



ORIGINAL RESEARCH PAPER

Psychology

ONYCHOPHAGIA AND GENDER- A CASE STUDY ON HIGH SCHOOL STUDENTS

KEY WORDS: onychophagia, anxiety, perfectionism, gender, high school students, treatment

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ABSTRACT

Onychophagia (Nail biting habit) is a common habit in High school students. It was reported as a stress removing habit and appeared in anxiety state. Recent studies observed the perfectionism rather than anxiety at the root of the behavior. Present study carried out to record the extent of the nail 2743 students, distributed over ten High schools in Guntur district was participated and given a response. Out of the total, 1589 are male and 1154 are female students. The study found that 55.17% female students had Nail biting habit compared to 49.40% of male students. It is concluded that female students had High Onychophagia compared to male students. Various treatment methods suggested by the researchers were included.

INTRODUCTION

Onychophagia is a habit of biting nails and fingertips, also called nail biting (NB). It is a stress relieving oral habit adopted by many children and adults. People usually do it when they are nervous, stressed, hungry or bored (Sachan and Chaturvedi, 2012, Siddiqui et al., 2017).

NB is usually confined to the fingernails and most nail biters bite all 10 fingers equally rather than selectively. Complications of NB include damage to the cuticles and nails, secondary bacterial infection and dental problems. NB is embarrassing, unattractive, socially undesirable and can predispose to the development of paronychia (Leung et al., 2015). In the present study, NB habit was observed in 8th to 10th studying male and female students, Guntur district, Andhra Pradesh.

METHODOLOGY

Ten High schools from Guntur were selected for the study. 8th to 10th class students were chosen as subjects. A total of 2743 students was participated and out of them 1589 are male, 1154 are female students. 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 nail biting habit?” The purpose of the study and the details regarding nail biting were explained in their mother tongue. The response was analyzed using statistical analysis. Percent variation was studied in comparison with male and female students.

TABLE -1: CLASS WISE STUDENT'S STRENGTH

Classes	8th			9th			10th			
	Schools	Male	Female	Total	Male	Female	Total	Male	Female	Total
Ponnekallu		52	40	92	36	42	78	49	40	89
Takkellapadu		27	37	64	25	22	47	24	23	47
Venigalla		33	52	85	31	37	68	48	55	103
Koppuravuru		40	36	76	39	28	67	30	23	53
SK		104	75	179	106	54	160	118	70	188
SJRR		80	53	133	78	47	125	48	45	93
SKS		55	45	100	46	48	94	67	51	118
P		75	17	92	62	21	83	57	20	77
KSR		26	26	52	62	17	79	30	26	56
SCMP		54	39	93	40	36	76	47	29	76
Total		546	420	966	525	352	877	518	382	900

SK - Smt. Kasturiba; SJRR Sri Jalagam Rama Rao; SKS-Smt. Kasu Sayamma; P- Pattabhipuram; KSR-Kaveti, Sankar Rao; SCMP - Smt. Chebrolu Mahalakshmi Pullaiah

8th: Male

Comparison of Onychophagia among 8th to 10th class male and female students was shown in table 3 and figure 1. Among the male students, high percent of SCMP students (22.70%) had Onychophagia, followed by P (20.10%) and Takkilapadu (18.42%) school students. The lowest percent was observed with Venigalla students (7.14%).

TABLE -2: GENDER WISE STUDENTS WITH ONYCHOPHAGIA

Classes	8th		9th		10th		
	Schools	Male	Female	Male	Female	Male	Female
Ponnekallu		13	9	18	26	17	13
Takkellapadu		14	12	12	11	11	9
Venigalla		8	9	15	18	29	20
Koppuravuru		13	13	16	7	12	13
SK		43	34	43	25	40	34
SJRR		33	23	42	14	18	18
SKS		27	19	27	18	29	20
P		39	12	32	11	22	9
KSR		10	9	32	5	6	11
SCMP		32	23	12	14	12	16
Total		232	163	249	149	196	163

RESULTS AND DISCUSSION

The relation between Onychophagia and gender are presented below. The percent variation was included in table 3.

Table -3: Gender Wise Students With Onychophagia (%)

Classes	8th		9th		10th		
	Schools	Male	Female	Male	Female	Male	Female
Ponnekallu		9.49	7.38	13.14	21.31	12.41	10.66
Takkellapadu		18.42	14.63	15.79	13.41	14.47	10.98
Venigalla		7.14	6.25	13.39	12.50	25.89	13.89
Koppuravuru		11.93	14.94	14.68	8.05	11.01	14.94
SK		13.11	17.09	13.11	12.56	12.20	17.09
SJRR		16.02	15.86	20.39	9.66	8.74	12.41
SKS		16.07	13.19	16.07	12.50	17.26	13.89
P		20.10	20.69	16.49	18.97	11.34	15.52
KSR		8.47	13.04	27.12	7.25	5.08	15.94
SCMP		22.70	22.12	8.51	13.46	8.51	15.38

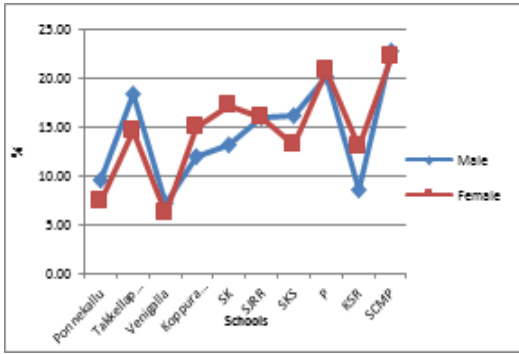


Figure 1 Gender wise Onychophagia in 8th students (%)

Female

In the case of female students, high percent of SCMP students (22.12) had Onychophagia (Table 3 and Figure 1), followed by P (20.65%) and SK (17.09%). The lowest percent was observed with Venigalla school students (6.25%).

9th: Male

Among the male students, high percent of KSR students (27.12%) had Onychophagia, followed by SJRR (20.39%) school students. 8.51% of the SCMP students marked onychphagia, which is the lowest (Figure 2).

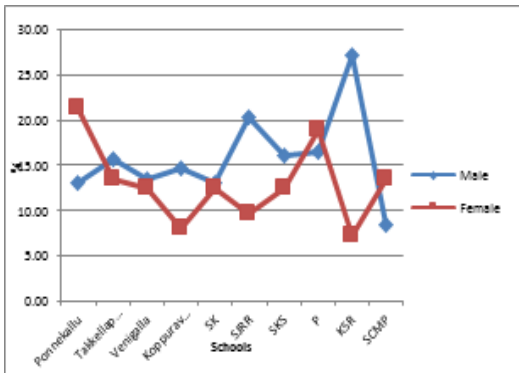


Figure 2 Gender wise Onychophagia in 9th students (%)

Female

High percent of Ponnekallu students (21.31) had the habit, followed by P (18.97%). The lowest was noticed with KSR School (7.25%).

10th: Male

High percent of Venigalla students (25.89%) had Onychophagia (Figure 3), followed by SKS (17.26%) school students. The lowest percent was noticed with KSR school students (5.08%).

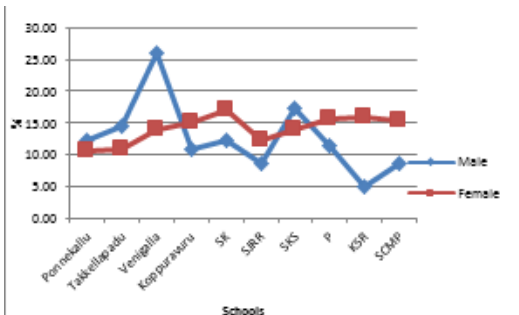


Figure 3 Gender wise Onychophagia in 10th students (%)

Female

High percent of SK students (17.09) had the habit (Figure 3), followed by KSR (15.94%), P (15.52%) and SCMP (15.38%). The lowest percent was noticed with Ponnekallu school students (10.66%).

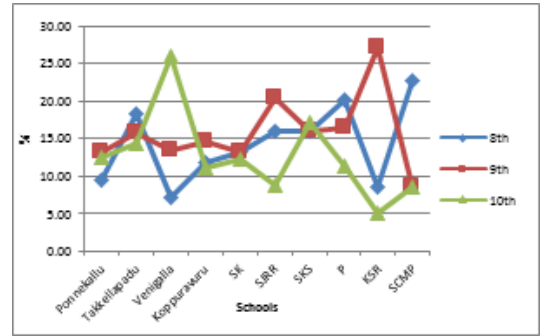


Figure 4 Onychophagia in Male Students

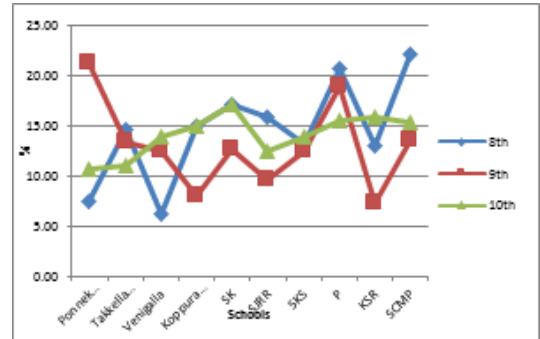


Figure 5 Onychophagia in Female Students

COMPARATIVE STUDY

55.17% of female students had Onychophagia habit compared to 49.40% of male students. The study supports that female students had high onychophagia compared to male students (Table 4 and Figure 6).

TABLE-4
COMPARISON OF ONYCHOPHAGIA BETWEEN MALE AND FEMALE STUDENTS

Schools	Male	Female
Ponnekallu	35.04	39.34
Takkellappadu	48.68	39.02
Venigalla	46.43	32.64
Koppuravuru	37.61	37.93
SK	38.41	46.73
SJRR	45.15	37.93
SKS	49.40	39.58
P	47.94	55.17
KSR	40.68	36.23
SCMP	39.72	50.96

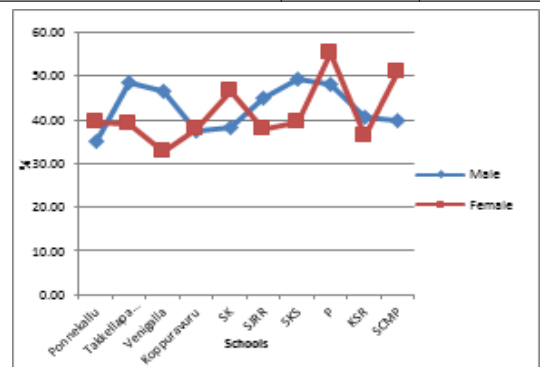


Figure 6 Comparison of Onychophagia in Male and Female students

According to Herdiyati and Marhani (2017) most nail biters in elementary students are boys who are mostly aged 9 years old. NB is a common oral habit in children and young adults. It is estimated that 28 to 33% of children between the ages of 7 to 10 years and

45% of adolescents are nail biters. The etiologies suggested for NB include stress, imitation of other family members, heredity transference from the thumb sucking habit, and poorly manicured nails (Leung et al., 2015). More pathological forms of nails biting are considered an impulse control disorder in the DSM-IV-R and are classified under obsessive-compulsive and related disorders in the DSM-5. The ICD-10 classifies the practice as "other specified behavioral and emotional disorders with onset usually occurring in childhood and adolescence". However, not all nail biting is pathological, and the difference between harmful obsession and normal behavior is not always clear (<https://en.wikipedia.org>).

A new study adds evidence to a theory that perfectionism rather than anxiety is at the root of these behaviors (<https://www.scientificamerican.com>).

TREATMENT

Various researchers had suggested different methods to treat onychophagia. The best way to treat a nail biter is to educate them, encourage good habits and should provide emotional support and encouragement. Behavior modification therapy has proved to be a successful means of treatment along with drug management. Multidisciplinary approach was suggested by Siddiqui et al., (2017).

Onychophagia cannot be managed without considering some related factors such as comorbidities, precedent and consequences of the behavior.

Nail biting is not an isolated symptom. It can be one symptom from a cluster of symptoms, all of which as well as the motivation behind NB should be evaluated, assessed, and managed. Behavioral modification techniques, positive reinforcement, and regular follow-ups are important for the treatment of nail biting or onychophagia. Application of denatonium benzoate as a nail polish suggested as a cheap and widely available treatment method (Sachan and Chaturvedi, 2012).

More recently, technology companies have begun producing wearable devices and smart watch applications that track the position of users' hands. Ergun et al., (2013) observed the impact of a healthy nails program on nail biting in Turkish school children and found useful. Albagieh et al., (2017) strong influence of nail biting on Tempromandibular disorders and concluded that it is important to increase the level of awareness about the risks of nail biting habit among teenagers and parents. Punishments have been shown to be not better than placebo, and in some cases may even increase the nail biting frequency.

In the present study, nail biting is observed in the students with 13 to 16 years age. In some schools even 50 to 60% of students had the nail biting habit.

CONCLUSION

Nail biting is classified under obsessive compulsive and related disorders in the DSM-5. The present study was observed a maximum of 22.70% 8th, 27.12% 9th and 25.89 10th male students had the habit. In female students the percentages are 22.12, 21.39 and 17.09 respectively. Awareness shall be created among the students, parents and teachers to come out from the habit.

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