IV RESULTS AND DISCUSSION

The study was conducted in five taluks of Coimbatore, the identified district in Tamil Nadu, since it had the largest Arunthathiyar population as compared to all other districts in western Tamil Nadu. A total of 626 adolescents (5% of the adolescent population from each taluk) in the age group 11 – 19 years were randomly selected for the base line survey to understand the life style of those adolescents. The information related to socio - economic and cultural profile was collected, the data analysed was compiled into a detailed narrative, to present a broad picture of the life of the adolescents in Arunthathiyar community.

Ironically, the findings, mainly related to socio economic status had much relevance with other studies, that was conducted recently, and even a decade ago. The status of Arunthathiyas is an untold saga, the generations after generations has not seen much of change in their lives. The research was first and foremost aimed to have a deeper understanding of the status of adolescent's wellbeing in terms of academic achievement, nutritional and mental health status, and also identify the problems associated with it. Secondly, the focus was to assess the various factors that contributed to adolescent's overall wellbeing in terms of academic achievement, nutritional status and mental health. Therefore, out of these five taluks one taluk which was small, but which a had dense and high population of 4820 adolescents was chosen for a detailed study for certain reasons.

Hence, the study sample comprised of 494 adolescents in the age group 11 – 19 years selected at random. A detailed assessment on their academic achievement, nutritional status and mental health was done with this lot of beneficiaries. As a final part of this research an educational intervention and awareness programme was structured to address the adolescents problems related to education, personal life and nutrition and set realistic goals, provide basic concept on nutrition, government support programmes. The total number of participants were thirty adolescents. Rating scales was prepared as a pre and post test tool to evaluate the outcome of the programme. The data thus analysed was to discuss under various sections as detailed below

Section I: Socio-economic and cultural profile of Arunthathiyar adolescents in the five taluks- An overview

A. General profile

B. Familial and economic profile

C. Cultural practices observed

Section II: **Adolescents in selected taluk - General profile.**

A. Socio economic and familial background

B. Neighbourhood/community profile

Section III: Academic Achievement (AA) and factors associated

A. Academic achievement of adolescents

B. Determinants of academic achievement

Section IV: Nutritional status (NS) and factors associated

A. Nutritional status of adolescents

B. Determinants of nutritional status

Section V: Mental Health (MH) status and factors associated

A. Mental health status of adolescents

B. Determinants of mental health

Section VI: Socio–economic status, perceptions of adolescents and their overall well being

A. Perceptions of adolescents on their socio-economic status

B. Perceptions of adolescents on their socio- economic status and academic achievement

C. Perceptions of adolescents on their socio-economic status and nutritional status

D. Perceptions of adolescents on their socio – economic status and mental health

Section VII: Efficacy of SPSS programme

A. Outcomes of group discussion

B. Analysis of pre and post test scores to adjudge the efficacy of the programme

C. Gender and efficacy of the SPSS

SECTION I: SOCIO-ECONOMIC AND CULTURAL PROFILE OF ARUNTHATHIYAR ADOLESCENTS IN FIVE TALUKS - AN OVERVIEW

A. General profile

The general profile of adolescents in Arunthathiyar community was gathered from five per cent of the adolescent population in each of the five taluks in the selected district and discussed under the following heads

a. Personal profile
b. Educational profile and
c. Problems faced in education

a. Personal profile

The Table – VIII below captures the details to compile a personal profile of the adolescents

TABLE –VIII

PERSONAL PROFILE

Variables	Taluks									
	Annur		Coimbatore		Madukkarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Gender										
Male	49	48.3	43	40.2	100	49	33	37.7	47	40.9
Female	53	51.7	64	59.8	104	51	54	62.3	67	59.1
Total	102	100	107	100	204	100	87	100	114	100
Age										
11 -13	18	17.2	31	29.0	55	27.1	15	17.5	24	21.2
14 -16	52	50.6	41	38.3	72	35.0	53	61.4	48	42.4
17- 19	32	32.2	35	32.7	77	37.9	19	21.1	42	36.4
Total	102	100	107	100	204	100	87	100	114	100

The details of the gender and age of the adolescent participants in five taluks shows, that girl's participation in all the Taluks was better than the boys. In Madukkarai and Annur the difference was marginal (2 – 3 %), where as in the other three taluks the boys participation was scarce, they were either shy,

reluctant or were busy in their own activities. Thus the gender differences of male and female adolescents' participation ranged from 19–25 per cent in Coimbatore and Mettupalyam and Pollachi. As per personal observation, the parent - child relationship and monitoring children's activities was better in Madukkrai and Annur than the other taluks. In Coimbatore and Mettupalyam particularly, the environment seemed to be not conducive to children, in terms of living space, sanitation, the peer group pressure and parent's state of mind.

The age of participants was seen as an advantage, in terms of response to the questions in the survey format. However, the maximum percentages of participants (35 – 61 %) were in the age group of 14-16 years, followed by the next highest percentage (21 – 38%) in the age range of 17 – 19 years.

b. *Educational profile*

The details considered were the class, school affiliation, and medium of instruction opted by adolescents in the five taluks. The Table-IX captures a clear picture of the above said details

TABLE- IX

EDUCATIONAL PROFILE

Variables	Taluks									
	Annur		Coimbatore		Madukkarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Education										
Middle	5	4.6	24	22.4	53	26.1	3	3.5	24	21.2
H. School	46	45.0	54	50.5	62	30.4	45	51.8	48	42.4
ITI	-	-	-	-	2	1.0	-	-	-	-
Hg. Sec	47	46.0	29	27.1	60	29.1	33	37.7	42	36.4
Diploma	2	2.2	-	-	4	2.0	6	7.0	-	-
Degree	2	2.2	-	-	23	11.4	-	-	-	-
Total	102	100	107	100	204	100	87	100	114	100
Affiliation										
Govt.	95	93.1	104	97.2	177	87.0	80	92.1	100	100
Private	7	6.9	3	2.8	27	13.0	7	7.9TT	-	-
Total	102	100	107	100	204	100	87	100	114	100
Medium of instruction										
Tamil	93	90.8	104	97.2	177	87	79	91.2	100	100
English	9	9.2	3	2.8	27	13	8	8.8	-	-
Total	102	100	107	100	204	100	87	100	114	100

Given that the average age range of majority of adolescent participants in the study was 14–16 years, correspondingly the table also highlights that a majority of them were attending (30- 52%) high school, the next high per cent age (29 - 43%) were in the higher secondary. The percentage of adolescents pursuing diploma was two per cent with exception of Pollachi taluk, where the percentage was rather as high as seven per cent. Madukkarai tops with 11 per cent of the respondents enrolled in the degree.

Most parents were engaged in daily wage work in the agricultural sector or as labours, with a daily wage of ₹. 400-500/-. The work in the agricultural sector is seasonal, it was 10 – 20 days a month or for six months in a year. The economical constraints force the parents to prefer government schools. The medium of instruction opted was Tamil, the regional language by 90-97 per cent of adolescents, as the government schools of those places had only Tamil as the medium of instruction.

c. *Problems faced by adolescents in education*

The problems of the school going childrenwere studied by Narayanaswami and Sachithanandam (2010), and they found that a combination of factors defined the adolescents learning. The factors were family circumstances, adolescent's personal capacities, school's role and the discriminatory attitude of teachers and fellow students from other castes. The Table - X summates the details of problems faced by the adolescents related to education.

TABLE - X

PROBLEMS FACED IN EDUCATION

Problems faced	Taluks											
	Annur		C'tore		M'kkarai		Pollachi		M'palyam		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Assignments incomplete	05	5.7	27	25.2	15	15.0	11	9.6	07	10.6	65	66.1
Scared of punishments	08	9.2	12	11.2	35	35.0	12	10.5	06	9.0	73	74.9
Not good in studies	11	12.6	21	19.6	12	11.7	14	12.3	13	19.7	71	75.9
Score poor marks	15	17.2	20	18.7	16	16.4	19	16.7	09	13.6	79	82.6
Difficult to comprehend	11	12.6	20	18.7	06	5.7	21	18.4	17	25.8	75	81.2
Discriminated in the school	19	21.8	10	9.3	14	13.6	12	10.5	04	6.0	59	61.2
No one to teach at home	14	16.0	12	11.2	44	43.9	08	7.0	16	24.2	94	102.3
Peer pressure	07	8.0	06	5.6	11	10.5	05	4.4	08	12.1	37	40.6
Economic constraints	46	52.9	43	40.2	44	44.3	62	54.4	25	37.9	220	229.7
Breakfast not pre in time	06	6.9	05	4.7	08	7.5	10	8.8	11	16.7	40	44.6
Not motivated /interested	05	5.7	14	13.0	07	6.9	9	7.9	04	6.0	39	39.5

The main problem of 38-54 per cent of the respondents was economical constraints. Due to poverty, the adolescents feel pursuing higher education was not possible. The economic constraint was in fact interconnected to other problems such as purchase of educational material, leading to delay in submission of assignments and face punishments. Except Madukkarai, in all the taluks six to twenty five per cent of adolescents had the problem of understanding the lessons and also did not get help to guide them at home. In Madukkrai, though 44 per cent expressed lack of guidance at home, the problem of understanding the lessons was found to be only with six per cent of the respondents.

The breakfast not prepared in time was stated by 7 – 17 per cent of the respondents in all the taluks, as their parents had to go early to work. Non availability of food was also observed as a problem, particularly in Coimbatore

taluk. According to Sahayasaila and Chamundeswari (2014), in India, many families are still very poor and cannot afford to meet the educational needs of their children and the worst being not able to provide three square meals a day. This indeed has serious implications on the learning and performance of the less-privileged students in schools. Thus, socio-economic status of a family serves as the foundation for children's development.

The problem of peer pressure though felt only by four to twelve per cent, this could be a serious problem particularly in slums. Not motivated in studies was the problem stated by seven to thirteen per cent of the adolescents. The conclusion from Cowle's (2005) study was that adolescents who live in higher quality neighbourhoods typically perform better in school than those who live in poorer neighbourhoods. Poor neighbourhoods often lack positive role models, adult supervision, connection to good school and motivation to perform well in school.

Discrimination in schools was expressed by four to 22 per cent. In Annur Taluk, the youth cadres of the communist party gave some incidents of discrimination in the school and the necessary action taken by them. A member of Safai Karmachari Andolan (a movement for elimination of manual scavenging) who was on a yatra from Kanyakumari to New Delhi, addressed a press conference and alleged that the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993 remained only on paper and even officials were unaware of its existence. A child of conservancy worker was asked to clean the toilets and vessels used in noon meal scheme at school.

B. Familial and economic profile

The family back ground data was analysed and discussed under the following heads

a. Family profile
b. Assets owned
c. Expenditure details
d. Details of savings and
e. Loans procured

a. Family profile

It was very interesting to observe the attitude, principles and habits of Arunthathiyars in the villages. In all the taluks, the parents were particular that the children remained in the close vicinity, even after marriage. They were not interested in sending the children to far off places for jobs; instead they preferred schools / colleges and work in nearby villages or towns. It was rare that a few have migrated to cities to explore better opportunities. The houses in the village are close knit, and most of them are related to each other, therefore there was good affinity and binding. When the son or daughter gets married, a small place is shared with them by constructing an extra living space. The habit of sharing is very much akin to them. In fact, these attitudes of the parents have not helped the children to be self reliant and confident individuals. It was observed that in spite of fairly good educational background, most of them worked in the agricultural fields or the local textile mills and companies on daily wages.

The Table - XI presents the details of type of family, the language spoken, family income and type of housing.

TABLE – XI

DETAILS OF FAMILY BACK GROUND

Details	Taluks									
	Annur		Coimbatore		Madukkarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Family type										
Nuclear	88	86.2	41	38.3	169	83.0	64	73.7	74	65.2
Joint	14	13.8	31	29.0	35	17.0	20	22.8	35	30.3
Extended		-	35	32.7	-	-	3	3.5	5	4.5
Total	102	100	107	100	204	100	87	100	114	100
Language spoken										
Telugu	100	100	91	85.0	19	9.5	77	88.6	110	97.0
Kannada	-	-	1	0. 9	1	0.2	-	-		-
Telugu but speak tamil	-	-	-	-	131	64.2	-	-		-
Tamil	-	-	15	14.1	53	26.1	10	11.4	4	3.0
Total	102	100	107	100	204	100	87	100	114	100
Income										
1001-3000	-	-	-	-	5	2.6	-	-	5	4.5
3001-5000	13	12.6	-	-	24	11.9	-	-	12	10.6
5001-8000	26	25.3			74	36.2	-	-	19	16.7
8001- 10000	34	33.4	37	34.6	53	25.9	50	57.0	55	48.5
10001-15000	26	25.3	21	19.6	29	14.2	26	29.8	23	19.7
>15000	3	3.4	19	17.8	19	9.2	11	13.2	-	-
Total	102	100	107	100	204	100	87	100	114	100
Housing										
Thatched	5	5.6	4	3.7	13	6.3	4	4. 4	9	7.6
Asbestos	14	13.8	31	29.0	1	0.4	20	22.8	23	19.8
Concrete roof	-	-	5	4.7	40	19.6	19	21.9	3	3.0
Row hoses	12	11.5	4	3.7	29	14.4	12	14.0	10	9.0
Tiled	71	70.1.	63	58.9	121	59.3	32	36.9	69	60.6
Total	102	100	107	100	204	100	87	100	114	100

The table shows in all the taluks, nuclear family type was most common. In Madukkarai, Annur and Pollachi taluks the percentage of nuclear families ranged from 73 – 86 per cent, where as in Mettupalyam it was slightly less with 65 per cent. However, Coimbatore city seemed to be different with joint, nuclear and extended families, more or less in equal proportion. The fact was lack of space in the city slums, often the 10 x 20 feet house was shared with children after they get married and establish their own family.

In almost all the taluks except Madukkarai, majority (85–100 %) speak Telugu, their mother tongue and a small percentage (3-14 %) have their mother

tongue as Tamil. In Madukkarai, though majority (64%) of the families have their mother tongue as Telugu, they speak Tamil for their own convenience, as it was the language they speak outside their home. One woman in Madukkraiwas was heard saying that it was also to avoid comments from people calling them "scheduled caste". The monthly income of majority of the families in almost all the five taluks was in the range of ₹. 8000 – 10,000/-.

In all the taluks, the majority (36 – 70 %) of the families had tiled houses. A handful of families had houses with concrete roofs. The government allotted row houses were the residence for 9 - 14 per cent in all taluks except in Coimbatore, where it was only four per cent. The problem of evacuation was intense in the slum areas, due to pressure either from the government or the private land owners to vacate the place. Most of the families were not given the ownership documents; therefore the families have not made permanent houses, and instead have asbestos or tin sheet roofs. The occupants are often under threats and this posed a great problem to their children to concentrate on their studies.

The researcher recommends that the government should consider a permanent place for the slum dwellers, and build individual houses instead of multi storied buildings. In most places the multi storied buildings were not maintained either by the government nor by the occupants and thus it gets dilapidated. Secondly, some extra place for the children to play would be possible in individual house. In villages, house sites should be allotted, as many of the families cannot afford to buy the land.

b. Assets owned

The assets owned by the families were assessed under the broad categories such as land, vehicles and live stock. The land was house site either given by the government or bought from the land owners; the agriculture land for cultivation was either their own or taken on lease from the land lords. In villages, most of the families had at least a few livestock and within their capacity to manage for rearing and the feed available. The Table – XII consolidates the said details as follows

TABLE – XII

DETAILS OF ASSETS OWNED

Assets owned	Taluks									
	Annur		Coimbatore		Madukkarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Land										
House site	76	74.7	35	32.7	128	62.8	67	77.2	40	34.8
Ag. Land-own	1	1.1	-	-	6	3.2	3	2.6	-	-
Ag land- lease	-	-	-	-	2	1.0	-	-	-	-
None	25	24.2	72	67.3	68	33.0	17	20.2	74	65.2
Total	102	100	107	100	204	100	87	100	114	100
Vehicles										
Bicycles	-	-	3	2.8	47	23.0	-	-	3	3.0
Two wheeler	5	4.6	9	8.3	125	61.4	21	24.6	12	10.6
Three wheeler	-	-	-	-	3	1.4	-	-	-	-
Four wheeler	-	-	-	-	3	1.4	-	-	-	-
None	97	95.4	95	88.9	26	12.8	66	75.4	99	86.4
Total	102	100	107	100	204	100	87	100	114	100
Live stock										
Cows	-	-	-	-	15	7.4	10	11.4	-	-
Buffalo	-	-	-	-	4	1.8	-	-	-	-
Sheep	-	-	2	1.9	4	1.8	15	17.5	2	1.5
Goat	8	8.0	-	-	37	18. 0	11	12.3	12	10.6
Pigs	-	-	-	-	2	1.0	-	-	-	-
Chicken	14	13.8	-	-	-	-	15	16.7	-	-
None	80	78.2	105	98.1	142	70.0	36	42.1	100	87.9
Total	102	100	107	100	204	100	87	100	114	100

The main assets owned by majority (63–77%) of the families in Madukkarai, Annur and Pollachi was the house site, where they have the ownership document. In Coimbatore and Mettupalyam, 33–35 per cent of the families own the house sites, but did not have the ownership deed and hence the uncertainty of permanent residence. The agricultural land is owned by a meagre one to three per cent of the families in Madukkarai, and one per cent cultivated on lease.

In Madukkrai 61 per cent of the families own two wheelers, and 25 per cent in Pollachi, in other taluks it was found to be five to eleven per cent. Ownership of three and four wheelers in Madukkrai was one per cent and none in other taluks. Possession of live stock was also scant, it was nine to eleven

per cent of the families in Madukkrai and Pollachi who owned the cows. Except Coimbatore, eight to eighteen per cent families in other taluks reared goats.

The families in Coimbatore did not have the place for live stock. In all, it was clear that families in Madukkrai and Pollachi were better off than the rest of the Taluks. The wide choice of availability of work in these two Taluks could be the reason, as Pollachi has rich soil and water sources and therefore work in farms has no dearth.

c. Expenditure details

The main expenditure pattern was related to food, clothing, debt repayment, education, medical expenses and house rent. The expenses on electricity, purchase of household articles and hospitality were the ancillary expenses and had been summed up briefly. The Table – XIII gives a picture of all the main expenses as detailed.

TABLE – XIII

HOUSE HOLD EXPENDITURE

Expenses	Taluk									
	Annur		Coimbatore		Madukkarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Food										
>500		-	-	-	2	1	-	-	-	-
501 – 1000		-	-	-	10	5	19	22	-	-
1001 - 3000	17	17	28	26	145	71	43	50	41	36
3001 -5000	46	45	61	57	47	23	22	25	44	39
>5000	39	38	18	17	-	-	3	3	29	25
Total	102	100	107	100	204	100	87	100	114	100
Clothing										
< 500	56	55	56	52	47	23	47	53.5	43	38
501- 1000	6	6	27	25	118	58	4	5.0	25	22
1001 - 3000	2	2	15	14	16	8	3	3.5	24	21
No expenses	38	37	9	9	23	11	33	38.0	22	19
Total	102	100	107	100	204	100	87	100	114	100
Debt repayment										
< 500	8	8	14	13	39	19	17	19.0	20	18
501- 1000	10	10	16	15	98	48	20	23.0	6	5
1001 - 3000	26	25	10	9	12	6	16	18.5	33	29
3001 -5000	6	6	5	5	6	3	3	3. 5	14	12
No expenses	52	51	62	58	49	24	31	36.0	41	36
Total	102	100	107	100	204	100	87	100	114	100

Details	Taluk									
	Annur		Coimbatore		Madukkarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Education										
< 500	31	30	4	4	90	44	32	37	30	26
501- 1000	27	27	16	15	55	27	7	8	19	17
1001 - 3000	8	8	24	22	8	4	3	4	13	11
3001 -5000	1	1	6	6	4	2	-	-	2	2
>5000	-	-	5	5	-	-	-	-	-	-
No expenses	35	34	52	48	47	23	45	51	50	44
Total	102	100	107	100	204	100	87	100	114	100
Medical expenses										
<500	37	36	21	20	104	51	35	40.4	21	18
501- 1000	31	30	8	7	53	26	5	5.2	25	22
1001 - 3000	9	9	8	8	4	2	4	4.4	20	18
>5000	2	2	-	-	-	-	-	-	-	-
No expenses	23	23	70	65	43	21	43	50.0	48	42
Total	102	100	107	100	204	100	87	100	114	100
House rent										
< 500	17	17	6	6	16	8	9	10.5	23	20
501- 1000	8	8	-	-	6	3	1	1.0	19	17
No expenses	77	75	101	94	182	89	77	88.5	72	63
Total	102	100	107	100	204	100	87	100	114	100

Obviously the table confirms that the food expenses was the main priority, with 70 - 90 per cent of the families in Madukkarai, Pollachi and Annur spending on an average ₹.1000–5000/-. Whereas in Coimbatore and Mettupalyam, 17 – 25 per cent families spent more than ₹. 5000/-. One per cent of the families who spent below ₹.500/- were observed to be elderly or single mothers, and they depend on the procurement of free rice from the PDS (Public Distribution System).

Chelladurai (2004) carried out a study on Arunthathiyars, also known as Adi Andhras, to assess their status of living in Chennai Metro. He found that the amount spent on food was more than ₹.1500/- by majority (50.45%) of the families, 16 per cent spent ₹.1001-1500/- and 33 per cent spent ₹.1000/-. The expenses spent on clothing by 68 and 21 per cent of the families were less than ₹. 250/- and between ₹. 250 – 500/- respectively.

The current study also observed that the expenses on clothing was below ₹. 500/-, as most of the families said it was their annual expenses when clothes were bought during festivals. A portion of the expenses also goes towards repaying of debts and that ranges anywhere from ₹. 500 – 5000/-, and the average amount was seen to be between ₹.1000 – 3000/-.

As the majority of the adolescents were enrolled in the government schools, 15 – 45 per cent of the families spent a minimum of less than ₹. 500/- on education, towards buying educational material and other related expenses. In Coimbatore city, the privileged five per cent of the families who were either in government jobs or doing business sent their children to private schools and spent ₹.5000/- every month. The medical expenses born by 18–51 per cent families were below ₹.500/-, most of them availed the services of government hospital and Employees State Insurance (ESI).

The habitat in the rural area is either provided by the government or the families had bought the house site and built their own houses, therefore a very small percentage of families stay in rented houses. Quite interestingly Chelladurai's findings also says that 80 per cent of the families do not pay rent as they have their own house, or taken on lease. Thirteen per cent pay rent less than ₹. 500/- and only seven per cent give a rent of ₹. 500 – 1000/-. In spite of a

decade's gap between these two studies the rent paid seems to be the same amount, besides the rate of inflation over the period.

The expenses towards electricity bills purchase of house hold articles and entertainment was very minimum. The usual entertainment in almost all the households was the television; therefore no extra amount was incurred. Visiting relatives and hospitality was quite common and very dear to the community; on an average 10 – 65 per cent of the families incur an expense of ₹. 500 – 1000/- every month. Ratinam (2015) acknowledged that the Arunthathiyars are very hospitable, though they are all poor families.

d. *Details of savings*

The study by Chelladurai, (2004) showed that 84 per cent of Arunthathiyars in Chennai metro do not have savings, thirteen per cent save in SHG's and the amount was less than ₹.200/- per month. Five per cent save in Banks and Insurance companies and also one per cent pay to the chit funds as the families feel that it was easier mode of savings, where the amount was collected at their doorsteps. The Table - XIV gives a broad picture of the mode and amount of savings carried out by the families in five taluks.

TABLE – XIV

MODE AND AMOUNT OF SAVINGS

Taluks	Mode of saving	No savings		Amount saved						Total	
				>500		501- 1000		1000<			
		N	%	N	%	N	%	N	%	N	%
Annur	Provident fund (PF) Chit Fund, SHG, LIC,	63	62	21	20.7	12	11.5	6	5.8	102	100
C'tore	PF, Bank, SHG	61	57	30	28	11	10.3	5	4.7	107	100
M'kkarai	Bank, LIC piggy bank,jewellery, chit fund, SHG,	114	55.9	48	23.5	30	14.7	12	5.9	204	100
Pollachi	SHG, chit fund, LIC, bank, PF jewellery.	50	57	16	18.4	14	16.7	7	7.9	87	100
M'palyam	LIC, PF, SHG, chit fund	73	63.6	31	27.3	10	9.1	-	-	114	100

The table consolidates the status of savings by the families and it was obviously seen that 42 – 65 per cent of the families in all the taluks did not have savings of any sort. Kumar (2013) in his study in Coimbatore also found that 56.1 per cent of the families do not have savings. The families who do the savings, have opted for different modes of saving money namely the Self Help Groups, Life Insurance Corporation (LIC), Provident Fund (PF), banks, chit funds and purchase of jewellery.

The families who work in companies or as conservancy workers have to subscribe to the PF as it was mandatory. Self Help Groups was yet another common source of savings, since the groups by laws and the banks have made savings mandatory for the members to be eligible for taking loans. In all the taluks, SHG was one of the mode of saving, The majority (18–28%) of the families save less than an amount of ₹.500/-, nine to seventeen per cent save in the range of ₹. 500 – 1000/- and four to eight per cent of the families in all taluks except Mettupalyam save above ₹.1000/-. It could be summed up that SHG, PF and LIC were the main modes of savings.

e. Loans procured

The visits to the four districts, that was Ramanathapuram, Cuddalore, Erode and also to the five taluks in Coimbatore district had confirmed that taking loans from various sources had been the practices of 90–95 per cent of the families. The reason and source of borrowing depended on the dearth of the problem. ₹ 10,000/- loan is taken for each of the items such as repayment of loans, monthly food The study conducted in Chennai by Chelladurai (2004) also shows that only 31.72 per cent have not taken loan in the Arunthathiyar families, the others borrowed an amount ranging from ₹. 5000 / - expenses, festivals, education, medical expenses, purchase of household requirements to buy property and start their own business. The details of loans taken by the respondents of base line survey were presented in the Table – XV.

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TABLE – XV

PURPOSE OF LOANS PROCURED

Loans procured	Taluks									
	Annur		Coimbatore		Madukkarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Food										
Loans taken	21	20.7	17	15.9	82	40.1	53	60.6	33	28.8
No loan	81	79.3	90	84.1	122	59.9	34	39.4	81	71.2
Total	102	100	107	100	204	100	87	100	114	100
Marriages										
Loans taken	04	5.8	06	12..3	27	13.2	03	3.6	07	6.0
No loan	96	94.2	94	87.7	177	86.8	84	96.4	107	94.0
Total	102	100	107	100	204	100	87	100	114	100
House construction / repairs										
Loans taken	24	25.3	13	9.4	57	27.5	14	15.8	33	28.8
No loan	76	74.7	97	90.6	147	72.5	73	84.2	81	71.2
Total	102	100	107	100	204	100	87	100	114	100
Medical expenses										
Loans taken	07	9.2	11	16.8	77	37.5	24	27.2	12	10..5
No loan	93	90.8	89	83.2	127	62.5	63	72.8	102	89.5
Total	102	100	107	100	204	100	87	100	114	100
Festivals										
Loans taken	19	20.7	31	20.7	50	24.5	15	16.7	19	16.7
No loan	81	79.3	69	78.3	154	75.5	72	83.3	95	83.3
Total	102	100	107	100	204	100	87	100	114	100
Education										
Loans taken	07	9.2	21	9.2	125	61.1	12	14	17	15.2
No loan	93	90.8	79	81.3	79	38.9	75	86	97	84.8
Total	102	100	107	100	204	100	87	100	114	100

The table highlights the loans taken by the families for various purposes, such as food expenses, marriage, construction and repair of house, medical expenses, celebration of festivals / social events and education. A majority of the families (16–60%) borrowed ₹. 1000-5000/- towards expenses for food. The loans for attending and celebrating marriage were seen to be quite a normal affair in all the taluks where in four to thirteen per cent had taken a loan that was from a range of ₹. 1000 to ₹. 50,000/-on an average. The loan was also taken for house construction / repair, as it was seen in the study that 37–70 per cent of the housing was tiled roofed.

The study found that nine to thirty seven per cent took loan for health purposes, and the amount taken ranged from ₹. 1000 – 30,000/-. One per cent of the families had even borrowed up to ₹. 1,00,000/-. One of the mothers of the

respondent in Coimbatore city slum said that heart attacks were quite common among youth and elder. In a study related to status of health of Arunthathiyars by Sharnya and Babu (2011) revealed, that in Coimbatore city most of them suffered from ulcer and general weakness. The family members who work in the construction sector were afflicted from skin related problems. In the rural area, where they worked the whole day continuously in the agricultural lands had joint pain, knee pain and slipped disc. The researchers further stated, that two fourth of the male and female population had dental problems due to chewing of betel nut and leaves. Thus the living lifestyle have had an impact on their health and therefore to be considered as a serious issue. The people who work as conservancy workers are most risk prone, and they are employed on daily wages by private companies. Since, all most all the Arunthathiyar families are engaged in most hazardous jobs, the employers, both in the formal and non formal sector must consider regular health checkups, provide protective gears and have special insurance coverage.

To celebrate festivals / visiting relatives, 17 – 25 per cent in all the taluks had taken a loan that amounted from ₹. 1000 – 10,000/-. In Mettupalyam and Annur the amount borrowed was up to ₹. 30,000/-. The Annamar Nombi (Pig eating festival) is celebrated once in two years and it was an expensive event. Some of the adolescents in Annur taluk were of the opinion that they were not for these expensive festivals where the animals were brutally killed, and also it was waste of money. However, 90per cent of the youth opined that the celebrations are age old practices and also events of fun and entertainment. On the whole it was found that 17 - 25 per cent borrowed to celebrate festivals.

In all the taluks on an average nine to fifteen per cent borrowed for education, and amount taken ranged from ₹. 1000 - 10,000.Madukkarai taluk, was an exception and 61 per cent had taken loan to meet educational expenses. In the case of families where the adolescents were enrolled in private institutions the amount borrowed goes up to ₹. 50,000/-. During the present study one of the mothers realized the fee exemption considered for Arunthathiyars. She approached the District collector and took a recommendation letter to be given to the college authorities, where her son was doing an engineering course. Later, the fee concession was given with much reluctance from the fourth semester

onwards. It was therefore clear that many of the parents were either not aware of the various privileges or difficult to procure; on the other hand the institutions were also not willing to spare the free seat.

Some of the families took loan to repay other loans, the common sources of loan taken by families in all the taluks were from Micro finance, SHGs, Finance companies. Celladurai (2004) says that the Arunthathiyars in Chennai Metro borrow from money lenders by mortgaging the PF and Bank pass books. The money lenders straight away go the place of work on the salary day to take away part of the salary towards the interest. The families were caught in the debt trap and in the extreme case; they even commit suicide due to the pressure and humiliation.

Loans taken and unable to repay the principle on time were the usual day to day challenge of the family that directly and indirectly influences the children's educational prospects.

C. Cultural practices observed

The cultural practices and celebrations of festivals were unique of Arunthathiyar community. In all the taluks, there was at least a small temple of "Madurai Veeran" and "Pattatharasiamman" in every village. The story goes that Maduraiveeranwas a "Warrior of Madurai" and also known as "Muthukumaran", was a folk deity worshipped by Arunthathiyar, Plate – 2 captures the place of worship of Arunthathiyars. The Pandyan king later erected a shrine at the south gate of Meenakshiamman Temple. The story persists through the singing of songs and street theatre (Survey of Tamil Nadu Hindu deities, 2018).

PLACE OF WORSHIP OF ARUNTHATHIYARS IN THE VILLAGES

PLATE - 2

Chelladurai (2004) from Janodayam a Non Governmental Organization undertook a study on Arunthathiyars and according to the study he says that 77.72 per cent of the respondents were fond of rituals and celebrations as part of their cultural practices, which take place from conception to death. The events celebrated were, the bangle ceremony, child birth, tonsure, ear boring, puberty, wedding and death. The Hindu festivals like Ugadi (Telugu New Year) and Pongal were celebrated by 41– 55 per cent of the families.

The Table – XVI details all the festivals and traditional practices related to marriages, child birth, pubertal and childbirth

TABLE-XVI

CULTURAL PRACTICES AND FESTIVALS

Details	Taluk									
	Annur		Coimbatore		Madukarai		Pollachi		Mettupalyam	
	N	%	N	%	N	%	N	%	N	%
Festivals										
Mathamma	-	-	-	-	-	-	-	-	-	-
AnnamarNombi (pig eating festival)	77	88.5	-	-	-	-	-	-	54	81.8
Worship Madurai veeran	86	98.9	96	89.7	80	66.6	104	91.2	46	69.7
Worship Pattatharasiamman	75	86.2	106	99	92	76.6	89	78	57	86.4
Worship Mariamma	-	-	9	8.4	-	-	11	9.6	-	-
Worship Meenakshiamma	29	33.3	-	-	-	-	-		-	-
All Hindu festivals	-	-	29	27.1	60	50	42	36.8	-	-
Converted to Christianity	11	12.6	-	-	-	-	7	23.7	-	-
Marriage										
Marriage within community	76	87.4	106	89.7	82	68.3	112	98.2	31	47
Inter caste / love marriages	3	3.4	17	15.8	84	70	17	14.9	-	-
Dowry	10	11.5	28	26.1	31	25.8	28	24.6	-	-
Child birth / Pubertal/ pregnancy										
Bangle ceremony	69	79.3	102	95.3	92	76.6	109	95.6	59	89.4
Naming ceremony	66	75.9	101	94.4	101	84.1	111	97.4	59	89.4
Ear piercing	52	59.8	101	94.4	102	85	102	89.5	52	78.8
Hair removal	64	73.6	98	91.6	96	80	98	86	56	84.8
Celebration of first birthday	59	67.8	99	92.5	99	82.5	89	78	46	69.7
Attainment of puberty	80	91.95	84	78.5	98	81.6	84	73.7	30	45.5

As far as the festivals are concerned Mathamma is not worshipped in all the five taluks, but the worship of Mariamma was area specific and akin to Coimbatore and Pollachi. Chelladurai (2004) presented that Arunthathiyars in Chennai also known as Adi Andhras, have their own family goddess called Mathamma or Mariamma. During these festival animals are sacrificed. Therefore, it may be that the goddess Mathammas worshiped as Mariamma in Coimbatore District.

Annamar Nombi also known as the Pig eating festival was celebrated in Mettupalyam and Annur taluks, the taluks which are close to Erode District. Worship of Madurai Veeran and Pattatharasiamman was celebrated in all the taluks. Worship of Meenakshi was seen in Annur taluk where they have quite a big temple. In addition to their traditional celebrations, 20–50 per cent of the families in Coimbatore, Madukkarai and Pollachi, also celebrate the Hindu festivals.

Unlike other religions and castes, the Arunthathiyars do not have learned religious leaders to guide or lead them to the spiritual paths, therefore seven to eleven per cent of the families in Annur and Pollachi taluks had taken to Christianity and visit the Church regularly to get solace. Kumar's (2012) study had also found 3.3 per cent of the respondent in the Arunthathiyar community were Christians and 2.5 per cent were Muslims.

Pertaining to marriages a majority (68 – 98 %) stated that marriages were held within the community. It was observed that in Coimbatore city the families living in the slum area were all from the same caste and were close knitted, which could be the reason for marriages happening within the community. However, Times of India (February, 2018) reported the story of Shanthi (backward community) and her husband Ilavenil (Arunthathiyar community). When Shanthi's family was aware of her affair they locked her in a room and was beaten almost every day by the family and relatives. After a month she managed to escape and got married to Ilavenil, when she became a mother of two children, Shanthi's mother often visited her for which she was sent out of the house. The whole affair ultimately led to the separation of parents who were

married for three decades. Times adds "Behind the glossy facade of industrialized region and Coimbatore known for its educational institutions, lays a murky world of caste discrimination". However, except for the Madukkarai Taluk, love marriages and inter caste marriages were at its minimum. Fortunately giving dowry as a marriage practice was low.

For the ceremonies related to child birth, pubertal and pregnancy, it was obvious that the families in all the taluks were fond of celebrating these social events. All the functions were given equal importance and celebrated on a grand scale. On an average 70 – 90 per cent of the families celebrated the naming the child, hair removal, ear piercing, pubertal, and bangle ceremony.

SECTION II: ADOLESCENTS IN THE SELECTED TALUK – GENERAL PROFILE

Man is a social animal and is never isolated, in this context, to have a deeper understanding of the adolescents, their family and the community the selected taluk the adolescents of the was subjected to detailed analysis and discussed under two subheads namely

A. Socio economic and familial back ground

B. Neighbourhood /community profile

A. Socio economic and familial back ground

The various components studied were consolidated and packed under the sub heads to draw out a profile of adolescents as follows:

a. Personal background
b. Family background
c. Lineage and
d. Family environment

a. *Personal background*

The Table -XVII brings out the personal data, comprising of gender, age, class studied, type of school and the medium of instruction

TABLE- XVII

PERSONAL BACKGROUND

Variables	N	%		Variables	N	%		Variables	N	%
Gender				**Class**				**Type of institution**		
Male	242	49.0		Middle	129	26.1		Government	430	87.0
Female	252	51.0		H. School	150	30.4		Private	64	13.0
Total	**494**	**100**		Cert. course	05	1.0		**Total**	**494**	**100**
Age in years				Hr. Sec	144	29.1		**Medium of instruction**		
11-13	134	27.1		Diploma	10	2.0		Tamil	430	87
14-16	173	35.0		Degree	56	11.4		English	64	13
17-19	187	37.9		**Total**	**494**	**100**		**Total**	**494**	**100**
Total	494	100.0								

The details in the table reveal that there was not much of gender disparity; in fact, it was quite interesting to note the girl's participation was two per cent more than the boys. In India, provision of midday meals or free uniform was found to substantially improve enrolment rates for girls in rural areas (Mehrotra, 2006; Dreze and Kingdon, 2001).The average age of majority (35%) of the respondents was 14 –16 years (median calculated), and 17–19 years was the next major percentage (37.9%) age group.

From these two age groups, 30 per cent of the respondents were in high school, 11 per cent into graduation and 29 per cent continued their studies in the higher secondary. A majority (87%) of the respondents were enrolled in government schools, while the rest 13 per cent of them got into private institutions. Tamil was the medium of language of the 87 per cent of the respondents. Given the kind of facilities in government schools, and parent's financial constraints, it was but obvious that they preferred those schools. The school head and teachers in some of the schools have tried to maintain a good standards of teaching, also there were a good number of sponsors to provide school / student requirements as part of Corporate Social Responsibility (CSR) initiative. It was also found that a lavish play ground and the gardens maintained in the schools were some of the positive aspects that developed the student's affinity to schools.

b. *Family background*

According to Narayanasami and Sachithanandam, (2010) historically, the community was carefully kept away from mingling with other communities in main stream social life; even today they are kept outside the main residential areas; they are prevented from getting education and acquiring any special skill useful for the economic development. It is indirectly a forced social situation in which their survival becomes impossible. The Table - XVIII the details of type of family, size, language spoken, family income and the type of house they live in.

TABLE- XVIII FAMILY BACKGROUND

Details	N	%	Details	N	%	Details	N	%
Mother tongue			**Family income**			**Family size**		
Telugu	47	9.5	1001 – 3000	13	2.6	02	01	0.2
Kannada	01	0.2	3001 – 5000	59	11.9	03	41	8.3
Te. speak Tamil	317	64.2	5001 – 8000	179	36.2	04	285	57.7
Tamil	129	28.1	8001 – 10,000	128	25.9	05	105	21.3
Total	**494**	**100.0**	10,001 – 15,000	70	14.2	06	47	9.5
T. Housing			15,000 >	45	9.2	07	15	3.0
Thatched	18	3.6	**Total**	**494**	**100**	**Total**	**494**	**100.0**
Asb. Sheet	02	0.4						
Con. Roof	87	17.6	**Type of Family**					
R. houses	61	12.4	Nuclear	410	83.0			
Tiled roof	293	59.3	Joint	84	17.0			
No housing	33	6.7	**Total**	**494**	**100.0**			
Total	**494**	**100**						

The percentage of nuclear families was seen to be high as 83 per cent; this could be mainly due to space availability. The average family size was four. The family income of the majority of the families was found to be in the range of ?. 5000 – 8,000/-. The language of 64 per cent of the families was Telugu but they speak Tamil for practical reasons, such as to help them to adjust with lessons and also to avoid their identity. The housing of 59 per cent of the families was tiled roofed. The government supports a small subsidy for house construction, the amount being insufficient; the families borrow from other sources as well.

c. Lineage

This part of discussion covered the age, education and occupation of the grandparents and parents and was presented in the Table - XIX

TABLE –XIX

LINEAGE

Variable	G. Father		G. Mother		Father		Mother	
	N	%	N	%	N	%	N	%
Age								
20 –29	-	-	-	-	02	0.4	12	2.4
30 - 39	-	-	-	-	212	42.9	394	79.8
40 – 49	-	-	-	-	243	49.2	84	17.0
50 – 59	18	3.6	40	8.1	19	3.8	01	0.2
60 – 69	28	5.7	33	6.7	-	-	-	-
71 - 80	06	1.2	04	0.8	-	-	-	-
81 – 90	01	0.2	01	0.2	-	-	-	-
91 -100	0	0.0	01	0.2	-	-	-	-
None	441	89.3	415	84.0	18	3.6	03	0.6
Total	494	100	594	100	494	100	494	100
Education								
Illiterate	48	9.7	65	13.2	167	33.8	190	38.5
Primary	03	0.6	06	1.2	103	20.9	87	17.6
Middle	0	0.0	01	0.2	46	9. 3	54	10.9
H.S	02	0.4	01	0.2	136	27.5	143	28.9
Hg. Sec	-	-	-	-	23	4.7	16	3.2
Graduate	-	-	-	-	0	0.0	01	0.2
ITI/ Diploma	-	-	-	-	01	0.2	0	0.0
None	441	89.3	415	85.2	18	3.6	03	0.6
Total	494	100	594	100	494	100	494	100
Occupation								
No occupation	14	2.8	22	4.5	06	1.2	64	13.0
Masonry	03	0.6	05	1.0	53	10.7	27	5.5
Ag. Labour	28	5.7	34	6.9	230	46.6	209	42.3
MNREGA	04	0.8	13	2.6	06	1.2	130	26.3
Driver	-	-	-	-	18	3.6	01	0. 2
F.employee	02	0.4	02	0.4	155	31.4	51	10.3
G.Employe	01	0.2	01	0.2	08	1.6	08	1.6
P. Business	01	0.2	01	0.2	0	0.0	01	0.2
*None	441	89.3	415	84.2	18	3.6	03	0.6
Total	494	100	494	100	494	100	494	100

*None- Not having

The details presented in the table showed that 83 per cent were nuclear families and the average family size (median calculated) was four. It was only 11 per cent of the families who had grandparents. The youngest grandparents (4-8%) per cent were in the age group 51– 60 years, and the next major age group (8-7%) of the grandparents were in the ambit of 61–70 years.

It was also noted that there were more females than the males in both the age groups. The literacy rate of the grandparents was poor (1.6%), the highest level of education was high school, and the numbers of the female literates were more (0.6%) than males. Their main occupation was daily labour in the agricultural fields. It was however encouraging to note that one per cent of them were employed in the government and one per cent in the factories, perhaps the most aged, above 70 and 90 years and the sick among them (3-4%) were not occupied.

A majority of the fathers (49.2%) were between 31- 40 years and the next high percentage (42.9 %) was in the age range of 41– 50 years. On the contrary good percentages (79.8%) of mothers were aged between 31- 40 years, apparently the fact that Arunthathiyar girls get married early seems to be true. The illiteracy rate was 34-38 per cent; subsequently the percentage of educated was also high with 27-29 per cent have gone to the level of high school education. Interestingly the female literacy rate was two per cent more than the males, and one per cent of the mothers were graduates. The occupation of the majority of the parents (42-46%) was agricultural labour work, ten per cent of the mothers and thirty one per cent of the fathers were factory employed. An equal percentage (1.6%) of both the mothers and the fathers were employed in the government job.

d. *Family environment*

While the family environment is crucial to the development of children and adolescents, growing up in adverse circumstances abstain them to be in par with peers from more advantaged homes in many aspects. The poor are not equipped with qualities, dispositions, skills, motivations and values linked to upward mobility (and breaking free of the cycle of poverty). Observers of social

inequalities in India, have pointed out that the state of poverty is persistent and follows from generation to generation. According to Dube and Sachdev (1983) the adult attitudes of apathy, indifference and withdrawal is transmitted to the younger members of the community and children are as a result inexorably sucked into a 'culture of poverty, hence the vicious cycle continues. Having discussed in length, the socio economic and cultural status of Arunthathiiyars in the previous section, the relevance of the adolescents personal opinions on the various aspects of family environment was found relevant to assess the present status of Arunthathiyars. The Table - XX highlights the adolescent's views of their family environment.

TABLE –XX FAMILY

ENVIRONMENT

Details	Yes		No		Total	
	N	%	N	%	N	%
Insufficient family income	314	63.6	180	36.4	494	100
Parents care and fulfil all our needs	281	56.9	213	43.1	494	100
Alcoholic parents/members and fights at home	94	19.0	400	81.0	494	100
Problem of money lenders	256	51.8	238	48.2	494	100
Parents are very encouraging and have aspirations for their children	337	68.2	157	31.8	494	100
Parents are pious, organized and guide well	317	64.2	177	35.8	494	100
Father gets drunk and abuses the family members	42	8.5	452	91.5	494	100
Parents go early to work and children are badly neglected	90	18.2	404	81.8	494	100
Congested living space	245	49.6	249	50.4	494	100

It was seen that some of the supporting factors to the adolescents as stated by the majority (64-68%) were pious and well organized parents, who encouraged and also had aspirations for their children. Most of them (52 -66%), also emphasised the difficulty with insufficient family income, day to day sustenance and the problem of money lenders. The majority (50%) of adolescents gave the problem of congested living space, and 19 per cent felt the problem of alcoholic parents and related issues. The parents going early to work and neglect of the children was mentioned by 18 per cent of the adolescents. The economical constraints were also mentioned in the problems related to

education. In spite of all the family problems, the mothers took great efforts to educate their children as stated by 64 – 68 per cent of the adolescents. Therefore it is clear that some parents take special efforts to educate their children

B. Neighbourhood / community profile

In the rural areas the community plays a very important role, this applies particularly to the Arunthathiyar community, as they live out of the village in their secluded colonies. The school / college environment plays a dramatic role in the lives of adolescents to build their personality. In the village setup the school is also very close to the community and often the teachers are quite friendly, some of the parents are also the members of Parent Teacher Association (PTA). On the whole the parent- teacher or the community- school relationships benefit the students in terms of improved teaching approaches, monitor student progress and behaviour and so on. The adolescents were facilitated to express their opinion on their environment and were summarized in the subsequent subheads namely

a. Neighbourhood
b. School/college environment

a. Neighbourhood

The Table–XXI presents the adolescents opinions on their neighbourhood

TABLE – XXI

NEIGHBOURHOOD

Details	Yes	No		Total	
	N	%	N	%	N	%
Neighbours are too interfering and demanding	107	21.7	387	78.3	494	100
Fights in the com. / neig.hood due to alcohol consp	103	20.9	391	79.1	494	100
Very supportive and encouraging community	296	59.9	198	40.1	44	100
Too many celebrations and noisy most of the time	238	48.2	256	51.8	494	100
Peer pressure and loss of direction	80	16.2	414	83.8	494	100
Congested and unhygienic neighbourhood	211	42.7	283	57.3	494	100
Some community members are troublesome and involve in mockery of school children	73	14.8	421	85.2	494	100

In the villages the closeness of the households, makes the family members easily accessible to each other. The majority of the respondents (60%) reported, as having very supportive and encouraging community. On the other side 42 – 48 per cent feel too many celebrations, congested, noisy and unhygienic neighbourhood as irksome. The community was found to make any celebration with the use of loud speakers, drumbeating etc. A marginal percentage (14 -22%) were interfering, demanding neighbours and were even involved in mockery of the school going.

Peer pressure and loss of direction was also one of the problems stated by 16 per cent of the respondents. The problem of alcohol consumption and fights in the community was stated by 20 per cent of the respondents, some of the adolescents felt alcohol consumption and the fights disturb or affect the neighbours also. The illiteracy, ignorance could be the cause of other negative qualities of neighbours. On the whole the 60 per cent of the respondents feeling that the neighbourhood being supportive to each other seemed encouraging. The personal observation was also that, though they were sceptical on the first instance when they see a stranger, the initial conversation would help build the rapport.

b. School / college environment

Lawrence and Vimala (2012) assert that as a student spends most of his life at school, the school environment is highly responsible for inculcating great values in him. A school's environment is the thread that binds the various activities on a campus. The thread is almost invisible, yet everyone experiences its influence. A school's physical environment includes the school building and the surrounding climate such as the noise, temperature, lighting, as well as physical, biological, or chemical agents.

The Table – XXII and XXIII consolidates the adolescents claim on their school/college physical environment and psychological environment respectively.

TABLE – XXII

PHYSICAL ENVIRONMENT OF SCHOOL / COLLEGE

Details	Yes		No	
	N	%	N	%
The building is good	472	95.5	22	4.5
There is no noise and disturbance in the surroundings	426	86.2	68	13.8
The class rooms are comfortable	425	86.0	69	14.0
The school has a good play ground	425	86.0	69	14.0
Drinking water facility is sufficient	422	85.4	72	14.6
The class rooms are well maintained	407	82.4	87	17.6
The black board is good and legible	406	82.2	88	17.8
There is sufficient furniture for the students	395	80.0	99	20.0
Classrooms have fans and helpful in summers	389	78.7	105	21.3
There are toilets in the school	377	76.3	117	23.5
The trees and garden in the school is most enjoyable	366	74.1	128	25.9
We enjoy the time in school in all aspects	364	73.7	130	26.3
Allowed to borrow library books	272	55.1	222	44.9
There is enough sports materials	193	39.1	301	60.9
Allowed to work in the computer lab	167	33.8	327	66.2

The close observations of the responses given by the respondents were interesting. The responses were categorised as high, moderate and low based on the percentage of responses. The high (74 – 95%) was given to the good building, the trees and the garden, good play ground, sufficient furniture and the legible blackboard. The adolescents, majority (74%) have also mentioned that the time spent in school time was most enjoyable. The moderate (55%) was the availability of library books to borrow. The low (34 – 39%) was for the availability of sports material and use of computer lab.

Considering the parents attitudes and unwillingness to send children outside for studies, the socioeconomic limitations, the researcher recommends that the central / state government should establish free residential schools and institutions at the Panchayat and Block levels in good locale (in par with Navadoya schools).

Further, the school environment is a combination of the attitudes, feelings, and values of students and staff. The Table - XXIII details the adolescent's narrative on the school/ college psychological environment.

TABLE - XXIII

PSYCHOLOGICAL ENVIRONMENT OF SCHOOL/COLLEGE

Details	Yes		No	
	N	%	N	%
Teachers are our role models	462	93.5	32	6.5
Teachers treat all students equally	459	92.9	35	7.1
We participate in all competitions and win	390	78.9	104	21.1
Some teachers discriminate and we feel hurt	161	32.6	333	67.4
The Head master / mistress is supportive	433	87.7	61	12.3
The class mates are very friendly and do not discriminate	374	75.7	120	24.3
Some students are still averse to caste and are not friendly	110	22.3	348	77.7
The plates in the school are kept separate	107	21.7	387	78.3
Some friends from upper caste come for clearing doubts and we feel happy	261	52.8	233	47.2
School time is most enjoyable time we have fun and also taught well.	401	81.2	93	18.8

The majority of the respondents (53-94%) have cherished their school/ college psychosocial environment to the optimum. Physical and psychological safety, positive interpersonal relationships, recognition of the needs and success of the individual, and support for learning are all part of the psychosocial environment (Ruchi and Sharma, 2011).

The respondents have appreciated the attitude and behaviour of the teaching staff as well the classmates from upper caste. In fact their answers were summed up in a single statement and as stated by 81 per cent of adolescents opined that "School time is most enjoyable time, we have fun and also taught well". The most appreciative statements of the students were "Teacher's were their role models, and treats everyone equally, participates and win prizes, head master/head mistress were very supportive, class mates were friendly and did not discriminate". All the statements are accommodated in the Figure 4

OPINION OF ADOLESCENTS TOWARDS THE PSYCHOLOGICAL ENVIROMENT OF SCHOOL/COLLEGE

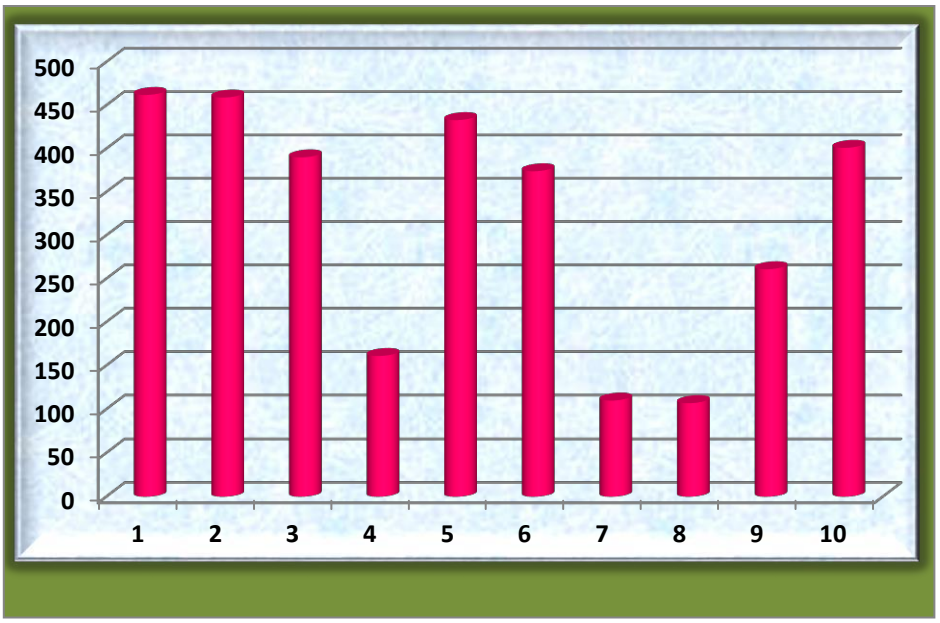


FIGURE - 4

This section went through a detailed study on the personal and family back ground of adolescents as those factors are the foundations stones to build and structure the adolescent's future for their wellbeing. The findings will also be supportive to the discussions in the subsequent sections.

SECTION III: ACADEMIC ACHIEVEMENT (AA) AND FACTORS ASSOCIATED

This section drives through the academic achievement of adolescents, and the influence of socio-economic and familial factors as the determinants. The identification of the most important determinants would be the store house of authentic factors to help sensitize the adolescents in particular, the Arunthathiyar community in general and also to influence the policy makers both in the government and civil society organizations. This section was further parted into subsections as

A. Academic achievement of adolescents

B. Determinants of academic achievement

A. Academic achievement of adolescents

Academic achievement is the sum total of information gained after completing a course of instruction (partially or fully) in a particular grade that he has obtained on an achievement test (Gupta and Katoch, 2013). This study considered the sum total percentage of marks of adolescents acquired by them in their annual examination and graded under four groups as detailed in the Table - XXIV

TABLE – XXIV

ACADEMIC ACHIEVEMENT OF ADOLESCENTS

Academic achievement	Number (N)	Percentage (%)
<40 (Poor)	73	14.8
41 – 59 (Good)	157	31.8
60– 79 (V. Good)	187	37.4
>80 (Excellent)	79	16.0
Total	**494**	**100.0**

A majority (37.4%) of them were scorers in the range 60 – 79, and 32 per cent scored 41 – 59 marks. There was a balance with almost equal scores in the good and v.good range. On the whole 70 per cent of adolescents were good and very good scorers, 15 per cent were poor and the rest 16 per cent were excellent scorer. There are a number of studies showing parental background being a factor influencing the academic achievement of adolescents. In this context the analysis and interpretation of data enabled Memons et al., (2010) conclude that students whose parents were well educated perform better than those students whose parents are less educated.

B. Determinants of academic achievement

Three major determinants of educational enrolment are socio-economic status, educational infrastructure, and culture. The importance of each of these three (groups of) factors, were widely recognized. Parental income, wealth, education and occupation have long been known to be major determinants of educational enrolment and achievement in both developing and developed countries (Filho, 2008; Mingat, 2007; Shavit and Blossfeld, 1993).

Socio-economic status is one of the most researched and debated factor among educational professionals that contribute towards the academic performance of students (Adams, 1996). The present study was focussed on Arunthathiyars, who were the most marginalized and deprived community. Therefore, considering their weak socio–economic background it was found worthwhile to find its relevance to the academic achievement of adolescents, and that the findings will be most useful for future course of action and policy intervention. This part of the study was discussed under the following heads

a. Age and Gender on academic achievement
b. Type of school and academic achievement
c. Type of family/housing and academic achievement
d. Parent's education and academic achievement
e. Parent's occupation and academic achievement and
f. Family income and academic achievement

a. Age and Gender on academic achievement

The Table –XXV and Figure 5 and 6 gives a detailed account of the respondent's age and gender and its influence on their academic achievement

TABLE- XXV

AGE AND GENDER ON ACADEMIC ACHIEVEMENT

Age and gender	Academic achievement									
	< 40		41 – 59		60 – 79		>80		Total	
	N	%	N	%	N	%	N	%	N	%
Age										
11	10	2.0	13	2.6	7	1.4	1	0.2	31	6.3
12-13	25	5.1	43	8.7	26	5.3	9	1.8	103	20.8
14-16	27	5.5	59	11.9	68	13.8	19	3.8	173	35.0
17-19	11	2.2	42	8.5	84	17.0	50	10.1	187	37.9
Total	73	14.8	157	31.8	185	37.4	79	16.0	494	100.0
	Df-9			**Chi square value - 64.058**				**P value - 0.00001^{S}**		
Gender										
Male	40	8.0	91	18.5	82	16.6	29	5.9	242	49.0
Female	33	6.7	66	13.4	103	20.8	50	10.1	252	51.0
Total	73	14.7	157	31.9	185	37.4	79	16.0	494	100.0
	Df -3			**Chi square value 12.421**				**P value 0.006^{S}**		

The table analysing age and academic achievement, clearly indicates that age has significant influence on academic achievement. The chi square test has also proved the significance at one per cent level. The peak performance as portrayed by the figure at the age of 17–19 years followed by 14–16 years. The intense coaching classes at 10th and 12th standard could be the reason for a better performance.

AGE AND ACADEMIC ACHIEVEMENT

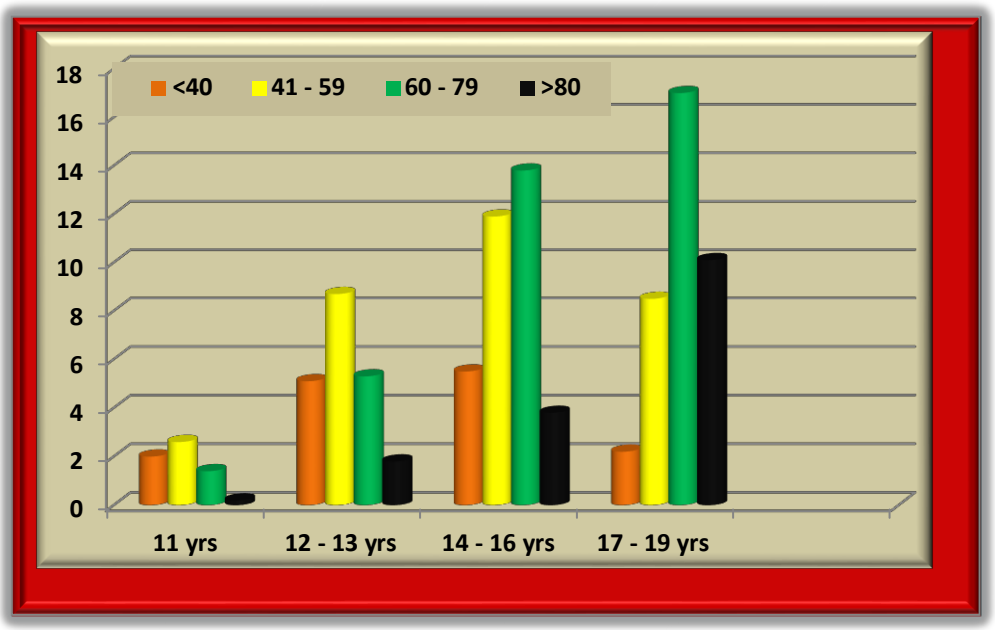


FIGURE - 5

GENDER AND ACADEMIC ACHIEVEMENT

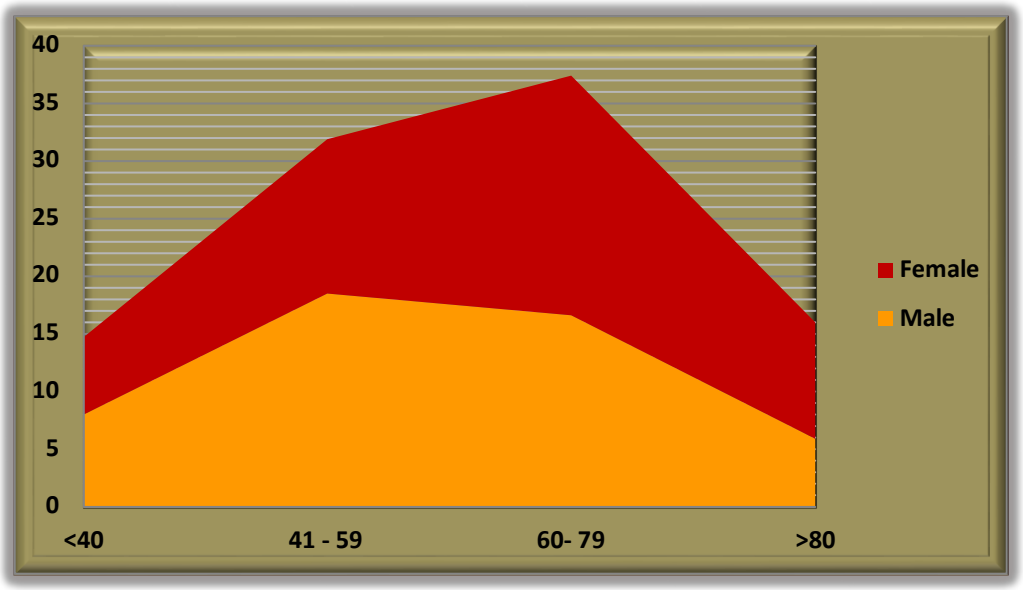


FIGURE - 6

In India, all 16-year old children attempt the Class X first Board Examination, known as the Secondary Examination and after this, the students appear in the Class XII Final Board Examination known as the Higher Secondary Examination. These two examinations are crucial for the upward educational journey (Deb, 2001). Not only parents, it is in fact both the private and government schools give a rigorous coaching by organizing special coaching classes.

Referring to gender and academic achievement, female respondents had performed well than their male counterparts. Their performance was almost double at the excellent level (>80 marks) and four cent higher in >60 – 79 range. Eitle (2005) opined that the relationship between gender and the academic achievement of students has been discussed for decades. Further, Chambers and Schreiber (2004) also viewed that a gap between the achievement of boys and girls has been found, with girls showing better performance than boys in certain instances.

b. Type of school and academic achievement

The Table-XXVI presents the influence of the type of school on academic achievement

TABLE –XXVI

TYPE OF SCHOOL AND ACADEMIC ACHIEVEMENT

Type of school	Academic achievement									
	< 40		41 – 59		60 – 79		>80		Total	
	N	%	N	%	N	%	N	%	N	%
Type of school										
Government	70	14.2	142	28.7	148	30.0	70	14.2	430	87.0
Private	3	0.6	15	3.0	37	7.5	9	1.8	64	13.0
Total	73	14.8	157	31.8	185	37.4	79	16	494	100.0
	Df – 3			**Chi square -14.988**				**p- value 0.002^{S}**		

The academic achievement of adolescents with respect to the type of school was also found to be significant. The performance of the adolescents in government schools was better than the private schools. Although the

percentage enrolled in the private schools is negligible (13%), it could still be claimed that while the majority of adolescents (30%) from government schools scored 60-79, and a fairly good percentage (14.2%) also scored the highest range of >80, the adolescents achievement in private schools dripped down significantly in the same range of marks from 7.5 per cent to 1.8 per cent.

The Figure 7 highlights the performance of students in government and private schools.

TYPE OF SCHOOL AND ACADEMIC ACHIEVEMENT

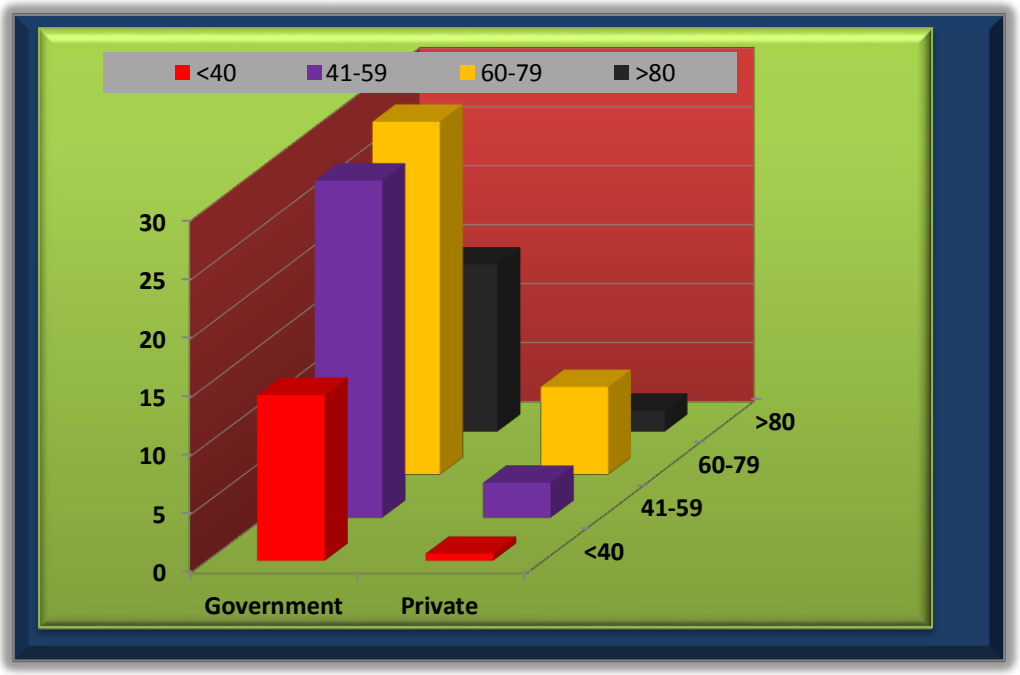


FIGURE – 7

Sentamu (2003) argued that schools influence educational process in content organization, teacher, teaching and learning, finally the end evaluation of them all. The educationists and researchers agreed with this principle that schools put strong effect on academic performance and educational attainment of students. The same principle applies to the present findings, since all the schools irrespective of government or private have well organized coaching classes after the regular school hours and also on weekends. The students are meticulously drilled in order to attain a high level of school percentage of results as well as district level ranks. Huisman, Rani and Smits (2010) from their study found that in rural areas most socio-economic household resources become less important when teacher and school availability improve.

c. Type of family/housing and academic achievement

The Table- XXVII details the type of family and housing and its relationship with academic achievement. The percentage of nuclear families had been on the rise everywhere as compared to that of joint families and the rural areas were no exceptions. In the study taluk the percentage of nuclear and joint families were found to be 83 and 17 per cent respectively. However, an attempt was made to analyse the variations. The Table presents the influence of type of family and housing on academic achievement

TABLE – XXVII

TYPE OF FAMILY/HOUSING AND ACADEMIC ACHIEVEMENT

Type of family and housing	Academic achievement									
	< 40		41 – 59		60 – 79		>80		Total	
	N	%	N	%	N	%	N	%	N	%
Type of family										
Nuclear	58	11.7	131	26.5	153	31.0	68	13.8	410	83.0
Joint	15	3.0	26	5.3	32	6.5	11	2.2	84	17.0
Total	73	14.8	157	31.8	185	37.4	79	16.0	494	100.0
	Df – 3			**Chi square -1.214**				**p- value 0.75^{NS}**		
Type of housing										
Thatched	2	0.4	8	1.7	7	1.5	1	0.2	18	3.9
Asbestos	1	0.2	0	0.0	1	0.2	0	0.0	2	0.4
Concrete roof	14	3.0	26	5.6	30	6.5	17	3.7	87	18.9
Row hoses	5	1.1	20	4.3	24	5.2	12	2.6	61	13.2
Tiled	44	9.5	92	20.0	114	24.7	43	9.3	293	63.6
Total	66	14.3	146	31.7	176	38.2	73	15.8	461	100.0
	Df– 12			**Chi square -9.012**				**p- value 0.702^{NS}**		

The type of family was seen to be not significantly associated with academic achievement. Comparing the academic achievement and the percentage of adolescents both from nuclear and joint families, a total of 45 out of 83 per cent of adolescents from nuclear families scored in the range of 60 – 79 and >80, similarly 13 out of 17 per cent were in the same range of scores. To consolidate, fifty per cent of adolescents each from nuclear as well as joint families fared equally well, with only a marginal difference of three per cent adolescents from nuclear families ahead of their counterparts.

The type of house and academic achievement also showed that they were not significantly associated. The close observation of the percentages shows that housing with tiled roofing had an influence with 20 and 25 per cent of the adolescents who scored 41 – 59 and 60 – 79 marks respectively. Also nine per cent of adolescents were found to be the top scorers by scoring a percentage of more than 80.

d. *Parent's education and academic achievement*

The following Table – XXVIII and Figure 8 describe the association of parent's education and adolescent's academic achievement.

TABLE –XXVIII

PARENT'S EDUCATION AND ACADEMIC ACHIEVEMENT

Parent's Education	Academic achievement									
	<40		41-59		60 -79		>80		Total	
	N	%	N	%	N	%	N	%	N	%
Mother's education										
Illiterate	27	5.5	52	10.6	68	13.8	43	8.8	190	38.7
Primary	10	2.0	42	8.6	27	5.5	8	1.6	87	17.7
Middle	10	2.0	18	3.7	21	4.3	5	1.0	54	11.0
H. School	24	4.9	38	7.7	64	13.0	17	3.5	143	29.1
Hg. Sec	2	0.4	5	1.0	4	0.8	5	1.0	16	3.3
Graduation	0	0.0	1	0.2	0	0.0	0	0.0	1	0.2
Total	73	14.9	156	31.8	184	37.5	78	15.9	491	100
	Df– 15		**Chi square value – 30.669**				**P value-0.010^{S}**			
Father's Education										
Illiterate	22	4.6	53	11.1	58	12.2	34	7.1	167	35.0
Primary	19	4.0	40	8.4	34	7.1	10	2.0	103	21.6
Middle	9	1.9	16	3.4	16	3.4	5	1.0	46	9.7
High School	19	4.0	37	7.8	56	11.8	24	5.0	136	28.6
Hg. Sec	2	0.4	6	1.3	12	2.5	3	0.6	23	4.8
Diploma	0	0	0	0	1	0.2	0	0	1	0.2
Total	71	14.9	152	31.9	177	37.2	76	16.0	476	100.0
	Df–15		**Chi square value - 15.542**				**p- value 0.413^{NS}**			

A part of the table and the figure captures the mother's status of education influencing the academic achievement of adolescents, and being significant in the chi-square test at five per cent level. The table indicates that mother's illiteracy, as well as those with high school education, have influenced

the adolescent's academic achievement. However, 24 per cent of adolescents whose mothers were illiterates scored between 60 - 80 per cent marks. The findings was in contradiction to Filho and Irineu (2008) who stated that parental education was one of the influential factors in determining the educational status of children in both developing and developed countries.

MOTHER'S EDUCATION AND ACADEMIC ACHIEVEMENT

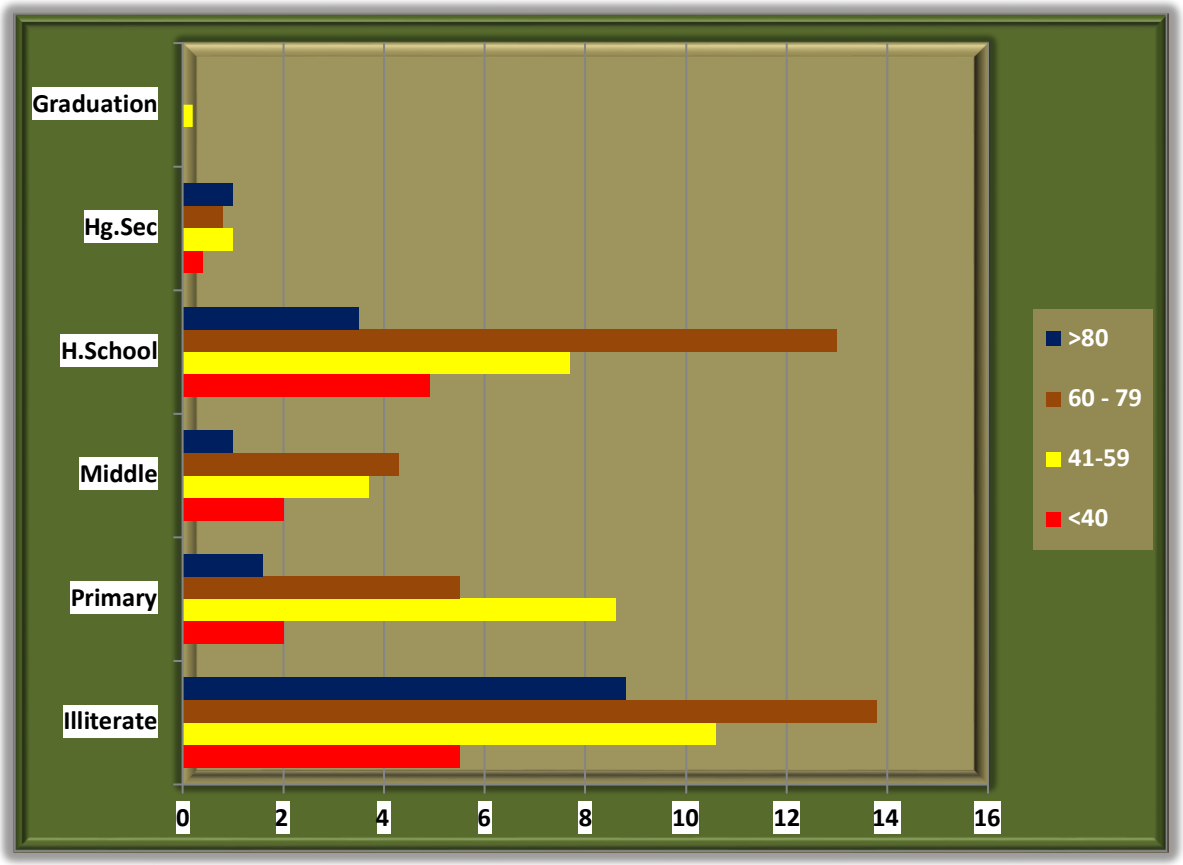


FIGURE- 8

However, a higher percentage (40%) of the adolescents whose mother's were educated from primary to graduation also scored 60 – 80 per cent, and this findings was most relevant to the observations of Huisman, et al., (2010) that parental education was important in both urban and rural areas. Mothers with more knowledge were in a better position or motivated, to get their daughters into school. This knowledge probably need not be very extensive; the measure of mothers' education only distinguished between those with none and those with at least some education.

Unlike the mothers, father's education and academic achievement of adolescents was not significant. Most men leave early to work, the kind of labour work involves intense physical strain and they return home very tired and exhausted, some of them were also addicts to alcohol. These could be the reasons for not paying attention or influencing their children's education. During close interactions many of the adolescents shared about alcoholic fathers and the consequences on their education.

e. Parent's occupation and academic achievement

The Table –XXIX below presents the details of parent's occupation and academic achievement.

TABLE –XXIX

PARENT'S OCCUPATION AND ACADEMIC ACHIEVEMENT

Occupation	Academic achievement									
	< 40		41 – 59		60 – 79		>80		Total	
	N	%	N	%	N	%	N	%	N	%
Mothers occupation										
No occupation	9	1.8	11	2.2	34	6.9	10	2.0	64	13.0
Masonry	5	1.0	7	1.4	9	1.8	6	1.2	27	5.5
Ag. Labour	34	6.9	73	14.9	67	13.6	35	7.1	209	42.6
MNREGA	20	4.1	43	8.8	46	9.4	21	4.3	130	26.5
F. Employ	5	1.0	20	4.1	24	4.9	4	.8	51	10.8
Govt. Employ	0	0.0	1	0.2	4	0.8	3	0.6	8	1.6
Total	73	14.9	156	31.8	184	37.5	78	15.9	491	100.0
	Df– 21			**Chi square – 27.684**				**p value – 0.149^{NS}**		
Fathers occupation										
No occupation	2	0.4	0	0.0	3	0.6	0	0.0	5	1.1
Masonry	8	1.7	17	3.6	20	4.2	8	1.7	53	11.1
Ag. Labour	37	7.8	75	15.8	75	15.8	44	9.2	230	48.5
MNREGA	0	0.0	3	0.6	3	0.6	0	0.0	6	1.3
Driver	4	.8	6	1.3	6	1.3	2	.4	18	3.8
Fact. Employ	19	4.0	48	10.1	65	13.7	23	4.8	155	32.6
Govt. Employ	1	.2	2	.4	5	1.1	0	0.0	8	1.7
Total	71	14.9	152	31.9	177	37.2	76	16.0%	476	100.0
	Df– 21			**Chi square - 18.355**				**P – value 0.626^{NS}**		

The occupation of mothers as well as fathers was not significantly associated with the academic achievement. The majority of rural mothers were into agricultural labour and the MNREGA (Mahatma Gandhi Rural Employment

Guarantee Act). A few mothers were factory employed and were into government jobs (conservancy work in hospitals and municipality). As far as fathers were concerned, a majority were also agricultural labourers and employed in factory.

A maximum of 14 – 16 per cent of adolescents whose mothers and fathers were as agricultural labourers scored 61 – 79 marks and a similar percentage were also in the 41– 59 range of marks. In contradiction to the findings of the present study, Hassan (2009) established from her longitudinal study that there was a positive association between the children's grades and their parents' labour market.

f. Family income and academic achievement

The Table - XXX and Figure 9 draws out an association of family income with academic achievement.

TABLE – XXX

FAMILY INCOME AND ACADEMIC ACHIEVEMENT

Family Income	Academic achievement									
	<40		41-59		60 -79		>80		Total	
	N	%	N	%	N	%	N	%	N	%
1001-3000	2	2.8	5	3.2	6	3.3	8	C	21	4.0
3001 – 5000	10	13.7	20	12.7	19	10.4	10	13.0	59	12.0
5001 – 8000	33	45.2	59	37.3	81	44.3	37	48.0	210	42.8
8001- 10,000	16	21.9	42	26.7	46	25.1	16	20.8	120	24.4
10,001- 15,000	9	12.3	30	19.1	26	14.2	6	7.8	74	15.0
>15,000	3	4.1	1	.1.0	5	2.7	0	0	9	1.8
Total	73	100	157	100	183	100	77	100	490	100
	Df– 15			**Chi-square value- 25.498**				**p-value- 0.044^{S}**		

Significant at 5% level

The table above captures the family income and its association with academic achievement in the Chi-square test being significant at five per cent level. The average income per month by the majority of the families (36%) was found to be in the range of ₹. 5001 – 8000/- and the next highest income of 26 per cent of the families was ₹. 8001 – 10, 000/-. The figure below captures the

highest number of academic achievers who were from the income range of . 5001 – 8000/-.

FAMILY INCOME AND ACADEMIC ACHIEVEMENT

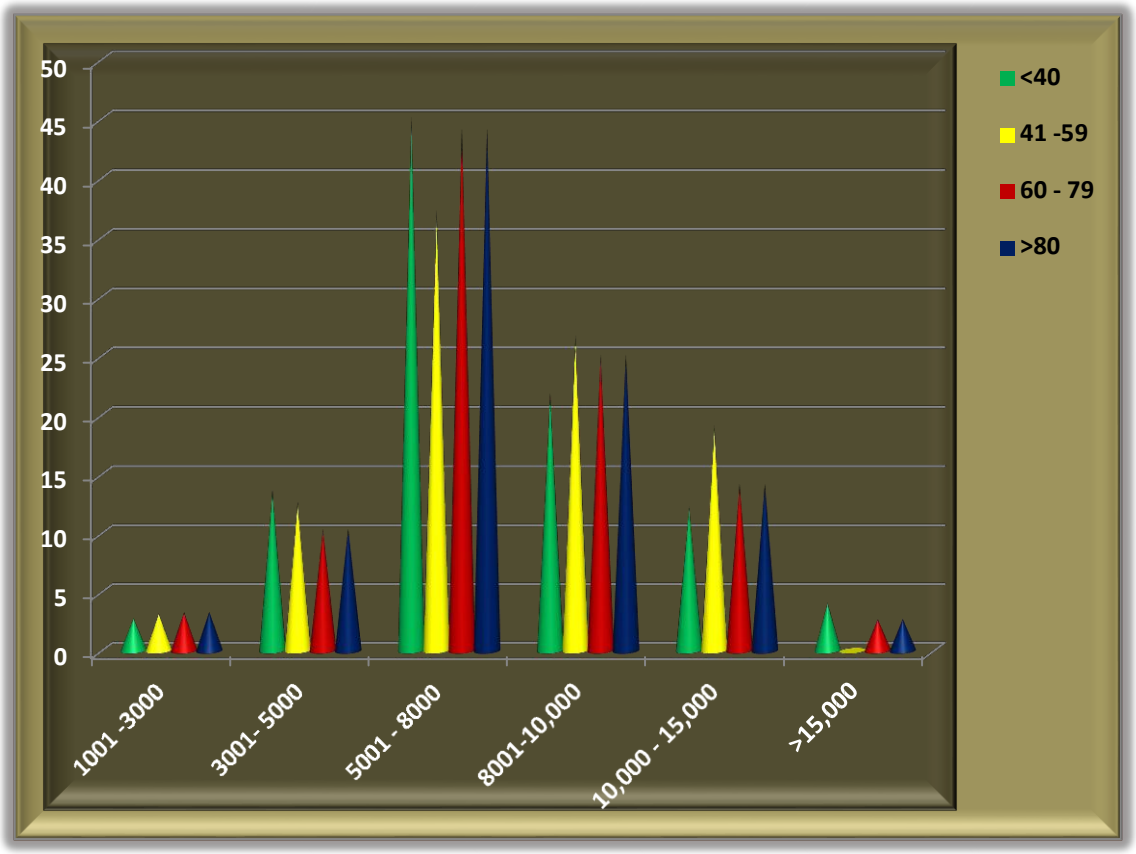


FIGURE - 9

Schoon, Parsons, and Sacker (2004) were of the opinion that although psychological problems were prevalent among adolescents from low socio-economic backgrounds, these adolescents vary considerably in intellectual and psychological functioning. A good number of adolescents from low socio - economic backgrounds perform well and are good achievers in school; and even some perform better than many middle socio-economic backgrounds. In such a case it was not unusual to find a parent or parents making special sacrifices to provide the necessary living conditions and support to contribute to school success.

A study conducted with low-income parents found that parents with high educational aspirations were linked to positive educational outcomes in

adolescents. Memons et al., (2010) state that higher the income of family, better would be students' availability of resources and consequently better would be academic achievements. Most of the experts argue that the low socio-economic status has negative effect on the academic performance of students because the basic needs of students remain unfulfilled and hence they do not perform better academically (Adams, 1996).

Going back to Schoon, Parsons, and Sacker (2004) opinion, in the present study it was found relevant in many cases of adolescents whose performance was remarkable, belonged to very poor families. During data collection many parents were heard saying "we are ignorant, so we want at least our children to be educated and hold better jobs". Times of India (2018) captured the outcomes of the recent class XII board exam results and presented thus "Akalya, daughter of a tea stall owner scored 1124 out of 1500 marks, in spite of suffering from fever during her first two exams, she was the school topper". Her father Narayanan and mother who had no formal education, moved from Udumalpet to Coimbatore in search of livelihood, and also to give better education to children. True to their dreams, the elder daughter (19 years) presently doing her graduation, scored 1156 marks in the board exam and was placed third in her school. The story does not end here; there were several other students from National Child labour Project (NCLP) who came out with flying colours during this year's results

To conclude, looking into the entire analysis of the determinants with academic achievement, it was found that factors such as age and gender, type of school, mother's education and family income had significant influence on academic achievement of adolescents, Therefore the hypothesis numbered 1 that states that 'the socio- economic factors do not influence the academic achievement of the selected adolescents' has to be rejected. However certain socio-economic factors like parent's occupation (both father and mother), and father's education do not influence the academic achievement of the selected section of adolescents.

SECTION IV: NUTRITIONALSTATUS AND FACTORS ASSOCIATED

India's economic status has been classified as a low income country with majority of the population at or below poverty line. Prasad (2011) cites World Food Programme and M.S.Swaminathan Research foundation (MSSRF) that, over the past decade there has been decrease in stunting among children in rural India but inadequate calorie intake and chronic energy deficiency levels remains steady. Under nutrition not only affects physical appearance and energy levels but also directly affects many aspects of the children's mental functions which has adverse effects on their ability to learn and process information, and grow into productive citizens and contribute to their society. Under nourishment also impairs immune functions leaving them more susceptible to infections. Children with infections are more susceptible to malnutrition and the cycle of poverty and malnutrition continues

Body Mass Index (BMI) was considered by WHO as an important nutritional index for detecting cases of underweight and overweight of individuals. Currently BMI is the preferred weight for height standard; because it was considered as the clinical measurement most closely related to body fat content and was being calculated as

$$\text{BMI} = \frac{\text{Body weight (in kilograms)}}{\text{Height}^2 \text{ (meters)}}$$

The concept of BMI was convenient to use because the values apply to both male and female (i.e gender neutral). BMI was used as a screening test for overweight or obesity (Wardlaw and Smith, 2015). Since nutrition is vital and important indicator of health and BMI is an important nutritional index, the study was focussed towards assessing the state of nutritional health of adolescents with BMI. The results would obviously support further follow up in terms of awareness to the Arunthathiyar community, and also to carry out further in-depth research. This section discusses the findings under the following heads

A. Nutritional health status of adolescents

B. Determinants of nutritional health

A. The nutritional health status of adolescents

The Table- XXXI and Figure 10 the identified adolescents into different levels of nutritional status as under nutrition, normal, overweight and obesity by means of BMI.

TABLE - XXXI

BMI OF SLECTED ADOLESCENS

BMI	N	%
Under nutrition	238	48.2
Normal	232	47.0
Overweight	16	3.2
Obesity	08	1.6
Total	**494**	**100**

The above table details the state of nutritional health of adolescents. The figure clearly indicates that nearly 50 per cent of them were under nourished and almost an equal percentage of them were normal. The percentage of overweight and obese was negligible. Exploring the connection between overweight and socioeconomic status (SES), a study conducted by Goyal, Shah, and Saboo (2010), found the prevalence of obesity and overweight in adolescents in the lower socio-economic groups was the least as compared to middle and higher socio-economic groups, and this holds true with the finding of the present study.

BMI OF SELECTED ADOLESCENTS

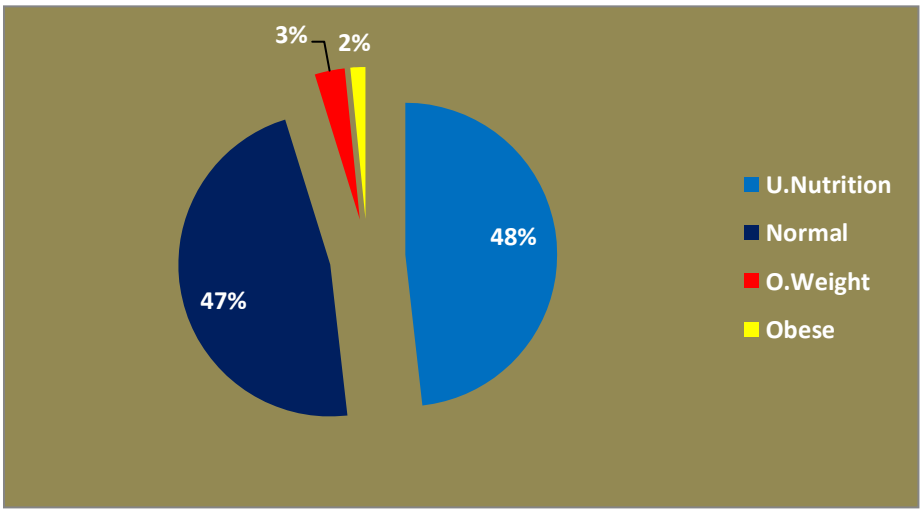


FIGURE - 10

However the high percentage of adolescents, who were in the category of under nutrition, draws our attention. Significant to the present study, research carried out by National Nutrition Monitoring Bureau (2003) in the rural population revealed that the prevalence of under nutrition among adolescents as assessed by weight for age was about 40 – 50 per cent (Srilakshmi, 2014).

In spite of the mid day meal programme introduced in all government schools; the prevalence of under nutrition among rural adolescents was disheartening. Times of India (TOI, 2017) reports, Tamil Nadu's upgraded version of the meal programme, the Midday Nutritious Meal Scheme, which was initiated by chief minister M G Ramachandran in 1982, presently covers more than 48 lakh children across the state. The state has a total of 43,143 noon meal centres. As per the opinion of experts, several factors can result in loss of nourishment, like the time taken to cook, the composition of vegetables and pulses in curries and how finely they were cut. "There is poor awareness among field workers on nutritive loss of food during cooking," said Dr **J** Kumudha, a consultant expert advisor on child health for the National Health Mission, Tamil Nadu. "They often wash vegetables after cutting them, at the cost of losing water soluble vitamins, further officials should also consider other factors, such as the fact that parboiled rice is more nutritious than polished and that overcooking food can result in loss of nutrition". Considering the vast number of student population, who benefit from the midday meal programme particularly from the most marginalized community, it is advisable for the government to regularly monitor the programme by experts. The suggestions given must be implemented by the department and also consider up gradation of the knowledge and skills of those staff team who are directly in charge of the nutrition programme.

B. Determinants of nutritional health

Some of the determinants considered as influencers of nutritional status were framed and discussed under the following heads

a. Age and gender on BMI
b. Type of school and BMI
c. Type of family/housing and BMI

d. Parent's education and BMI

e. Parent's occupation and BMI and

f. Family income and BMI

a. Age and gender on BMI

The Table - XXXII captures the age and gender of adolescents and the BMI, and the test values were presented.

TABLE - XXXII

AGE AND GENDER ON BMI

Gender	BMI									
	Under nutrition		Normal		Over weight		Obese		Total	
	N	%	N	%	N	%	N	%	N	%
Age										
11	15	3.0	13	2.6	1	0.2	2	0.4	31	6.3
12-13	35	7.1	62	12.6	5	1.0	1	0.2	103	20.9
14-16	90	18.2	76	15.4	4	0.8	3	0.6	173	35.0
17-19	98	19.8	81	16.4	6	1.2	2	0.4	187	37.9
Total	238	48.2	232	47.0	16	3.2	8	1.6	494	100
Df- 9			**Chi square value - 16.799**				**P value – 0.052^{NS}**			
Gender										
Male	112	22.7	118	23.9	9	1.8	3	0.6	242	49
Female	126	25.5	114	23.1	7	1.4	5	1.0	252	51
Total	238	48.2	232	47.0	16	3.2	8	1.6	494	100
	Df – 3			**Chi square value-1.441**			**p value – 696^{NS}**			

The chi square analysis with age and BMI was also not significant. The percentages of adolescents in each age group were almost 50 per cent who were under nourished. Therefore age was not a significant factor, according to Srilakshmi (2014) stated that a very large population of rural Indian households have inadequate food supplies and chronic energy deficiency was due to chronic food deficiency. People whose BMI is less than 18.5 are considered as underweight. Children who are subjected to socio economic and dietary constraints during the critical years of growth and development end up with small body size. The Figure 11 portrays the gender variations.

AGE AND BMI

FIGURE – 11

While it is important to be sensitive to the additional nutrient requirements of the adolescence growth period, families were either ignorant or unable to meet the requirements. The meal cooked was shared by all the family members, and therefore the additional food requirements of the adolescents may tend to be overlooked. The ICDS (Integrated Child Development Services) programme that caters to the services of preschool children and expectant and nursing mothers must frequently educate the mothers as well as the adolescents on the importance of role of nutrition in the growth and development.

Gender and BMI

The p value in the table indicates that the gender and BMI were not significant. The percentages of male and female adolescents were more or less equally spread out at all levels of BMI, thus signifying that gender had no bearing with BMI. Though the percentages of overweight and obese adolescents were very low, almost 50 per cent of male and female adolescents were under nourished, The Figure 12 highlights the gender variations in BMI.

GENDER AND BMI

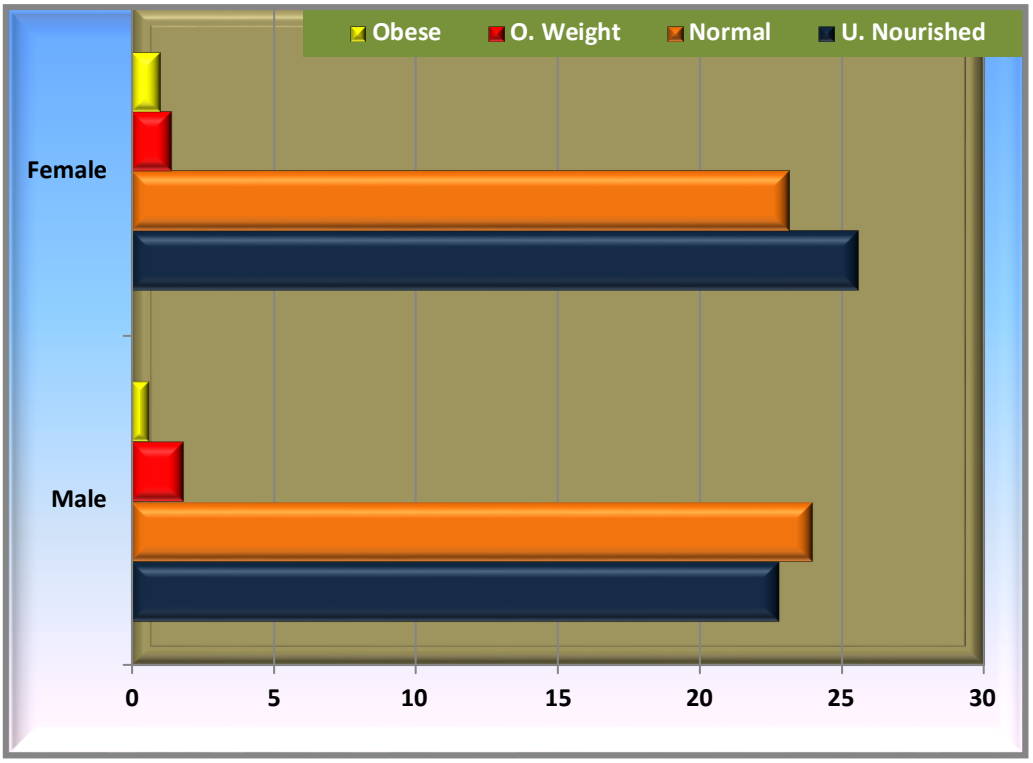


FIGURE - 12

Chitra and Reddy (2007), studied the dietary pattern of 10–15 year olds and demonstrated that only 42.8 per cent of the adolescents ate breakfast regularly and the mean nutrient intakes were inadequate compared with the recommended values for energy and protein. The inadequate energy intake was reflected in a high incidence of malnutrition in both boys and girls; 40.3 per cent of the boys and 32.1 per cent of the girls studied were found to be underweight.

Upon discussion, it was evident that many adolescents have left over rice from the previous day, or some variety rice for breakfast and this lacks the required nutrient intake.

b. Type of school and BMI

The Table – XXXIII and Figure 13 presents the type of school and BMI of the selected adolescents.

TABLE - XXXIII

TYPE OF SCHOOL AND BMI

Type of school	BMI									
	Under nutrition		Normal		Over weight		Obese		Total	
	N	%	N	%	N	%	N	%	N	%
Type of school										
Government	201	40.7	211	42.7	11	2.2	7	1.4	430	87.0
Private	37	7.5	21	4.3	5	1.0	1	0.2	64	13.0
Total	238	48.2	232	47.0	16	3.2	8	1.6	494	100.0
	Df – 3			**Chi square value - 9.302**				**P value 0.026^{S}**		

The type of school and BMI was found to be significant at five per cent level. A majority of the adolescents (43%) from government schools were at the normal level of nutritional health as compared to adolescents from private schools where eight out of thirteen per cent were under nourished. The reason for lesser number of adolescents, however, may be the midday meal programme in government schools. The meals provided were based on a combination of cereals, pulses, and leafy vegetables, eggs were given thrice a week. The diet helped in increase the amount of vitamins and minerals, weight gain and addressed the deficiency symptoms (Srilakshmi, 2014).

TYPE OF SCHOOL AND BMI

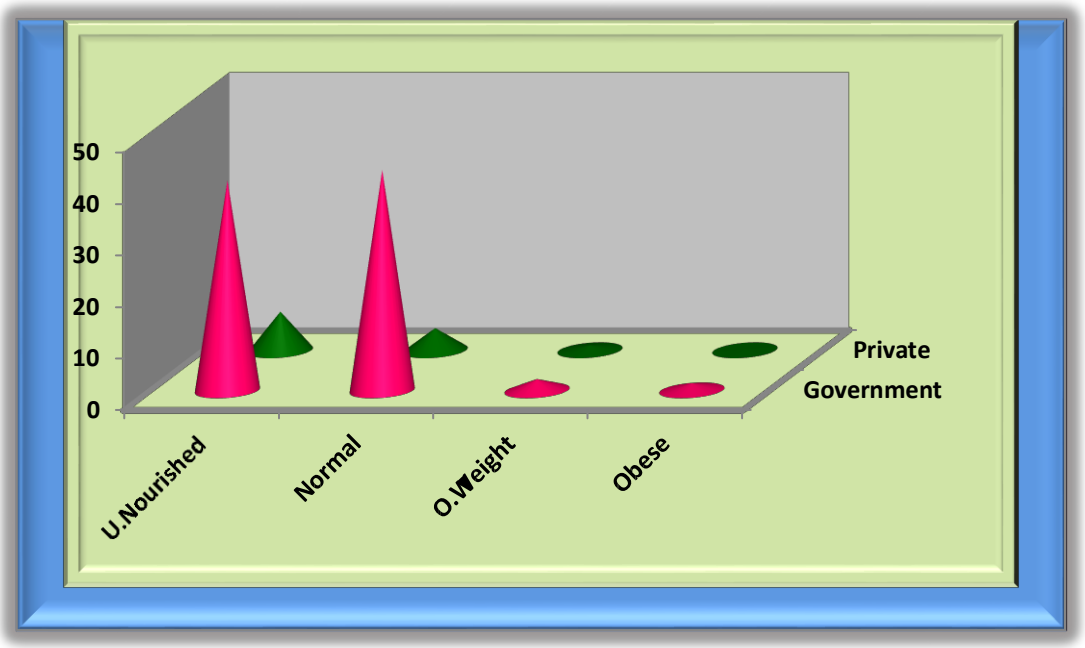


FIGURE - 13

The present day student community, particularly those in private schools are given lofty assignments to be completed almost every day and the entire concentration is focussed to lessons rather than personal health.

The food and nutrition component being a vital factor, and relatively most families particularly the poor and marginalised were either ignorant or negligent, it could be suggested that the school curriculum (both in government and private) must have a combination of theory and practical classes on nutrition, right from the middle school onwards, where they would be able to grasp its importance. The frame work could be based on basic knowledge on making a home / school garden to grow the common vegetables, nutrition and skills in food preparation.

c. Type of family and BMI

The Table - XXXIV highlights the type of family and nutritional health of the identified adolescents.

TABLE - XXXIV

TYPE OFFAMILY AND BMI

Type of family	BMI									
	Under nutrition		Normal		Over weight		Obese		Total	
	N	%	N	%	N	%	N	%	N	%
Type of family										
Nuclear	211	42.7	181	36.6	12	2.4	6	1.2	410	83.0
Joint	27	5.5	51	10.3	4	0.8	2	0.4	84	17.0
Total	238	48.2	232	47.0	16	3.2	8	1.6	494	100.0
	Df – 3			**Chi square value –10.564**				**P value 0.014^{S}**		

The family type and BMI was significantly associated with the joint family type being more favourable to adolescents. There were ten out of seventeen per cent of adolescents from joint families under the normal level of nutritional health, and a lesser percentage were under nourished, overweight and obese. Comparatively there was a less percentage of adolescents (37out of 83%) from nuclear families at the normal and more (43 %) at the under nutrition levels, over weight and obese.

Pal et al., (2017), study supports the present findings as he claims that children who were reared in nuclear families were more likely to be stunted than those raised in joint families. The justification could be that the members in the joint families, such as the grandparents pamper or influence the children to eat well and in time.

d. Parent's education and BMI

The Table – XXXV illustrates the influence of parent's education on the BMI of the selected adolescents and thereby reflecting the factor that influences their nutritional health.

TABLE - XXXV

PARENT'S EDUCATION AND BMI

Parent's education	BMI									
	Under nutrition		Normal		Over weight		Obese		Total	
	N	%	N	%	N	%	N	%	N	%
Mother's education										
Illiterate	97	19.8	87	17.7	4	0.8	2	0.4	190	38.7
Primary	39	7.9	4	8.6	3	0.6	3	0.6	87	17.7
Middle	26	5.3	25	5.1	2	0.4	1	0.2	54	11.0
H. School	66	13.4	70	14.3	5	1.0	2	0.4	143	29.1
Hg. Sec	10	2.0	6	1.2	1	0.2	0	0.0	17	3.5
Total	238	48.5	230	46.8	15	3.1	8	1.6	491	100.0
	Df – 15			**Chi square – 6.226**				**p value 0.976^{NS}**		
Father's education										
Illiterate	76	16.0	83	17.5	5	1.1	2	0.4	166	34.9
Primary	48	10.1	51	10.7	3	0.	1	0.	103	21.7
Middle	27	5.7	19	4.0	0	0.0	0	0.0	46	9.7
H. School	64	13.5	59	12.4	8	1.7	5	1.1	136	28.6
Hg. Sec	15	3.2	9	1.9	0	0.0	0	0.0	24	5.0
Total	230	48.4	221	46.5	16	3.4	8	1.7	475	100.0
	Df – 15			**Chi square- 15.629**				**pvalue – 0.407^{NS}**		

The table containing details of parent's education and adolescent's BMI showed, that they were not significantly associated. Pal et al., (2017) who cited Tesfaye noted the main predictors of children's nutritional status as maternal education, occupation of mother, source of drinking water and place of residence, was literally contrary to the present finding.

However, observing closely, as compared to father's education the mother's high school level of education had an influence on the BMI of the adolescents, as the percentage of under nourished was less and slightly better at the normal level. The mother's involvement in providing food to the family is natural in most families.

e. Parent's occupation and BMI

The Table - XXXVI sketches the association of parent's occupation and BMI of the selected adolescents

TABLE - XXXVI

PARENT'S OCCUPATION AND BMI

Parent's Occupation	BMI									
	Under nutrition		Normal		Overweight		Obese		Total	
	N	%	N	%	N	%	N	%	N	%
Mothers occupation										
No occupation	27	5.5	32	6.5	3	0.6	2	0.4	64	13.0
Masonry	13	2.6	13	2.6	0	0.0	1	0.2	27	5.5
Ag. Labour	102	20.8	96	19.6	8	1.6	3	0.6	209	42.6
MNREGA	69	14.1	57	11.6	2	0.4	2	0.4	130	26.5
F. Employ	0	0.0	1	0.2	0	0.0	0	0.0	1	0.2
Govt. Employ	5	1.0	4	0.8	0	0.0	0	0.0	9	1.8
Total	238	48.5	230	46.8	15	3.1	8	1.6	491	100
	Df– 21			**Chi square – 27.684**				**p value – 0.149^{NS}**		
Fathers occupation										
No occupation	4	0.8	1	0.2	0	0.0	0	0.0	5	1.0
Masonry	25	5.3	24	5.0	3	0.6	1	0.2	53	11.1
Ag. Labour	99	20.8	119	25.0	7	1.5	5	1.1	230	48.3
MNREGA	1	0.2	5	1.1	0	0.0	0	0.0	6	1.3
Driver	7	1.6	9	1.9	2	0.4	0	0.0	18	3.8
Fact. Employ	91	19.1	58	12.2	4	0.8	2	0.4	155	32.6
Govt. Employ	4	0.8	5	1.1	0	0.0	0	0.0	9	1.9
Total	231	48.5	221	46.4	16	3.4	8	1.7	476	100
	Df– 21			**Chi square - 18.355**				**P – value 0.626^{NS}**		

The table indicates the main occupation of parents was agricultural labour; nearly 70 per cent of mothers and 50 per cent of fathers were occupied in the daily wage labour work. The factory employed fathers were 33 per cent. However, the analysis revealed that the occupation of parents was not associated with the nutritional status of adolescents. The agriculture labour work was seasonal, yet men had more opportunities and were better paid than women, whose roles were very limited in the agricultural field. Hence, a closer look into the data revealed that father's occupation had influenced to an extent on the BMI of adolescents. The agricultural labour work of fathers had a

maximum of 25 per cent of adolescents under normal level of BMI. Many health studies with the view that parent's occupation as being crucial to children's well being were observed to be contradicting the present findings.

f. Family income and BMI

The Table – XXXVII presents family income and BMI.

TABLE - XXXVII

FAMILY INCOME AND BMI

Family income	BMI									
	Under nutrition		Normal		Overweight		Obese		Total	
	N	%	N	%	N	%	N	%	N	%
Family income and BMI										
1001-3000	2	0.4	10	2.0	0	0	1	0.8	13	3.3
3001-5000	25	5.0	30	6.0	4	0.8	0	0.2	59	13.0
5001-8000	90	18.0	79	16.0	6	1.2	5	0	190	35.2
8001-10,000	68	14.0	55	11.0	4	0.8	2	0.4	129	26.2
10,001-15,000	40	8.0	43	8.7	1	0.2	0	0	84	16.7
>15,000	13	2.6	15	3.0	1	0.	0	0	29	5.6
Total	238	48.0	232	46.7	16	3.0	8	1.4	494	100
	Df– 15			**Chi square – 19.123**				**p value – 0.208^{NS}**		

The chi-square test for the association of family income with the BMI of identified 494 adolescents was found to be insignificant. However, the maximum percentage (27%) of adolescents were seen to be with normal BMI in the income range of ₹. 5000 to 10,000/-. Therefore, it could be ascertained that income plays a part in the well-being of the adolescents though not significantly.

This section has consolidated the influence of various determinants on the nutritional status of adolescents and found that type of school and the type of family they hail from determine their BMI. Therefore the hypothesis numbered 2 that state that 'the socio- economic factors do not influence the nutritional status of the selected adolescents has to be rejected. However certain other factors like parent's occupation, education and income was not found to influence their BMI. Further research has to be done to provide evidential results of how these factors go undetermined and contradict the already existing literature.

SECTION V: MENTAL HEALTH STATUS (MH) AND FACTORS ASSOCIATED

World Health Organization (2005) defines child and adolescent mental health as the 'capacity to achieve and maintain optimal psychological functioning and wellbeing. It is directly related to the level reached and competence achieved in psychological and social functioning', where they can cope with the normal stresses of life, can work productively and fruitfully and are able to make a contribution to her or his community.

Mental-health conditions have a significant impact across a wide range of developmental outcomes, limiting opportunities for social integration. One area that can be impacted by mental-health conditions during adolescence is the development of safe and healthy relationships with peers, parents and teacher. In fact, adolescence is the developmental period that is critical for identity formation and taking on roles, especially with peer. Many mental-health conditions negatively affect a youths' ability to successfully form supportive and healthy relationships and manage conflict within these relationships. At least one in four adolescents experiences symptoms of depression (Kessler, 2005), which commonly includes irritability, anger and avoidance of social interaction. These symptoms can lead youth to withdraw from others as well as be rejected by their peers, which can exacerbate depressive symptoms further and limit opportunities for social skills development. The same is true also with anxiety.

The social, emotional and financial constraint of adolescents from Arunthathiyar community has been well established by various studies. These limitations are likely to add up to the problems of mental health. The focus was therefore to identify the crucial and core issues as determinants of mental health. The authentic findings would be most useful to vouch for the betterment of adolescents. This section has been studied under the following subheads:

A. Mental health status of adolescents
B. Determinants of Mental health

A. Mental health status of adolescents

The Table – XXXVIII gives the details of mental health status of the selected respondents

TABLE – XXXVIII

MENTAL HEALTH STATUS OF ADOLESCENTS

S.No	Status	Depression		Anxiety		Stress	
		N	%	N	%	N	%
1.	Normal	259	54.2	240	48.6	367	74.3
2.	Mild	72	14.6	33	6.7	59	11.9
3.	Moderate	110	22.3	101	20.4	57	11.5
4.	Severe	39	7.9	61	12.3	11	2.2
5.	Extremely severe	14	2.8	59	11.9	0	0
	Total	**494**	**100**	**494**	**100**	**494**	**100**

According to the numbers given in the table and the corresponding percentage, almost near to half of the adolescent population (48 – 54%) in the study were normal and 20 – 22 per cent were in the moderate, 11 – 24 per cent were into severe and extremely severe levels of depression and anxiety. On the other hand with reference to the stress level, a majority (74%) are normal and free from stress, 23 per cent had mild and moderate levels and a small percentage (2%) experienced severe level of stress. If looked deeper into the analysis, 34 – 45 per cent of the adolescents suffer from moderate to extremely severe levels of depression and anxiety, therefore the overall status of mental health of the adolescents seems to be a matter of concern.

According to Costello et al., (2003), anxiety was one of the most common psychological disorders among adolescents worldwide. The prevalence rates of anxiety range from four to twenty five per cent with an average rate of eight per cent (Bernstein and Borchardt, 1991; Boyd, et al., 2000). However, Tomb and Hunter (2004) opine that the figures could be underestimated, since anxiety among a large number of adolescents goes undiagnosed, due to the internalized nature of its symptoms. Anxiety is associated with substantial negative effects on social, emotional and academic success (Essau, Conradt and

Petermann, 2000). Cross-sectional studies have shown that children from low income families appear to have higher levels of depression and conduct symptoms. Economic strain has been linked to externalized behaviours in boys and internalized behaviours in girls (Goosby, 2006; Bordin, et al., 2009). These studies establish the fact that anxiety and depression are serious disorders that calls the attention of parents, school authorities and the community.

B. Determinants of Mental health

Certain variables were considered to determine the mental health status of the selected adolescents in general and the selected population in particular. Hence the mental health status was subjected to descriptive status with certain extraneous variables and the results were discussed under the following heads:

a. Age and Gender on mental health
b. Type of school and mental health
c. Type of family/housing and mental health
d. Parent's education and mental health
e. Parent's occupation and mental health and
f. Family income and mental health

a. Age, gender and mental health

The Table - XXXIX and Figure 14 furnishes the details of age specific variations with reference to the mental health status of adolescents.

b.

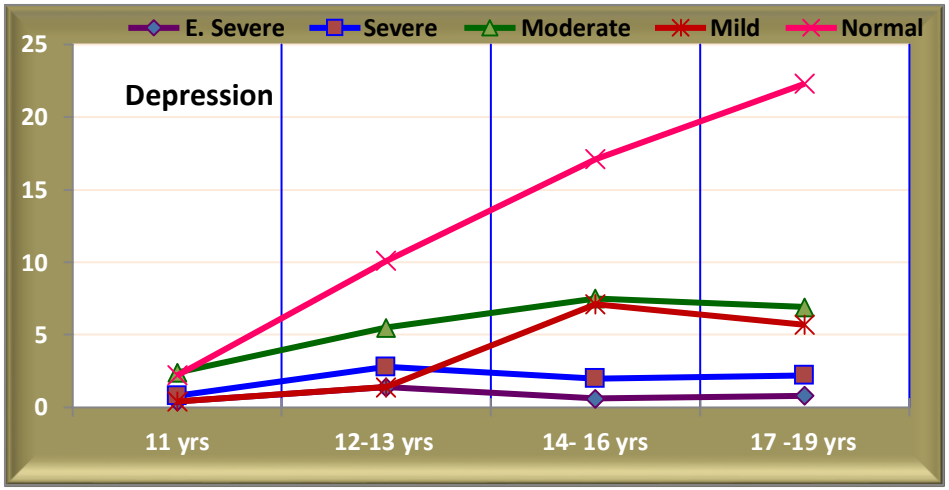
TABLE- XXXIX

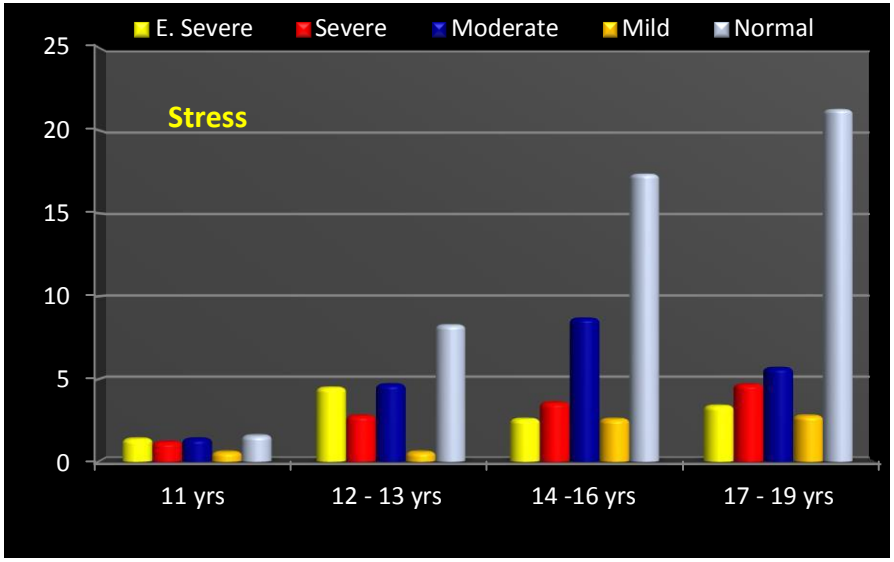
AGE AND MENTAL HEALTH

Type of housing	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
11	11	2.2	2	0.4	12	2.4	4	0.8	2	0.4	31	6.3
12- 13	50	10.1	7	1.4	27	5.5	14	2.8	5	1.4	103	20.9
14-16	88	17.1	35	7.1	37	7.5	10	2.0	3	0.6	173	35.0
17-19	110	22.3	28	5.7	34	6.9	11	2.2	4	0.8	187	37.9
Total	259	52.4	72	14.6	110	22.3	39	7.9	14	2.8	494	100.0
	Df – 12			**Chi square value 30.108[a]**					**P value- 0.003[S]**			
Anxiety												
11	8	1.6	3	0.6	7	1.4	6	1.2	7	1.4	31	6.3
12- 13	41	8.3	3	0.6	23	4.7	14	2.8	22	4.5	103	20.9
14-16	86	17.4	13	2.6	43	8.7	18	3.6	13	2.6	173	35.0
17-19	105	21.3	14	2.8	28	5.7	23	4.7	17	3.4	187	37.9
Total	240	48.6	33	6.7	101	20.4	61	12.3	59	11.9	494	100.0
	Df -12			**Chi square value – 31.382**					**P value –0.002[S]**			
Stress												
11	16	3.2	3	0.6	12	2.4	0	0.0	-	-	31	6.3
12- 13	63	12.8	15	3.0	19	3.8	6	1.2	-	-	103	20.9
14-16	141	28.5	19	3.8	11	2.2	2	0.4	-	-	173	35.0
17-19	147	29.8	22	4.5	15	3.0	3	0.6	-	-	187	37.9
Total	367	74.3	59	11.9	57	11.5	11	2.2	-	-	494	100.0
	Df -9			**Chi square value – 45.098[a]**					**P value –0.000[S]**			

The age of adolescents and all the aspects of mental health was significant, particularly stress was highly significant. The higher the age the levels of mental health was better, however the normal stress level of a good percentage of adolescents in the age groups of 14 – 16 and 17 – 19 years were better than depression and anxiety. Further a close observation indicates that a lesser percentage of adolescents succumbed to moderate and severe levels of stress (2-0.4%) as compared to depression (8–2%) and anxiety (9–5%). Depression and anxiety were recognized as common and serious disorders, and debilitating mental health problems in the changing social context.

AGE AND MENTAL HEALTH STATUS OF ADOLESCENTS





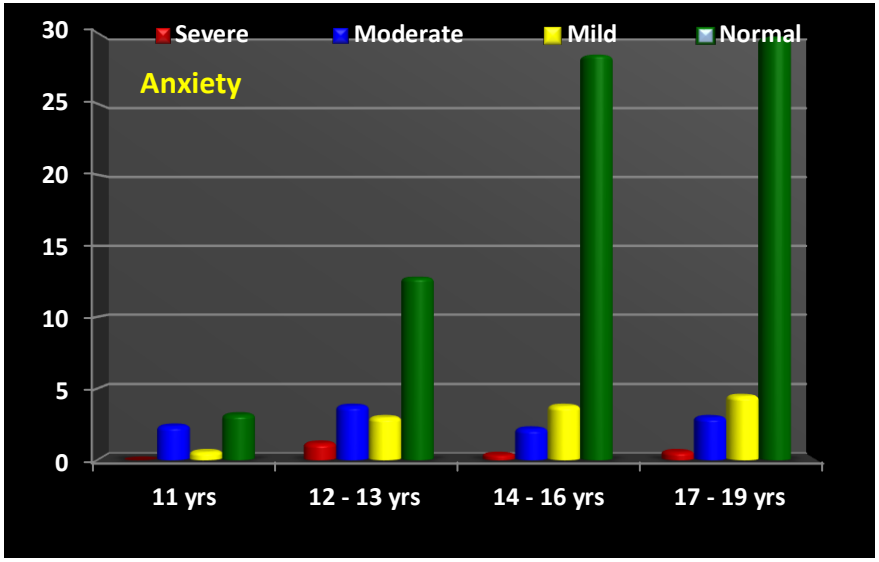


FIGURE – 14

These health problems were afflicting adolescents and student population to a large extent (Andrews and Wilding, 2004).Lifetime prevalence increases drastically from one per cent of the population under age 12 years to 17- 25 per cent of the population by the end of adolescence, with an increase in cases in age-group of 15 -18 years (Kessler, Avenevoli and Merikangas, 2001). The Figure 14 portrays the three aspects of mental health related to age. The present finding therefore calls for attention and opens a platform for future studies, to safe guard adolescent's wellbeing of not only Arunthathiyar community but the general adolescent population.

Gender and mental health

The Table – XL presents the gender specific variations in mental health status.

TABLE- XL
GENDER SPECIFIC VARIATIONS IN ADOLESCENT'S MENTAL HEALTH STATUS

Gender	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
Male	119	24.1	29	5.9	70	14.2	18	3.6	6	1.2	242	49.0
Female	140	28.3	43	8.7	40	8.1	21	4.3	8	1.6	252	51.0
Total	259	52.4	72	14.6	110	22.3	39	7.9	14	2.8	494	100.0
	Df-4			**Chi square value- 12.962**					**p value 0.012^{S}**			
Anxiety												
Male	114	23.1	13	2.6	53	10.7	33	6.7	29	5.9	242	49.0
Female	126	25.5	20	4.0	48	9.7	28	5.7	30	6.1	252	51.0
Total	240	48.6	33	6.7	101	20.4	61	12.3	59	11.9	494	100.0
	Df- 4			**Chi square value –2.558**					**p value 0.634^{NS}**			
Stress												
Male	173	35	35	7.1	30	6.1	4	0.8	-	-	242	49.0
Female	194	39.3	24	4.9	27	5.5	7	1.4	-	-	252	51.0
Total	367	74.3	59	11.9	57	11.5	11	2.2	-	-	494	100.0
	Df- 3			**Chi square value -4.028**					**p value- 0.258^{NS}**			

The table draws a clear picture of the status of mental health of male and female adolescents. The p value indicates association of significance for the depression and not so with anxiety and stress.

GENDER AND MENTAL HEALTH STATUS (DEPRESSION) OF ADOLESCENTS

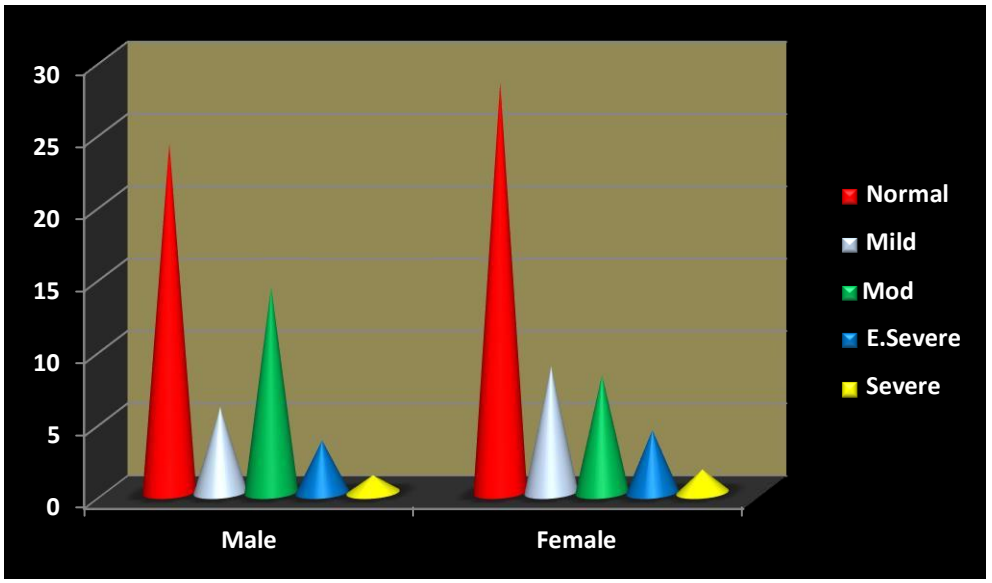


FIGURE - 15

The Figure 15 portrays the gender specific variations in mental health with reference to depression. The variations from male to female adolescents were observed from normal to mild, severe and extremely severe level. The transition into adolescence seems to be the starting point for an increase in psychological problems like depression and anxiety. Studies have shown that the occurrence of different levels of depression among adolescence has varied and some studies have indicated that approximately 25 to 40 per cent of adolescent girls experience significant depressed mood, compared with 20 to 35 per cent of boys (Graber and Sontag, 2009; Hankin and Abela, 2005). The study by Patel and Kleinman (2003) also established the fact that females are more predisposed to mental disorders due to rapid social change, gender discrimination and social exclusion. The above study substantially supports the relevance of the present findings, and speaks volumes of the threats posed to female adolescents.

b. Type of school and mental health

The Table – XLI specifies the type of school and its influence on mental health status of adolescents.

TABLE - XLI

TYPE OF SCHOOL AND MENTAL HEALTH

Type of school	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
Government	225	45.5	58	11.7	100	20.2	33	6.7	14	2.8	430	87.0
Private	34	6.9	14	2.8	10	2.0	6	1.2	0	0.0	64	13.0
Total	259	52.4	72	14.6	110	22.3	39	7.9	14	2.8	494	100.0
	Df-4			**Chi square value-6.44**					**0.169^{NS}**			
Anxiety												
Government	202	40.9	33	6.7	89	18.0	54	10.9	52	10.5	430	87.0
Private	38	7.7	0	0.0	12	2.4	7	1.4	7	1.4	64	13.0
Total	240	48.6	33	6.7	101	20.4	61	12.3	59	11.9	494	100.0
	Df- 4			**Chi square value - 6.958**					**0.138^{NS}**			
Stress												
Government	317	64.2	52	10.5	51	10.3	10	2.0	-	-	430	87.0
Private	50	10.1	7	1.4	6	1.2	1	.2	-	-	64	13.0
Total	367	74.3	59	11.9	57	11.5	11	2.2	-	-	494	100.0
	Df- 4			**Chi square value 0.652**					**0.885^{NS}**			

The type of school, government or private and status of mental health of adolescents was not found to be significantly associated. However compared to depression and anxiety, a better percentage of adolescents both in government as well as private schools (64 and 10 % respectively) were at the normal level of stress. It was obvious that the status of depression and anxiety of adolescents from both the government as well as the private institutions was noticed from moderate to severe levels as compared to that of stress levels. According to Arun and Chavan (2009), school environment determine the stress levels among adolescents. However the present finding contradicts that the type of schools does affect the adolescents stress levels.

c. Type of family/housing on mental health

The Table – XLII and XLIIII observes the association between the type of family, housing and mental health status of adolescents.

TABLE - XLII

TYPE OF FAMILY AND MENTAL HEALTH

Type of family	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
Nuclear	221	44.7	57	11.5	92	18.6	32	6.5	8	1.6	410	83.0
Joint	38	7.7	15	3.0	18	3.6	7	1.4	6	1.2	84	17.0
	259	52.4	72	14.6	110	22.3	39	7.9	14	2.8	494	100.0
	Df -4			**Chi square value – 8.433**					**p value -0.077^{NS}**			
Anxiety												
Nuclear	208	42.1	32	6.5	82	16.6	46	9.3	42	8.5	410	83.0
Joint	32	6.5	1	0.2	19	3.8	15	3.0	17	3.4	84	17.0
	240	48.6	33	6.7	101	20.4	61	12.3	59	11.9	494	100.0
	Df -4			**Chi square value – 15.409**					**P value –0.004^{S}**			
Stress												
Nuclear	314	63.6	45	9.1	44	8.9	7	1.4	-	-	410	83.0
Joint	53	10.7	14	2.8	13	2.6	4	0.8	-	-	84	17.0
	367	74.3	59	11.9	57	11.5	11	2.2	-	-	494	100.0
	Df -3			**Chi square value – 7.88**					**P value –0.049^{S}**			

Type of family was not associated with depression but was found to be significantly associated with anxiety and stress. A higher percentage of adolescents from joint families were found to be suffering from mild through severe levels of anxiety and stress as compared to those from nuclear families. A close observation and calculation finds 10.4 and 6.2 out of 17 per cent of adolescents were at the mild through severe levels of anxiety and stress respectively. Subsequently, it was 34.4 and 19.4 out of 83 per cent of adolescents who were into the same levels of anxiety and stress.

Considering the living space of these families, extra members in the house could be cumbersome. Poor family environment in terms of parental hostility, rejection, and inconsistencies could all contribute to psychological problems, such as anxiety, stress, depression and many other problems (Sharma, Verma and Malhotra, 2008).

Type of housing and mental health

The Table – XLIII looks into type of housing and its relationship with the mental health of adolescents.

TABLE- XLIII

TYPE OF HOUSING AND MENTAL HEALTH OF ADOLESCENTS

Type of housing	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
Thatched	10	2.2	2	.4	5	1.1	1	.2	0	0.0	18	3.9
As	2	.4	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Concrete	41	8.9	16	3.5	21	4.6	4	.9	5	1.1	87	18.9
Row house	31	6.7	9	2.0	16	3.5	5	1.1	0	0.0	61	13.2
Tiled	157	34.1	42	9.1	60	13.0	28	6.1	6	1.3	293	63.6
Total	241	52.3	69	15.0	102	22.1	38	8.2	11	2.4	461	100.0
	Df -16			**Chi square value 12.926**					**P value – 0.678^{NS}**			
Anxiety												
Thatched	10	2.2	1	0.2	3	0.7	3	0.7	1	0.2	18	3.9
Asbestos	2	0.4	0	0.0	0	0.0	0	0.0	0	0.0	2	0.4
Concrete	35	7.6	5	1.1	22	4.8	16	3.5	9	2.0	87	18.9
Row house	29	6.3	5	1.1	12	2.6	8	1.7	7	1.5	61	13.2
Tiled	147	31.9	18	3.9	61	13.2	32	6.9	35	7.6	293	63.6
Total	223	48.4	29	6.3	98	21.3	59	12.8	52	11.3	461	100.0
	Df -16			**Chi square value – 8.939**					**P value –0.916^{NS}**			
Stress												
Thatched	12	2.6	4	.9	2	.4	0	0.0	-	-	18	3.9
Asbestos	1	.2	1	.2	0	0.0	0	0.0	-	-	2	.4
Concrete	65	14.1	13	2.8	8	1.7	1	.2	-	-	87	18.9
Row house	49	10.6	4	.9	8	1.7	0	0.0	-	-	61	13.2
Tiled	215	46.6	34	7.4	35	7.6	9	2.0	-	-	293	63.6
Total	342	74.2	56	12.1	53	11.5	10	2.2			461	100.0
	Df -12			**Chi square value – 10.795**					**P value –0.547^{NS}**			

The table was the outcome of association of type of house with mental health. Although the association was not significant, the results however indicate that the tiled roof houses had more adolescents under normal levels of depression, anxiety and stress. The majority (34 - 47%) of the adolescents were at the normal level in all the three aspects of mental health. Housing involves both a site (dwelling) and a situation (neighbourhood), the location, physical quality, level of overcrowding and the cost of housing all impact directly on health. Overcrowding, damp and cold have direct detrimental effects on physical and mental health (Public Health Association, 1992). Poverty acting through economic stressors such as unemployment and lack of affordable housing is more likely to precede mental illness such as depression and anxiety, thus making it an important risk factor for mental illness (Patel and Kleinman, 2003).

d. Parents education and mental health

The Tables- XLIV and XLV looks into mothers and father's education and mental health of adolescents.

TABLE -XLIV

MOTHER'S EDUCATION AND MENTAL HEALTH

Mother's education	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
Illiterate	106	21.6	30	6.1	35	7.1	11	2.2	8	1.6	190	38.7
Primary	47	9.6	9	1.8	18	3.7	11	2.2	2	.4	87	17.7
Middle	27	5.5	6	1.2	17	3.5	4	.8	0	0.0	54	11.0
H. School	70	14.3	23	4.7	36	7.3	11	2.2	3	.6	143	29.1
Hg. Sec	8	1.6	4	.8	2	.4	2	.4	0	0.0	16	3.3
Graduation	1	.2	0	0.0	0	0.0	0	0.0	0	0.0	1	.2
Total	259	52.7	72	14.7	108	22.0	39	7.9	13	2.6	491	100.0
	Df- 20			**Chi square value -17.326[a]**					**p value – 0.632[NS]**			
Anxiety												
Illiterate	98	20.0	13	2.6	34	6.9	22	4.5	23	4.7	190	38.7
Primary	40	8.1	8	1.6	12	2.4	15	3.1	12	2.4	87	17.7
Middle	27	5.5	1	.2	12	2.4	8	1.6	6	1.2	54	11.0
H. School	66	13.4	9	1.8	39	7.9	13	2.6	16	3.3	143	29.1
Hg. Sec	8	1.6	1	.2	4	.8	2	.4	1	.2	16	3.3
Graduation	1	.2	0	0.0	0	0.0	0	0.0	0	0.0	1	.2
	Df – 20			**Chi square value – 14.564**					**p value – 0.801[NS]**			
Stress												
Illiterate	143	29.1	22	4.5	21	4.3	4	.8	-	-	190	38.7
Primary	61	12.4	11	2.2	15	3.1	0	0.0	-	-	87	17.7
Middle	39	7.9	6	1.2	7	1.4	2	.4	-	-	54	11.0
H. School	110	22.4	17	3.5	12	2.4	4	.8	-	-	143	29.1
Hg. Sec	12	2.4	2	.4	1	.2	1	.2	-	-	16	3.3
Graduation	1	.2	0	0.0	0	0.0	0	0.0	-	-	1	.2
	Df -15			**Chi square value – 8.893**					**p value – 0.883[NS]**			

The association of mother's education and mental health was not significant. The depression and anxiety levels of adolescents are spread out from mild to severe levels at even at high school educational status of mother. However, the stress levels from normal to severe levels were noticed to be somewhat better. The findings by most researchers have focussed on

economical factors as crucial to mental health, particularly depression and anxiety. This seems true as far as Arunthathiyar adolescents are concerned

Father's education and mental health

The Table- XLV assess the father's education and mental health status of adolescents.

TABLE – XLV

FATHER'S EDUCATION AND MENTAL HEALTH

Father's education	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
Illiterate	84	17.6	26	5.5	38	8.0	11	2.3	8	1.7	167	35.1
Primary	52	10.9	16	3.4	24	5.0	6	1.3	5	1.1	103	21.6
Middle	28	5.9	2	.4	10	2.1	6	1.3	0	0.0	46	9.7
H. School	72	15.1	23	4.8	28	5.9	12	2.5	1	.2	136	28.6
Hg. Sec	9	1.9	4	.8	6	1.3	4	.8	0	0.0	23	4.8
Diploma	1	.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Total	246	51.7	71	14.9	106	22.3	39	8.2	14	2.9	476	100.0
	Df– 20			**Chi square value – 19.387**					**p value – 0.497^{NS}**			
Anxiety												
Illiterate	77	16.2	12	2.5	36	7.6	22	4.6	20	4.2	167	35.1
Primary	44	9.2	6	1.3	25	5.3	17	3.6	11	2.3	103	21.6
Middle	25	5.3	5	1.1	8	1.7	4	.8	4	.8	46	9.7
H. School	70	14.7	9	1.9	26	5.5	13	2.7	18	3.8	136	28.6
Hg. Sec	10	2.1	1	.2	5	1.1	5	1.1	2	.4	23	4.8
Diploma	1	.2	0	0.0	0	0.0	0	0.0	0	0.0	1	.2
Total	227	47.7	33	6.9	100	21.0	61	12.8	55	11.6	476	100.0
	Df – 20			**Chi square value – 10.365**					**P value –0.961^{NS}**			
Stress												
Illiterate	124	26.1	20	4.2	20	4.2	3	.6	-	-	167	35.1
Primary	74	15.5	15	3.2	11	2.3	3	.6	-	-	103	21.6
Middle	31	6.5	7	1.5	6	1.3	2	.4	-	-	46	9.7
H. School	106	22.3	15	3.2	13	2.7	2	.4	-	-	136	28.6
Hg. Sec	17	3.6	2	.4	3	.6	1	.2	-	-	23	4.8
Diploma	1	.2	0	0.0	0	0.0	0	0.0	-	-	1	.2
Total	353	74.2	59	12.4	53	11.1	11	2.3	-	-	476	100.0
	Df– 15			**Chi square value – 4.800**					**P value – 0.994^{NS}**			

The association of father's education and mental health was not significant. However, father's high school level of education was found to have fairly influenced the mental health of adolescents, when compared to father's

illiteracy. Even though, the normal level of mental health of adolescents was better at the illiteracy level by a marginal difference, a closer observation of the data shows the moderate to severe levels of depression, anxiety and stress was better at father's high school level of education. Several studies have found that parents education as influential to mental health of adolescents.

e. Parents occupation and mental health

The Table – XLVI and XLVII presents the details of mother's occupation and its influence on mental health of adolescents.

TABLE – XLVI

MOTHER'S OCCUPATION AND MENTAL HEALTH OF ADOLESCENTS

Mother's occupation	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
No occup	39	7.9	8	1.6	13	2.6	3	.6	1	.2	64	13.0
Masonry	15	3.1	6	1.2	3	.6	3	.6	0	0.0	27	5.5
Ag. Labour	98	20.0	33	6.7	51	10.4	18	3.7	9	1.8	209	42.6
MNREGA	69	14.1	17	3.5	32	6.5	10	2.0	2	.4	130	26.5
F. Employ	33	6.7	6	1.0	8	1.4	5	1.0	1	.2	53	10.8
G. Employ	5	1.0	2	.4	1	.2	0	0.0	0	0.0	8	1.6
Total	259	52.7	72	14.7	108	22.0	39	7.9	13	2.6	491	100.0
	Df -28			**Chi square- 26. 838**					**p value -0.527^{NS}**			
Anxiety												
No occu	34	6.9	6	1.2	12	2.4	6	1.2	6	1.2	64	13.
Masonry	16	3.3	1	.2	6	1.2	2	.4	2	.4	27	5.5
Ag. Labour	92	18.7	15	3.1	45	9.2	25	5.1	32	6.5	209	42.6
MNREGA	65	13.2	6	1.2	26	5.3	20	4.1	13	2.6	130	26.5
F. Employ	29	5.9	4	.8	10	2.0	6	1.2	4	.8	53	10.8
G. Employ	4	.8	0	0.0	2	.4	1	.2	1	.2	8	1.6
Total	240	48.9	32	6.5	101	20.6	60	12.2	58	11.8	491	100.0
	Df – 28			**Chi square value – 16.351**					**p value –0.96^{NS}**			
Stress												
No occu	46	9.4	11	2.2	6	1.2	1	.2	-	-	64	13.0
Masonry	23	4.7	3	.6	1	.2	0	0.0	-	-	27	5.5
Ag. Labour	156	31.8	22	4.5	25	5.1	6	1.2	-	-	209	42.6
MNREGA	95	19.3	15	3.1	20	4.1	1	.2	-	-	131	26.7
F. Employ	39	7.9	6	1.2	4	.8	3	.6	-	-	52	10.6
G. Employ	7	1.4	1	.2	0	0.0	0	0.0	-	-	8	1.6
Total	366	74.5	58	11.8	56	11.4	11	2.2	-	-	491	100.0
	Df –21			**Chi square value – 13.841**					**p value –0.876^{NS}**			

Mother's occupation and mental health of adolescents was not significantly associated. The main or major occupation of the mothers was agricultural labour and MNREGA (Mahatma Gandhi National Rural employment Guarantee Act) which is also daily wage labour work. Goosby (2006), views the risk factors that influence a child's psychological adjustment include parents' employment and educational status. The child who experiences poverty may also experience other life adversities, such as unfavourable family environment and poor quality parenting.

It diminishes the ability of parents to provide supportive and consistent behaviour this in turn influences the wellbeing of the child (Wood, 2000). Drops in income increases depression and antisocial behaviour (Strohschein, 2005). According to Goosby (2006) changes in the family due to economic strain are linked to externalized behaviours (marked by aggression and antisocial features) in boys and internalized behaviours (evidenced by withdrawal and anxiety) in girls. The above findings seem very much relevant to the present study; where nearly 70 per cent of mothers were engaged in the daily wage occupations. The agricultural work is seasonal and the MNREGA work is for 100 days in a year, it is quite possible that mothers may not be occupied at certain days of a month. Evidently, the table presents less percentage of adolescents at the normal levels of depression and anxiety (30 and 32%) as compared to normal stress level of adolescents (52%).

Father's occupation and mental health

The Table - XLVII identifies father's occupation and its influence on mental health status of adolescents.

TABLE - XLVII

FATHER'S OCCUPATION AND MENTAL HEALTH

Father's occupation	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
No occup	1	.2	3	.6	0	0.0	1	.2	0	0.0	5	1.1
Masonry	32	6.7	7	1.5	13	2.7	1	.2	0	0.0	53	11.1
Ag. Labour	118	24.8	28	5.9	56	11.8	21	4.4	8	1.7	231	48.5
MNREGA	2	.4	0	0.0	2	.4	1	.2	1	.2	6	1.3
Driver	13	2.7	2	.4	2	.4	0	0.0	1	.2	18	3.8
Fact. Employ	77	16.2	29	6.1	30	6.3	15	3.2	4	.8	155	32.6
Govt. Employ	3	.6	2	.4	3	.6	0	0.0	0	0.0	8	1.7
Total	246	51.7	71	14.9	106	22.3	39	8.2	14	2.9	476	100.0
	Df – 28			**Chi square value – 33.871**					**p value – 0.205 NS**			
Anxiety												
No occup	1	.2	1	.2	1	.2	2	.4	0	0.0	5	1.1
Masonry	28	5.9	2	.4	14	2.9	6	1.3	3	.6	53	11.1
Ag. Labour	111	23.3	15	2.9	44	9.2	32	6.7	30	6.3	231	48.5
MNREGA	1	.2	0	0.0	1	.2	2	.4	2	.4	6	1.3
Driver	10	2.1	1	.2	5	1.1	0	0.0	2	.4	18	3.8
Fact. Employ	73	15.3	14	2.9	31	6.5	19	4.0	18	3.8	155	32.6
Govt. Employ	3	.6	1	.2	4	.8	0	0.0	0	0.0	8	1.7
Total	227	47.7	33	6.9	100	21.0	61	12.8	55	11.6	476	100.0
	Df - 28			**Chi square value – 39.899**					**p value -0.068NS**			
Stress												
No occup	2	.4	3	.6	0	0.0	0	0.0	-	-	5	1.1
Masonry	44	9.2	6	1.3	3	.6	0	0.0	-	-	53	11.1
Ag. Labour	169	35.5	27	5.7	33	6.9	2	.4	-	-	231	48.5
MNREGA	3	.6	1	.2	2	.4	0	0.0	-	-	6	1.3
Driver	14	2.9	1	.2	1	.2	2	.4	-	-	18	3.8
Fact. Employ	114	23.9	20	4.2	14	2.9	7	1.5	-	-	155	32.6
Govt. Employ	7	1.5	1	.2	0	0.0	0	0.0	-	-	8	1.7
Total	353	74.2	59	12.4	53	11.1	11	2.3	-	-	476	100.0
	Df – 21			**Chi square value – 34.315**					**P value – 0.034S**			

The table presents the father's occupation and its influence on the mental health status of adolescents. The father's occupation was associated significantly with stress levels of adolescents and not with depression and anxiety. The major occupation of fathers was agricultural labour and factory employment. The factory employment is more secure and rewarding job as compared to the daily wage occupations; under this occupation, the percentage of normal depression and anxiety levels (16 and 15%) was much lower than the

stress level (24%). Subsequently, the moderate and severe levels of depression and anxiety was higher (11 and 15%), than the stress level (4.5%). The father's occupation had therefore substantially helped the adolescents maintain their stress levels.

f. ***Family income and mental health***

The Table – XLVIII gives details of family income and mental health of adolescents.

TABLE - XLVIII

FAMILY INCOME AND MENTAL HEALTH

Family income	Mental Health											
	Normal		Mild		Moderate		Severe		E. Severe		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Depression												
1001-3000	11	2.2	3	0.6	3	0.6	1	0.2	0	0	18	3.7
3001 – 5000	38	7.6	4	0.8	13	2.6	2	0.4	2	0.4	59	12.0
5001 – 8000	119	24.3	26	5.3	39	7.9	20	4.0	6	1.2	210	42.9
8001- 10,000	50	1.0	25	5.1	32	6.5	10	2.0	3	0.6	120	24.5
10,001- 15,000	39	8.0	13	2.6	15	3.0	5	1.0	2	0.4	74	15.1
>15,000	2	0.4	1	0.2	5	1.0	0	0	1	0.2	9	1.8
Total	259	53.0	72	14.7	107	21.8	38	7.7	14	2.8	490	100.0
	Df – 20		**Chi square- 26.969**						**p value – 0.136^{NS}**			
Anxiety												
1001-3000	12	2.2	0	0	2	0.4	3	0.6	1	0.2	18	3.7
3001 – 5000	32	6.5	6	1.2	10	2.0	5	1.0	6	1.2	59	12.0
5001 – 8000	107	21.8	16	3.3	40	8.2	21	4.3	26	5.3	210	42.9
8001- 10,000	51	10.4	3	0.6	29	5.9	20	4.0	17	3.5	120	24.5
10,001- 15,000	37	7.6	6	1.2	18	3.7	7	1.4	6	1.2	74	15.1
>15,000	1	0.2	2	0.4	2	0.4	2	0.4	2	0.4	9	1.8
Total	240	49.0	33	6.7	101	20.6	58	11.8	58	11.8	490	100.0
	Df – 20		**Chi square value – 25.176**						**p value – 0.195^{NS}**			
Stress												
1001-3000	14	2.9	2	0.4	2	0.4	0	0	-		18	3.7
3001 – 5000	47	9.6	3	0.6	8	1.6	1	0.2	-	-	59	12.0
5001 – 8000	156	31.8	20	4.0	30	6.1	4	0.8	-	-	210	42.9
8001- 10,000	91	18.6	14	2.9	15	3.0	0	0	-	-	120	2.5
10,001- 15,000	54	11	14	2.9	1	0.2	5	1.0	-	-	74	15.1
>15,000	3	0.6	4	0.8	1	0.2	1	0.2	-	-	9	1.8
Total	365	74.5	57	11.6	57	11.6	11	2.2	-	-	490	100.0
	Df – 15		**Chi square value – 38.441**						**p value – 0.001^{S}**			

The status of depression and anxiety was not associated with family income, however stress and family income has been significantly associated at five per cent level. The family income of ₹. 5001 – 8000/- has influenced the majority of adolescents (32%) at the normal stress level. The next higher income was ₹. 8001- 10,000/- and in this range of income 19 per cent of adolescents were in normal level of stress, comparatively less percentage at the moderate and none at the severe level of stress. Obviously income seemed to be an important factor with adolescents' mental health, particularly the stress factor.

The importance of income was emphasized by Patel et al., (2006), they felt that the most strongly associated factors with mental disorders were deprivation and poverty. Individuals with lower levels household income, lack of access to basic amenities were at high risk of mental disorder. Young people living in low-affluence households are less likely to have adequate access to health resources (Gabhanin, 2006) and are more likely to be exposed to psychosocial stress, which underpin health inequalities in self-rated health and well-being (Kusela et al., 1999*).*

This section had elaborately covered the influence of various determinants of mental health status of the identified adolescents and found that gender, age, type of family, father's occupation and family income had significantly influenced one or all aspects of their mental health. Therefore the hypothesis numbered 3 that state that 'the socio-economic factors do not influence the mental health status of the selected adolescents' has to be refuted. Moreover certain factors like type of housing, educational status of their parents and mothers' occupation do not find its list as determinants.

SECTION VI: SOCIO–ECONOMIC STATUS PERCEPTION OF ADOLESCENTS ON THEIR OVERALL WELL- BEING

The role of dependency limits educational opportunities of Arunthathiyars through bondage. The community continues to be engaged in the world through precarious employment and bondage, because of structured relationship with the upper caste communities. The relationship is based on the high degree of power asymmetry, with all the allocated resources being distributed to upper

communities. The entire process of managing resources and allocating work dictates how the Arunthathiyars should conduct their lives with their authoritative landlords (Celeti, 2015).

Many other studies on Arunthathiyars, have also shown prevalence of persistent poverty and suffering. Therefore, based on the interactions with the community in four districts, the perception scale was developed to understand the adolescent's perceptions on their socio-economic status. This initiative was taken with an assumption that the present generation can set a new track, to tread on to better future for themselves and the following generations by recognising their own perceptions.

The study extensively explored the status of socio-economic of Arunthathiyar families, taking into consideration the income, expenditure, savings assets and debts apart from parent's education, occupation etc. However, the researcher was interested in understanding the concept of socio–economic status and vulnerability from the adolescent's perspective as they were the feelers of the situation. Weinger (2015) conducted a qualitative study, as an extensive review of the literature carried out by him found no articles in the last 25 years about how poor children subjectively view their world.The notion that poor children are not bothered, because they live among other poor people and are therefore not aware of their common losses and distresses was inaccurate. The results of his study suggest that poor children have bewildering and negative perceptions about rich children that begin early in life. This section covers a detailed discussion of the adolescent's perceptions under the following heads:

A. Level of perception over their socio- economic status
B. Relationship between socio – economic status perception and academic achievement
C. Relationship between socio – economic status perceptions and nutritional health and
D. Relationship between socio – economic status perception and mental health

A. Level of perception over their socio – economic status

The gender and perceptions of the adolescents related to their socio - economic status was presented in the Table – XLIX.

TABLE – XLIX

LEVEL OF PERCEPTIONS OF ADOLESCENTS ON THEIR SOCIO - ECONOMIC STATUS IN RELATION TO GENDER

Gender	Level of perceptions											
	V.Low		Low		Mod		High		V.High		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Male	6	1.2	21	4.3	119	24.0	94	19.0	2	0.4	242	48.9
Female	1	0.2	11	2.2	128	26.0	111	22.5	1	0.2	252	51.1
Total	7	1.4	32	6.5	247	50.0	205	41.5	3	0.6	494	100.0
	Df – 4			Chi square value – 8.569				P value – 0.073				

It was clear that the majority had a moderate level of perception on their status, and a good number also have a high level of perception. There was no gender difference, the chi square test analyses shows it is not significant, however the female respondents perceptions level was slightly better than the males. It was also interesting to see that a small percentage were on the extremes with very low and very high level of perceptions. According to Stewart, (2015) the level of parental education may influence the way the adolescents think about themselves and perceive others. Quoting Prince-Embury, (2009) "Increased parental education help adolescents have more resilience to negative affect by having more opportunities", the study suggests a follow up to track the determinants of better perceptions.

B. Relationship between socio – economic status perception and academic achievement

Therefore, the perceptions of adolescents on their socio – economic status were elicited as an authentic factor and related its influence on their academic achievement. The Table – L and Figure 16 presents the details of perceptions.

TABLE- L

SOCIO ECONOMIC PERCEPTION OF ADOLESCENTS AND ACADEMIC ACHIEVEMENT

Perceptions	Academic achievement									
	< 40		41 – 59		60 – 79		>80		Total	
	N	%	N	%	N	%	N	%	N	%
Very low	1	0.2	4	0.8	76	0	2	0.4	7	1.4
Low	9	1.8	15	3.0	5	1.0	3	0.6	32	6.5
Moderate	30	6.0	86	17.4	102	20.6	29	5.9	247	50.0
High	33	6.7	51	10.3	76	15.4	45	9.1	205	41.5
Very high	0	0	1	0.2	2	0.4	0	0	3	0.6
Total	73	14.8	157	31.8	185	37.4	79	16.0	494	100
	Df – 12			**Chi square value – 30.956**			**p– value 0.002^{S}**			

The perceptions of adolescents on their socio-economic status were significantly associated with academic achievement. The moderate and high level of perceptions has helped in better scores, 21 per cent of adolescents had secured 60 – 79 marks, and 17.4 per cent had scored 41 – 59 marks. It was obvious that very low level of perceptions had the least influence on facilitating the academic achievement of the adolescents. The Figure 16 paints a picture on adolescent's perception and academic achievement.

PERCEPTION AND ACADEMIC ACHIEVEMENT

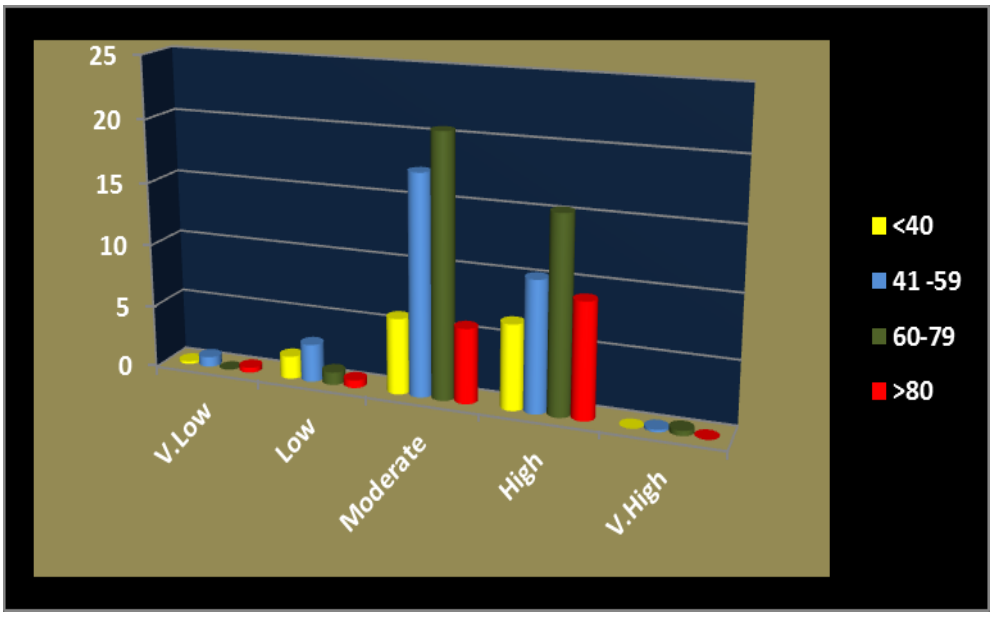


FIGURE - 16

In lieu of the above finding, it could be clearly stated that the hypothesis numbered 4 that state 'academic achievement is not affected by the perceptions on socio-economic status' gets refuted. In support of the present study, Ahmed, et al., (2010) consistent findings across diverse samples by suggested that social support was important for adolescents regardless of their socio - economic status or ethnicity. Subsequently, the results from their study revealed that the students' perceived support (from parents, peers and teacher) facilitated their motivational beliefs and emotions, which, in turn, enhanced their achievement.

C. Relationship between socio – economic status perception and nutritional health

The Table – LI and Figure 17 presents adolescents perceptions and nutritional status.

TABLE - LI
PERCEPTION AND NUTRITIONAL STATUS

	Perceptions											
	Very low		Low		Moderate		High		V. High		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
U. Nutrition	2	0.2	14	3.0	128	26.0	94	19.0	0	0	238	48.2
Normal	4	0.8	17	3.4	107	22.0	101	20.4	3	0.6	232	47.0
O. Weight	1	0.2	0	0	9	2.0	6	1.2	0	0	16	3.2
Obese	0	0	1	0.2	3	0.6	4	0.8	0	0	8	1.6
Total	7	1.2	32	6.6	247	50.6	205	41.4	3	0.6	494	100.0
	Df -12				**Chi sq value – 11.142**				**p- value 0. 517^{NS}**			

PERCEPTION AND NUTRITIONAL STATUS

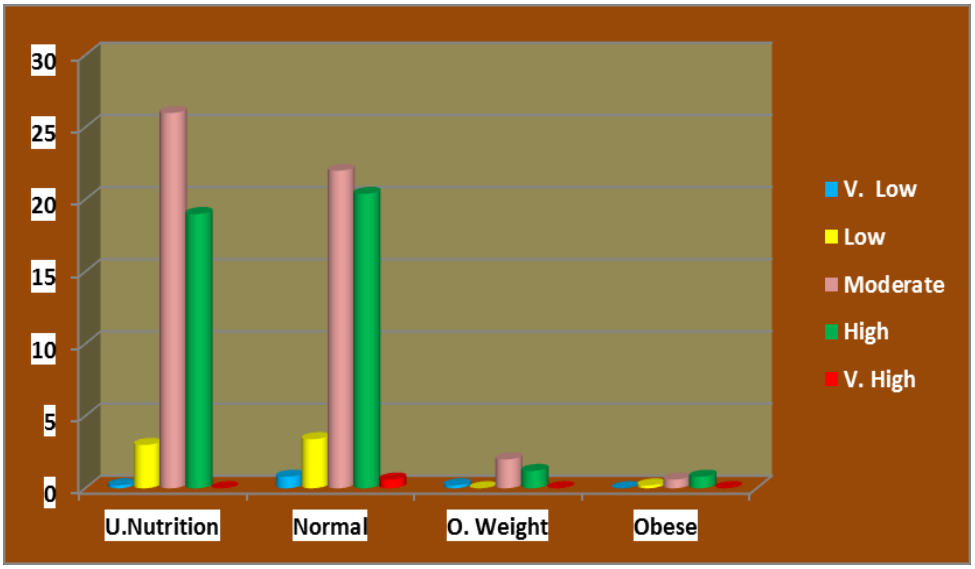


FIGURE - 17

The p value - 0.517 of the chi square analysis indicated that the perceptions of adolescents and nutritional status were not significant. However, quite interestingly a majority of 20 – 22 per cent of the adolescents who had moderate and high level of perceptions were under normal level of nutritional status. Obviously this was indicative of the importance of socio – economic factor as crucial to nutritional health. Hence, the hypothesis numbered 5 gets accepted.

C. Relationship between socio – economic status perception and mental health

Weinger (2015) studied the adolescent's perceptions of their socio-economic status and concluded that though not all their conceptions may be inaccurate, the attitudes may be self-defeating. Polarizing feelings potentially drain energy, reinforce their sense of being victims, and undermine their conviction that they can become responsible for their own lives. In this context the present study tried to explore the levels of perceptions and its relative influence on the mental health of the adolescents. The Table – LII consolidates the findings

TABLE - LII

PERCEPTIONS AND MENTAL HEALTH

Variable	r– value	p-value	Conclusion
Perception and depression	-0.039	0.386	Negative correlation not significant
Perception and anxiety	-0.095	0.034*	Negative correlation, significant
Perception and stress	-0.101	0.025*	Negative correlation, significant

The test values of anxiety and stress was found significant at five per cent level, and was negatively correlated. This brings to the forefront that the socio-economic status of a family was important to adolescent's mental health and perceptions. The perceptions scale had covered a wide range of aspects, signifying on the whole the Arunthathiyars status in the community as perceived

by adolescents. The negative correlation therefore was a significance to denote level of perceptions with status of mental health.

Sleskova, Benka and Orosova (2015) reports that parents who are unemployed were not in a position to full fill the needs, could be the reason of a negative correlation on adolescent mental health. Not being able to provide economically for the family puts a significant amount of pressure on the whole family and adolescents report negative affect to their parents who were unable to provide for the family (Jang and Choi, 2012). The overall finding was therefore suggestive of positive perceptions for sustained well being.

The perceptions of adolescents on their socio- economic status were associated with a negative correlation with anxiety and stress, however not with depression. Hence the hypothesis that states 'mental health is not affected by the perception of adolescents over their socio-economic status' was accepted.

SECTION VII: EFFICACY OF THE AWARENESS PROGRAMME (SPSS) SENSITIZATION TO PROBLEMS AND SEEK SOLUTIONS

The three days awareness programme – SPSS (Sensitization to Problems and Seek Solutions) was organized for 30 adolescents in the interior village of the study taluk. The frame work of the programme was based on education, personal life and nutrition. The concept was basically to sensitize the adolescents or make them aware of their problems related to education, nutrition and mental health and also be responsive to situations, ideas and trends.

Sensitization – comes from the word sensitize which means 'to make someone to be aware of something'. The business.com dictionary defines sensitization as the attempt to make one self or others aware of and responsive to certain ideas, events, situation, or trend. According to Bowen (2006) the term originated with Blumer (1954), the late American sociologist, who contrasted definitive concepts with sensitizing concepts. He explained that a definitive concept refers precisely to what is common to a class of objects, by the aid of a clear definition, and attributes or fixed bench marks. A sensitizing concept lacks such specification of attributes or bench marks and consequently it does not enable the user to move directly to the instance and its relevant content. Instead,

it gives the user a general sense of reference and guidance in approaching empirical instances.

The programme related education and their personal life was on the problem based approach. Agarwal and Rao (2017) explain Problem Based Learning (PBL), where participants use "triggers" from the problem, subsequently they do independent, self directed study before returning to the group to discuss and refine their acquired knowledge. Thus, PBL is not about problem solving per se, but rather it uses appropriate problems to increase knowledge and understanding. Group learning facilitates not only the acquisition of knowledge but also several other desirable attributes, such as communication skills, teamwork, problem solving, independent responsibility for learning, sharing information, and respect for other.

The method used to promote nutrition and its importance in health was demonstration approach as it enables concepts and processes to be observed directly, which in turn makes learning easier. The efficacy of the programme was measured through the pre and post test results. This section had tried to analyse the significance of the awareness programme under the following heads

A. Outcomes of group discussion

C. Analysis of pre and post test scores to adjudge the efficacy of SPSS programme and

D. Gender and efficacy of the SPSS

A. Outcomes of group discussion

The adolescents participated in small group discussions to reflect on the problems related to education and personal life. The larger group was split into six smaller groups of five members. The first three groups were asked to list out all the problems concerning education, and suggest possible solutions to overcome the same. Similarly the second group was given the topic of problems related to personal life and also to seek solutions. The groups selected their leader to coordinate the process of discussion and also document the opinions given. The individual opinions given were again discussed for consensus of the group members.

The list of problems and the solution given was consolidated and presented in the under two sub heads:

a. Education
b. Personal life and
c. Nutrition

a. Education

The Table - LIII consolidates the outcome of the group discussion related to problems with reference to education

TABLE - LIII

LIST OF PROBLEMS FACED RELATED TO EDUCATION AND SOLUTIONS

List of problems related to education	N	%	Solutions
Lack of concentration in the class	16	53.0	• Pay attention to teachers • Must ask questions and clarify doubts • Learn English word by word • Practice maths • Organise group study • Start savings • Stop using cell phones • Prepare and attempt the NMMS (National Merit scholarship) test,to benefita monthly scholarship of 600/- every month from class 8th onwards up to high school.
Unable to cope with studies	6	20.0	
Use of cell phones	7	23.0	
Students not being sincere in their work	5	17.0	
Not regular to school	5	17.0	
Difficulty in comprehending maths and English	10	33.0	
Financial constraints	18	60.0	
Discrimination by the teacher	7	23.0	
Teachers are strict	5	16.0	
Not regular to school and want to drop out	4	13.0	
No Uniform	3	10.0	
Poor preparation for exams	6	20.0	

The table above gives the details of problems related to education, the most critical problems discussed by the adolescents were lack of concentration (53%) and financial constraints (60%). The next problems of concern as stated by 33 per cent were difficulty in learning maths and English.

The problem of using cell phones and discrimination by teachers were of equal weight-age (23%). The adolescents (13 – 17%) also felt that they were not sincere in their work and regular to school.

The small groups presented the problems and solution in the larger group, who in turn further discussed the probable solutions that could be considered for a follow up as they were all living in the same village. The group as a whole discussed, interacted realised that some of their own drawback or weaknesses. Finally the larger group came to a consensus, and group felt that they could organise group study to learn from each other. English was alien language and decided to learn word by word. The interesting aspect was that money is spent on costly dresses and that they must avoid and go for simple ones, the habit of savings must be initiated and avoid over usage of cell phones.

b. Personal life

The Table- LIV details the outcome of group discussion related to their personal life.

TABLE - LIV

OUTCOME OF GROUP DISCUSSIONS RELATED TO PERSONAL LIFE

List of problems related to personal life	N	%	Solutions
Financial constraints – Poverty	30	100.0	• Parents must go to work regularly • Fathers must stop drinking • Avoid unnecessary expenses • Spend within the budget • Parents stop extravagant expenses • Put end to traditional practices • Parents must judge the value of the requirements purchased, and pay the amount accordingly
Thatched houses	5	17.0	
Boys tease, bully	11	37.0	
Problem of drinking water	12	40.0	
Alcoholic fathers	11	37.0	
Spending more time watching TV	5	17.0	
Problem with parents - separation and not regular to school	4	13.0	
Health problems	6	20.0	
Caste discrimination	10	33.0	

The table gives details of the problems discussed related to adolescent's personal life. Quite obviously the problem of money and poverty stands as the topmost problem faced by the majority (100%). The next problems of concern were that of 37 – 40 per cent of the participants had problems with alcoholic fathers, problem of drinking water and teasing and bullying. The health problems were stated by 20 per cent of the participants. The problems mentioned by 13 – 17 per cent were related to domestic violence (fights between parents and separation), thatched houses and time spent in watching television. The problems of parents led to other problems at home and that they were irregular to school and also lacked interest in studies.

Thus the individual smaller groups also presented their problems and solutions, which the larger group followed up with discussion and dialogue to come to consensus on solutions, since it was a concern to almost of all of them.

Since the financial constraint was the most crucial problem, the participants seriously felt that their parents must go for work regularly to earn wages, the spending on traditional practices must be avoided, and also avoid unnecessary expenses. For the problem related to water, alcohol and housing the adolescents decided that they would approach the NGO to place a memorandum to the authorities concerned.

c. Nutrition

The nutrition demonstration of low cost and locally available foods that were protein and micro nutrient rich in nature was enjoyed by all the adolescents. Simple to cook and variety of dishes made from each of the food helped them to understand the concept of time and interest in cooking. Washing vegetables prior to cutting and methods of cooking as important was explained.

The male and the female adolescents were found equally and enthusiastically participating in the preparation and serving the food. The concept of planning in the preparation of food, the easy and quick methods of preparation was well received by the respondents.

In order to involve the participants small groups were made to locate the activities related to washing, cutting, serving and washing the dishes. The boys who usually felt that these were activities of the girls, also got involved and enjoyed. The nutritional values of foods were explained over the entire process of demonstration of cooking as portrayed in plate 3.

SPSS – NUTRITION DEMONSTRATION

Demonstration of recipes to small groups

PLATE 3

B. Analysis of pre and post test scores to adjudge the efficacy of SPSS programme

The group discussions and the outcomes formed the main platform for all the activities that was planned and carried out to the group needs. The detailed three day programme was organized as per schedule as given in Appendix. All the activities were participative in nature and hence the selected adolescents could understand the essence of each activity. The usefulness of the programme was discussed after three weeks. On the whole the adolescents who took part in the SPSS programme were found to practice the skills that they learnt.

The rating scale for education and personal life had ten statements each, the scale related to education was focussed on regularity to school, being punctual, completion of class work, sharing and learning from each other, preparation for exams etc. On the other hand the scale on personal life had statements was on management of time, money, relationships, entertainment, housekeeping, personal grooming and cooking. The third rating scale had 15 statements related to concept of health, healthy methods of cooking, nutrients in foods, low cost locally available foods and concept of organic foods. The Table – LV draws out the analyses of pre and post scores with paired t' test on the three aspects covered in the programme.

TABLE - LV
PRE AND POST SPSS SCORES AND ITS DESCRIPTIVE t' STATUS

Variable		Mean	Sd	t test value	Df	p – value
Education	Pre	28.23	5.68	-22.459	29	**0.00002^S**
	Post	40.63	4.78			
Personal life	Pre	28.87	4.64	-26.511	29	**0.00002^S**
	Post	42.3	3.73			
Nutrition	Pre	43.87	4.73	-16.773	29	**0.00002^S**
	Post	61.33	6.62			

The three aspects covered in the awareness programme were education, personal life and nutrition. The resultant paired ' t' test values were observed to be <0.00002^S, which was an indication of high significance for all the three aspects covered. The mean scores of the pre and post test presented were

obviously illustrative of the efficacy of the awareness programme and accepting the hypothesis numbered 7. The difference in the mean scores of pre post tests of education and personal life was more or less similar, while the mean scores of post test of nutrition was comparatively high.

PRE AND POST TEST MEAN SCORES OF SPSS PROGRAMME

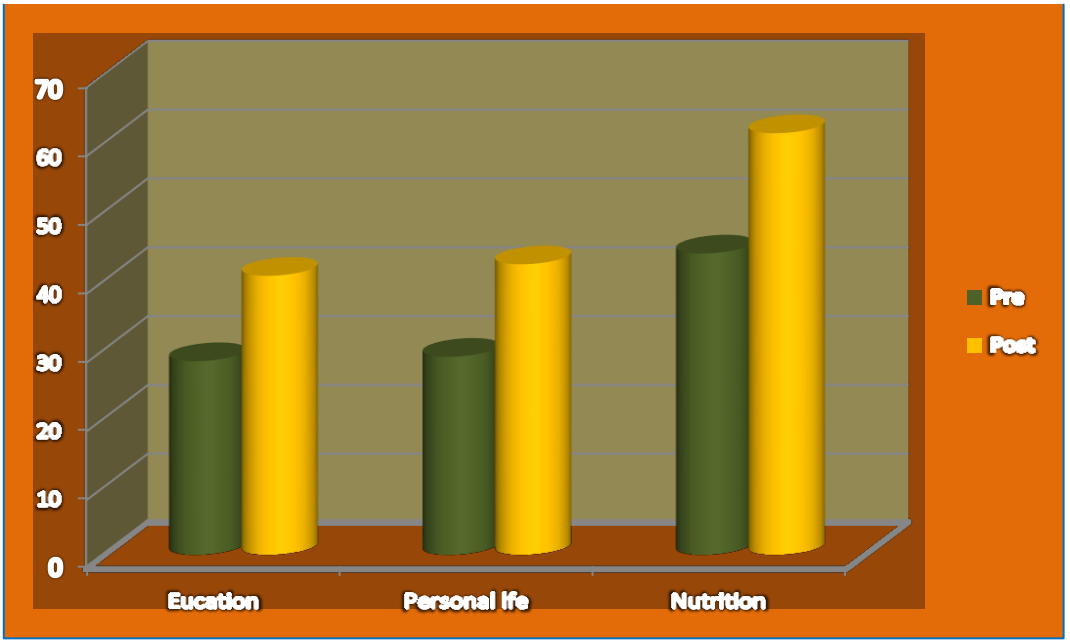


FIGURE - 18

The demonstration of foods had a good impact on the adolescents; the process of learning by doing seemed effective also the variety of food preparation was well received.

The score in personal life was still higher as compared to education, the sketch to the river of life helped them to back at adversaries in life and think positive of future. The affirmative actions were like, form a group and carry out group study, buy simple clothes for festivals and save the money, and regular savings to be practiced. They now spend time to practice concentration exercises and few minutes' to relax and reflect on their activities. They also started using locally available foods, and cutting the vegetables after washing. The decision to stop over usage of cell phones and watching television was also taken by them. Plate – IV captures the details of the SPSS intervention programme.

SPSS PROGRAMME

Adolescents engaged in group work

Games and relaxation

PLATE 4

Investigator with the adolescents in group work

Drawing river of life
PLATE 4

C. Gender and efficacy of the SPSS

Though the SPSS intervention was found to be efficacious among the selected adolescents, the investigator felt the need to observe the gender variations as it would later help a researcher, policy maker and educationists to customise the programme aiming towards the holistic development of these adolescents. Hence the data was subjected to gender variations in mean score on all the three aspects of SPSS and was portrayed in the Table- LVI

TABLE – LVI

GENDER AND EFFICACY OF SPSS PROGRAMME

SPSS		Gender	N	Mean	SD	Std. Error Mean	T	Df	Sig two tailed
Education	Pre–test	Male	11	25.0909	5.61168	1.69198	-2.507	28	**.018^{S}**
		Female	19	30.0526	4.99415	1.14574			
	Post – test	Male	11	37.7273	4.05194	1.22170	-2.820	28	**.009^{S}**
		Female	19	42.3158	4.42283	1.01467			
Personal life	Pre – test	Male	11	27.7273	4.69235	1.41480	-1.025	28	**.314^{NS}**
		Female	19	29.5263	4.59914	1.05511			
	Post–test	Male	11	40.7273	3.25856	.98249	-1.830	28	**.078^{NS}**
		Female	19	43.2105	3.75024	.86036			
Nutrition	Pre – test	Male	11	42.7273	5.55141	1.67381	-1.004	28	**.324^{NS}**
		Female	19	44.5263	4.20804	.96539			
	Post–test	Male	11	61.5455	7.56787	2.28180	.131	28	**.897^{NS}**
		Female	19	61.2105	6.23234	1.42980			

The analysis has brought out the influence of gender on the efficacy of the SPSS programme. While gender and efficacy of the programme on the gender aspect was significant, the results of personal life and that of nutrition with gender were insignificant. As was seen in gender and academic achievement, the female adolescents fared better than the male counterparts. This could be suggestive of the fact that girls were more serious to their work and studies as compared to boys. The other two aspects, personal life and nutrition components were equally well received by both the male and female adolescents, with a marginal difference in mean scores.

The boys who were into games and sports on their weekends, decided to spend by organising group study as the examinations were fast approaching. The impact of the programme was mainly due the analysis and realisation of the problems. Some of the foods like ragi porridge were now prepared and taken in the mornings, when the breakfast was not ready.

The roles and allocation of work was believed to be gender specific, therefore cooking, washing, cleaning was the responsibility of females. However the group work and participation helped them to realise that it was the attitude that was important, therefore some of the boys too were now helping their mothers in the house work. Spending time with adolescents is also to gain knowledge from their life experiences. The programmes when conducted in a conducive environment, and on a elaborate basis the change in their attitudes will be certain, that ultimately will help them to be confident and manage their lives better for their wellbeing.

The efficacy of the SPSS intervention programme was analysed with paired t' test and found that all the three aspects, namely education, personal health and nutrition were significantly related. Therefore the hypothesis numbered 7 that states "SPSS intervention programme does not have an impact on the well-being of the selected adolescents" is rejected.