, the patient is taught

ways of stopping the panic reaction and regaining emotional control (Abbas and Kiran, 2015).

Virtual reality exposure therapy (VRET) has been shown to be as effective as traditional forms of in vivo exposure therapy for the treatment of specific phobias. However, as with in vivo exposure, VRET still involves relatively high costs and limited accessibility which makes it prohibitive for a large part of the population. Innovative methods using smartphone applications (apps) may improve accessibility and scalability of VRET. Donker *et al.*, (2018) evaluated OPhobia, a gamified self-guided VRET for acrophobia that is delivered through a smartphone app in combination with rudimentary cardboard virtual reality (VR) goggles. Brandt *et al.*, (2018) studied about Susceptibility to Fear of Heights in Bilateral Vestibulopathy and Other Disorders of Vertigo and Balance.

Traditionally, actual exposure to heights is the most ordinary solution. However, there have been a number of research studies into using virtual reality as a treatment for acrophobia. A major benefit of virtual reality treatment is the savings in both cost and time, as there is no need for "on-location" therapist accompaniment. More research will need to be carried on before this method becomes a readily available option, but if it is available it may be worth trying (Bouman *et al.*, 1992).

Virtual reality (VR) technology has been used in the psychological treatment of acrophobia since 1995, and has come to dominate the treatment of numerous anxiety disorders. It is now known that virtual reality exposure therapy (VRET) regimens are highly effective for acrophobia treatment. In particular, the review focuses on recent innovations in the use of VR technology and discusses the benefits it may offer for examining the underlying causes of the disorder, allowing for the systematic assessment of interrelated factors such as the visual, vestibular and postural control systems. According to the Diagnostic. Acrophobia appears closely related to the fear of elevators and fear of flying, both of which belong to the specific phobia, situational type, as defined in the DSM-IV (Muris, Schmidt, & Merckelbach, 1999).

Because some individuals who fear heights have often been unable to report a clear height-related aversive experience as a primary etiological factor, some authors have proposed hereditary or non-associative accounts in the disorder's development (Menziez & Clarke, 1993, 1995a). In one study, Menziez and Clarke (1993) compared fearful and non-fearful participants' responses to heights in an attempt to assess their acquisition of height-related fear.

A few years later, Menziez and Clarke (1995b) were able to extend these findings using a much larger clinically defined group of acrophobics. All this evidence led the authors to rule out a latent inhibition hypothesis (e.g. Bond & Siddle, 1996; Lubow, 1973).

Some of the useful methods

Exposure-based therapy - (Singh and Singh, 2016)

Cognitive therapy (CT)- (Specific phobia. <http://www.med.upenn.edu>).

Progressive desensitization (Specific phobia. <http://www.med.upenn.edu>).

Relaxation- (Specific phobia. <http://www.med.upenn.edu>).

Hypnosis (hypnotherapy)- (Natural treatment for phobia and anxiety. <http://www.phobicssociety.org>)

Homeopathy- (<http://www.phobicssociety.org>).

Herbal remedies- (Natural treatment for phobia and anxiety. <http://www.phobicssociety.org>).

CONCLUSION

Acrophobia was reported by many high school students. The present study was made a comparison among 8th to 10th students and between rural and urban students. There was no much difference in the highest percentage among three classes, i.e., 8th:26.80, 9th:24.36 and 10th:24.42 of rural schools. In the case of urban school students, the percentages were 35.26, 43.01 and 33.62 respectively. The students shall feel it as a common phobia and shall take suitable treatment.

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