

Achluophobia in High School Students, Guntur, Andhra Pradesh, India

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ABSTRACT

Achluophobia, fear of darkness, is a common phobia among children and to some degree in adults. The response was taken from 3399 students (8th:1175, 9th:1095, 10th:1129) studying in Government High Schools. The study found that the phobia was more in 8th class students of both rural and urban, compared to 9th and 10th students. Among the rural schools, the average percentage (8th to 10th) was more in Nambur (23.32), Venigalla (17.96) and Tadikonda girls' (16.35). In the case of urban schools the highest percentage was recorded in SJRR(22.20), SKS (19.25) and SK school (16.90).

Keywords : Achluophobia, Specific Phobia, Anxiety Disorder, Treatment, Rural and Urban High School Students

I. INTRODUCTION

Specific phobias are extreme and persistent fears of certain objects, situations, or activities, or persons. Achluophobia is the scientific term for fear of the dark (<https://www.allhealthsite.com>). This is also called as scotophobia or nyctophobia. Nyctophobia is a phobia characterized by a severe fear of the dark. It is triggered by the brain's disfigured perception of what would, or could happen when in a dark environment. It can also be temporarily triggered if the mind is unsteady or scared about recent events or ideas, or a partaking in content the brain considers a threat. Nyctophobia produces symptoms beyond the normal instinctive parameters, such as breathlessness, excessive sweating, nausea, dry mouth, feeling sick, shaking, heart palpitations, inability to speak or think clearly or sensation of detachment from reality and death. Nyctophobia can be severely detrimental

physically and mentally if these symptoms are not resolved. There are many types of therapies to help manage Nyctophobia (Wikipedia).

The fear of darkness is one of the most common fears among children, with a peak between four and six years. From the age of nine it starts to decrease in the majority of children. In some cases it persists and develops into a specific phobia (Orgiles et al., 2008).

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

II. 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 darkness?”. 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 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 Achluophobia	9th School Strength	No. of Students with Achluophobia	10th School strength	No. of Students with Achluophobia
Chinakakani	59	9	56	15	49	4
Namburu girls’	30	19	21	13	30	17
Namburu	97	47	96	20	86	20
Ponnekallu	92	16	78	15	86	7
Takkellapadu	64	28	47	10	47	5
Tadikonda girls’	49	29	57	20	49	12
Venigalla	79	21	69	15	101	31

TABLE 2 CLASS WISE URBAN SCHOOL STUDENT’S STRENGTH

School	8th School Strength	No. of students with Achluophobia	9th School Strength	No. of students with Achluophobia	10th School strength	No. of Students with Achluophobia
SK	173	44	159	16	189	26
SGNKR	66	33	89	21	77	22
SJRR	130	61	93	41	93	11
SKS	100	43	94	27	116	28
P	92	18	83	9	77	0
KSR	51	18	77	22	53	12
SCMP	93	33	76	16	76	8

III. RESULTS AND DISCUSSION

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

Rural Schools

8th class

Highest percent of Namburu girls (63.33) were marked the Achluophobia, followed by Tadikonda girl (59.18%) and Namburu (48.45%). The lowest percent was noticed with Chinakakani school (15.25%).

9th Class

61.90% of Namburu girl’s students had expressed the Achluophobia, followed by Tadikonda girls (35.09%) and Chinakakani (26.79%). Comparatively, the problem is low in Ponnekallu (19.23%) and Namburu (20.83%).

Table 3 Achluophobia Among Rural School Students (%)

School Place	8th	9th	10th
Chinakakani	15.25	26.79	8.16
Namburu girls	63.33	61.90	56.67
Namburu	48.45	20.83	23.26
Ponnekallu	17.39	19.23	8.14
Takkellapadu	43.75	21.28	10.64
Tadikonda girl	59.18	35.09	24.49
Venigalla	26.58	21.74	30.69

10th Class

Highest percent of Namburu girls (56.67) were marked the Achluophobia, followed by Venigalla (30.69%) and Tadikonda girl (24.49%). The problem is low in Ponnekallu (8.14%).

Table 4 Achluophobia among Urban School Students (%)

School	8th	9th	10th
SK	25.43	10.06	13.76
SGNKR	50.00	23.60	28.57
SJRR	46.92	44.09	11.83
SKS	43.00	28.72	24.14
P	19.57	10.84	0.00
KSR	35.29	28.57	22.64
SCMP	35.48	21.05	10.53

Urban Schools

8th Class

50.00% of SGNKR students were pointed Achluophobia, followed by SJRR (46.92%) and SKS (43.00%). The lowest percent was observed with P (19.57%).

9th Class

Highest percent of SJRR (44.09) school students had Achluophobia, followed by SKS (28.72%) and KSR (28.57%). The lowest percent was observed in SK students (10.06%).

10th Class

28.57% of SGNKR students were suffering from Achluophobia, followed by SKS (24.14%) and KSR (22.64%). The lowest percent was observed in SCMP (10.53%).

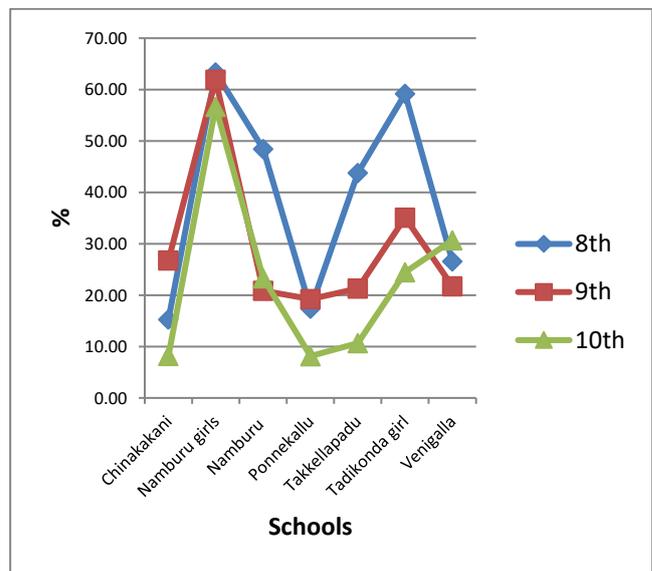


Figure 1. Percent variation of Achluophobia in rural school students

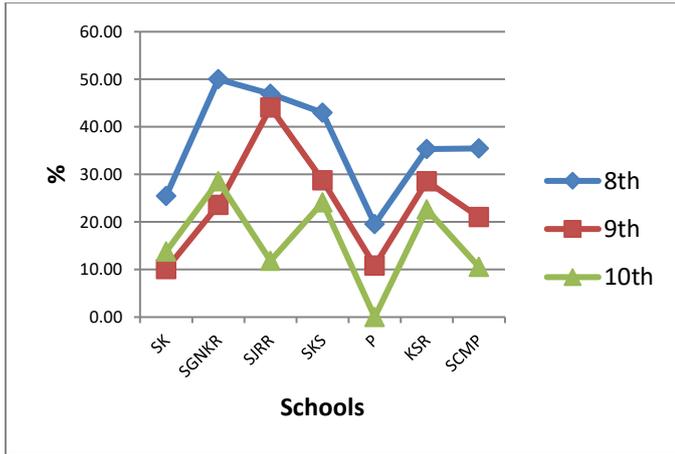


Figure 2. Percent variation of Achluophobia in urban school students

Comparative study

Rural Schools

Comparison of Achluophobia 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 school students (23.32) had Achluophobia followed by Venigalla (17.96%) and Tadikonda girls’ (16.35%). The lowest percent was observed with Chinakakani (7.51%) and Ponnekallu (10.19%).

Table 5 Comparative Study of Achluophobia (%)

Rural Schools (%)		Urban Schools (%) 8 th to 10 th	
8 th to 10 th		10 th	
Chinakakani	7.51	SK	16.90
Namburu girls	13.14	SGNKR	14.93
Namburu	23.32	SJRR	22.20
Ponnekallu	10.19	SKS	19.25
Takkellapadu	11.53	P	5.30
Tadikonda girl	16.35	KSR	10.22
Venigalla	17.96	SCMP	11.20

Urban Schools

In the case of urban schools, high percent of SJRR students (22.20) had an Achluophobia (Table 4 and

Figure 4), followed by SKS (19.25%), SK (16.90%) and SGNKR (14.93%). The lowest percent was observed with P (5.30%).

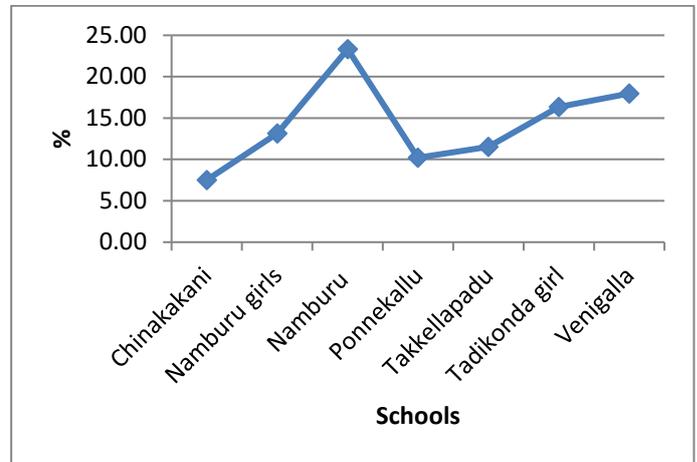


Figure 3. Comparison within the rural school students

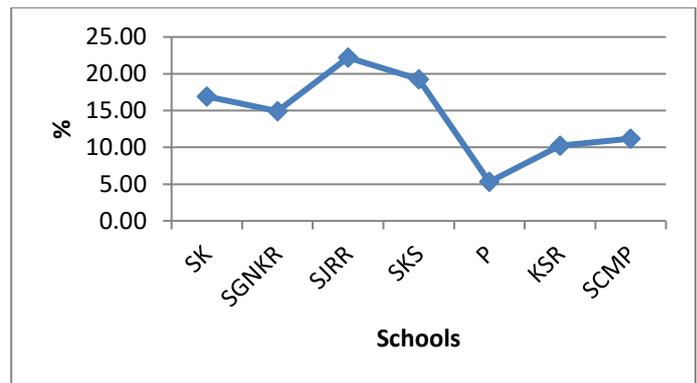


Figure 4. Comparison among the Urban school students

Treatment Methods

Fear is an emotion of anticipation that is triggered when a situation that is at risk for our safety and/or the safety of others is perceived, through either exteroceptive inputs or the endocrine and autonomic nervous systems (interoceptive inputs). To prepare the body to face this danger, these stimuli can evoke “freeze, flight, fight, fright” reactions (Bracha 2004) or “tend-and-befriend” responses (such as turning to others for help or social support, or making a situation less tense, dangerous, or uncomfortable in some way)

(Taylor et al. 2000). At the neurobiological level, significant advances have been made in identifying fear circuits and mechanisms; dysfunctions in these circuits/mechanisms can lead to chronic psychiatric disorders, Indeed, available treatments that aim to reduce pathological fear are associated with decreased symptom severity, but up to 40% of patients show only partial long-term benefit, while most of them fail to achieve complete remission (Singewald et al. 2015).

The fears were first noticed in childhood and persisted into adolescence and adulthood. At these times, they were overwhelmed by images of ghosts and haunted houses often experiencing a vivid impression that an immaterial being not perceivable by the ordinary senses was hovering around. Comorbidity with other phobias was the rule. The overall clinical and psychopathological picture was consistent with a diagnosis of a specific phobia. In a few cases, the response to pharmacological treatment and cognitive-behavioral intervention has alleviated the symptoms. "Phobia of the supernatural" may be more common than usually thought. It must actively be sought for in patients complaining of poor sleep and daytime somnolence, and in patients with other types of phobia. The differential diagnosis of phobia of the supernatural includes nocturnal panic attacks, psychosis, other types of phobia that tend to occur during the night, dissociative states of sleep, dementia, and a few rare presentations of epilepsy (Oliveira-Souza, 2018).

Additionally, people who suffer from specific phobias work hard to avoid their phobia stimuli, even though they know there is no threat or danger, but they feel powerless to stop their irrational fear. Based on the research reviewed in this article, it appears that the amygdala is central to two phenomena that may support pathological innate fear: fear sensitization (Garcia, 2017).

For the diagnosis, some kind of structured or semi-structured interview is commonly used to assess the criteria established by the World Health Organization (1994) or by the American Psychiatric Association (APA). The evaluation of the severity of the subjective perception of fear, or the frequency of somatic complaints associated with anxiety disorders in childhood (Hofflich et al., 2006), is done by auto applied procedures, interviews, or assessment scales. By the review of the published studies, it is clear that, currently, we have diverse instruments of assessment of darkness phobia, but in most cases the tests are not standardized (Orgiles et al, 2008). The current review and synthesis was designed to provocatively develop and evaluate the proposition that "fear of the unknown may be a, or possibly the, fundamental fear" underlying anxiety and therein neuroticism. The revised criteria are based on logical rhetorical arguments using a constituent reductionist post positivist approach supported by the available empirical data. The revised criteria are then used to assess several fears posited as fundamental, including fear of the unknown (Carleton, 2016).

There are certain therapies by which Achluophobia is treatable. The main treatment of choice for specific phobias is Cognitive-behavioral (CBT). Behavioral techniques by which survivor is exposed 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).

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>).

Antidepressants, anxiolytics and beta blockers are the commonly prescribed drugs for phobias (Taylor, 2006, Cohen, 2008, Ernst, 2007, Nice, 2008, 2011, Sareen et al., 2006 and Scott et al., 2001).

IV. CONCLUSION

Achluophobia is a normal phobia at school level children and may persist further. The study found that the problem is high in girls' schools. Further, it was found that the problem is high in 8th class students compared to 9th and 10th. It indicates that the phobia is decreasing with age. Parents shall understand the phobias in their children and the suitable treatment shall arrange to avoid future complications.

V. ACKNOWLEDGEMENT

Authors are thankful to Rotary club – Adharsh, Guntur Commissioner, GMC and the Authorities of Acharya Nagarjuna University for the financial assistance.

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Cite this article as :

Sankara Pitchaiah Podila, "Achluphobia in High School Students, Guntur, Andhra Pradesh, India", *International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET)*, ISSN : 2456-3307, Volume 6 Issue 1, pp. 117-123, January-February 2019. Available at doi : <https://doi.org/10.32628/IJSRSET196133>
Journal URL : <http://ijsrset.com/IJSRSET196133>