

APPENDIX A

A₁ = FREQUENCY DISTRIBUTION OF SCORES ON VARIOUS TRAITS
ACCORDING TO TEACHERS' RATING1 TRAIT : TALKATIVE (CLASSROOM DISCUSSIONS)

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	0	1	1
2	0	2	2
3	0	2	2
4	2	9	11
5	7	16	23
6	11	17	28
7	11	21	32
8	21	21	42
9	15	11	26
10	18	5	23
11	19	2	21
12	7	3	10
13	7	1	8
14	3	0	3
15	4	0	4
N = 125			111
			236

$$\text{Median} = 1 + \left(\frac{N/2 - F}{f_m} \right) \times i$$

$$= 7.5 + \frac{118 - 99}{42} \times 1$$

$$= 7.95$$

Applying Median Test,
Normal Dull

Above Median	94	43	137
Below Median	31	68	99
	125	111	236

$$\chi_c^2 = \frac{236(|6392 - 1333| - 118)^2}{125 \times 111 \times 137 \times 99} = 33.16$$

and df = 1 ∴ P is less than 0.01

∴ χ_c^2 is significant

Where, l = exact lower limit of the class interval upon which the median lies.

N = Total number of Scores

F = Sum of the Scores on all intervals below l

f_m = frequency within the interval upon which the median falls.

i = Length of class interval.

2 TRAIT : TALKATIVE (SOCIAL COMMUNICATIONS)

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	0	0	0
2	1	3	4
3	2	2	4
4	2	2	4
5	4	2	6
6	4	4	8
7	5	7	12
8	5	9	14
9	9	10	19
10	29	15	44
11	10	19	29
12	14	12	26
13	8	7	15
14	8	5	13
15	7	5	12
16	5	6	11
17	5	3	8
18	5	0	5
19	1	0	1
20	1	0	1
21	0	0	0
N = 125			111
			236

$$\text{Median} = 10.5 + \frac{118-115}{29} \times 1$$

$$= 10.603$$

Applying Median Test,

	Normal	Dull	
Above Median	64	57	121
Below Median	61	54	115
	125	111	236

$$\chi_c^2 = 0.01113 \quad \therefore P \text{ lies between } 0.90 \text{ and } 0.95$$

and $df = 1 \quad \therefore \chi_c^2$ is insignificant

3 TRAIT : UNPUNCTUAL

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	0	3	3
2	5	0	5
3	11	0	11
4	16	10	26
5	31	19	50
6	30	19	49
7	11	24	35
8	11	19	30
9	5	7	12
10	5	7	12
11	0	0	0
12	0	3	3
N = 125			111
			236

$$\begin{aligned} \text{Median} &= 5.5 + \frac{118 - 95}{49} \times 1 \\ &= 5.97 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	52	79	131
Below Median	73	32	105
	125	111	236

$$\chi_c^2 = 18.87 \quad \text{and} \quad df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is significant beyond 0.01 level

4 TRAIT : TRUANT

Score	Normal (f)	Dull (f)	Total (f)
0	61	14	75
1	16	7	23
2	16	28	44
3	21	19	40
4	0	33	33
5	11	7	18
6	0	3	3
N = 125			111
			236

$$\begin{aligned} \text{Median} &= 1.5 + \frac{118 - 98}{44} \times 1 \\ &= 1.954 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	48	90	138
Below Median	77	21	98
	125	111	236

$$\chi_c^2 = 42.36 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is significant beyond 0.01 level

5 TRAIT : BULLYING

Score	Normal (f)	Dull (f)	Total (f)
0	41	22	63
1	10	11	21
2	11	7	18
3	10	3	13
4	21	12	33
5	5	12	17
6	5	12	17
7	11	15	26
8	11	14	25
9	0	0	0
10	0	3	3
11	0	0	0
12	0	0	0
N = 125			111
			236

$$\begin{aligned} \text{Median} &= 3.5 + \frac{118 - 115}{33} \times 1 \\ &= 3.59 \end{aligned}$$

	Normal	Dull	
Above Median	53	68	121
Below Median	72	43	115
	125	111	236

$$\chi_c^2 = 7.635 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is significant

6 TRAIT : TEMPER OUTBURSTS

Score	Normal (f)	Dull (f)	Total (f)
0	25	13	38
1	11	3	14
2	10	7	17
3	6	12	18
4	10	7	17
5	6	11	17
6	10	10	20
7	11	15	26
8	5	10	15
9	11	9	20
10	11	11	22
11	5	0	5
12	4	0	4
13	0	3	3
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
N =	125	111	236

$$\begin{aligned} \text{Median} &= 5.5 + \frac{118 - 121}{20} \times 1 \\ &= 5.35 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	57	58	115
Below Median	68	53	121
	125	111	236

$$\chi_c^2 = 0.7921 \text{ and } df = 1$$

∴ P lies between 0.30 and 0.50

∴ χ_c^2 is insignificant

7 TRAIT : TARDY

Score :	Normal (f)	Dull (f)	Total (f)
0	5	3	8
1	5	3	8
2	16	3	19
3	18	4	22
4	21	14	35
5	15	22	37
6	16	22	38
7	11	20	31
8	3	13	16
9	10	0	10
10	5	7	12
11	0	0	0
12	0	0	0
N =	125	111	236

$$\begin{aligned} \text{Median} &= 4.5 + \frac{118 - 92}{37} \times 1 \\ &= 5.2 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	45	62	107
Below Median	80	49	129
	125	111	236

$$\chi_c^2 = 8.57 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is significant

8 TRAIT : CARELESS

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	11	3	14
2	5	3	8
3	16	10	26
4	5	19	24
5	16	11	27
6	24	19	43
7	16	14	30
8	16	19	35
9	11	0	11
10	0	7	7
11	0	0	0
12	5	3	8
13	0	3	3
14	0	0	0
15	0	0	0
N = 125		111	236

$$\begin{aligned} \text{Median} &= 5.5 + \frac{118 - 99}{43} \times 1 \\ &= 5.942 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	72	65	137
Below Median	53	46	99
	125	111	236

$$\chi_c^2 = 0.0002822 \text{ and } df = 1$$

∴ P is greater than 0.95

∴ χ_c^2 is highly insignificant

9 TRAIT : DEFIANCE TO DISCIPLINE

Score	Normal (f)	Dull (f)	Total (f)
0	9	10	19
1	7	7	14
2	6	7	13
3	8	8	16
4	11	9	20
5	5	10	15
6	8	12	20
7	26	21	47
8	7	3	10
9	9	2	11
10	6	5	11
11	10	5	15
12	5	4	9
13	0	3	3
14	4	2	6
15	1	1	2
16	3	2	5
17	0	0	0
18	0	0	0
N = 125			111
			236

$$\text{Median} = 6.5 + \frac{118 - 117}{47} \times 1$$

$$= 6.521$$

	Normal	Dull	
Above Median	71	48	119
Below Median	54	63	117
	125	111	236

$$\chi_c^2 = 3.796 \text{ and } df = 1$$

∴ P lies between 0.05 and 0.10

∴ χ_c^2 is not significant. (It is very near to the significance level of 0.05)

10 TRAIT : INTERESTED IN SCHOOL ACTIVITIES

Score	Normal (f)	Dull (f)	Total (f)
0	0	3	3
1	5	5	10
2	10	4	14
3	11	4	15
4	7	8	15
5	18	10	28
6	17	8	25
7	11	16	27
8	11	14	25
9	8	4	12
10	9	19	28
11	8	7	15
12	7	8	15
13	3	0	3
14	0	1	1
15	0	0	0
N =	125	111	236

$$\begin{aligned} \text{Median} &= 6.5 + \frac{118 - 110}{27} \times 1 \\ &= 6.796 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	57	69	126
Below Median	68	42	110
	125	111	236

$$\chi_c^2 = 5.833 \quad \text{and} \quad \text{df} = 1$$

∴ P lies between 0.01 and 0.02

∴ χ_c^2 is significant at 0.02 level

11 TRAIT : UNCLEAN

Score	Normal (f)	Dull (f)	Total (f)
0	10	7	17
1	5	3	8
2	10	5	15
3	10	8	18
4	11	19	30
5	11	10	21
6	11	9	20
7	15	8	23
8	5	8	13
9	5	11	16
10	5	8	13
11	6	5	11
12	5	3	8
13	6	3	9
14	5	3	8
15	3	1	4
16	2	0	2
17	0	0	0
18	0	0	0
N =	125	111	236

$$\text{Median} = 5.5 + \frac{118 - 109}{20} \times 1$$

$$= 5.95$$

Applying Median Test,

	Normal	Dull	
Above Median	68	59	127
Below Median	57	52	109
	125	111	236

$$\chi_c^2 = 0.003718 \text{ and } df = 1$$

∴ P is greater than 0.95

∴ χ_c^2 is highly insignificant

A₂ : FREQUENCY DISTRIBUTION OF SCORES ON VARIOUS TRAITS ACCORDING TO 'SELF RATING'

1 TRAIT : TALKATIVE (CLASSROOM DISCUSSIONS)

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	0	2	2
2	1	5	6
3	1	6	7
4	4	9	13
5	5	14	19
6	8	21	29
7	13	23	36
8	30	8	38
9	19	7	26
10	19	7	26
11	10	6	16
12	8	3	11
13	7	0	7
N = 125			111
			236

$$\begin{aligned} \text{Median} &= 7.5 + \frac{118 - 112}{38} \times 1 \\ &= 7\frac{1}{2}658 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	93	31	124
Below Median	32	80	112
	125	111	236

$$\chi_c^2 = 49.08 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is highly significant

2 TRAIT : TALKATIVE (SOCIAL COMMUNICATION)

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	0	0	0
2	1	0	1
3	0	0	0
4	0	1	1
5	2	1	3
6	1	3	4
7	2	2	4
8	7	3	10
9	9	2	11
10	8	5	13
11	19	4	23
12	20	14	34
13	14	18	32
14	10	13	23
15	10	15	25
16	8	12	20
17	9	7	16
18	3	5	8
19	0	3	3
20	2	1	3
21	0	2	2
N = 125			111
			236

$$\text{Median} = 12.5 + \frac{118 - 104}{32} \times 1$$

$$= 12.938$$

Applying Median Test,

	Normal	Dull	
Above Median	56	76	132
Below Median	69	35	104
	125	111	236

$$\chi_c^2 = 12.42 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is significant

3 TRAIT : UNPUNCTUAL

Score	Normal (f)	Dull (f)	Total (f)
0	19	8	27
1	20	12	32
2	22	15	37
3	29	23	52
4	11	28	39
5	7	9	16
6	7	6	13
7	8	6	14
8	2	3	5
9	0	1	1
N = 125		111	236

$$\begin{aligned} \text{Median} &= 2.5 + \frac{118 - 96}{52} \times 1 \\ &= 2.923 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	64	76	140
Below Median	61	35	96
	125	111	236

$$\chi_c^2 = 9.124 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is significant

4 TRAIT : TRUANCY

Score	Normal (f)	Dull (f)	Total (f)
0	61	11	72
1	20	11	31
2	16	32	48
3	16	43	59
4	10	11	21
5	2	3	5
N = 125		111	236

$$\begin{aligned} \text{Median} &= 1.5 + \frac{118 - 103}{48} \times 1 \\ &= 1.813 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	44	89	133
Below Median	81	22	103
	125	111	236

$$\chi_c^2 = 46.56 \quad \text{and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is highly significant

5 TRAIT : BULLYING

Score	Normal (f)	Dull (f)	Total (f)
0	64	45	109
1	23	26	49
2	17	15	32
3	12	14	26
4	6	7	13
5	2	3	5
6	1	0	1
7	0	1	1
N =			
	125	111	236

$$\begin{aligned} \text{Median} &= 0.5 + \frac{118 - 109}{49} \times 1 \\ &= 0.685 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	61	66	127
Below Median	64	45	109
	125	111	236

$$\chi_c^2 = 2.276 \text{ and } df = 1$$

∴ P lies between 0.10 and 0.20

∴ χ_c^2 is insignificant

6 TRAIT : TEMPER OUTBURSTS

Score	Normal (f)	Dull (f)	Total (f)
0	28	35	63
1	20	21	41
2	15	11	26
3	12	9	21
4	14	9	23
5	9	7	16
6	7	5	12
7	7	6	13
8	7	5	12
9	2	2	4
10	1	0	1
11	3	1	4
N = 125		111	236

$$\begin{aligned} \text{Median} &= 1.5 + \frac{118 - 104}{26} \times 1 \\ &= 2.038 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	62	44	106
Below Median	63	67	130
	125	111	236

$$\chi_c^2 = 1.972 \text{ and } df = 1$$

∴ P lies between 0.10 and 0.20

∴ χ_c^2 is insignificant

7 TRAIT : TARDY

Score	Normal (f)	Dull (f)	Total (f)
0	13	1	14
1	12	5	17
2	17	5	22
3	32	11	43
4	16	14	30
5	14	25	39
6	7	19	26
7	8	19	27
8	6	9	15
9	0	2	2
10	0	1	1
N =			
	125	111	236

$$\begin{aligned} \text{Median} &= 3.5 + \frac{118 - 96}{30} \times 1 \\ &= 4.233 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	35	75	110
Below Median	90	36	126
	125	111	236

$$\chi_c^2 = 35.42 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is highly significant

8 TRAIT : CARELESS

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	0	0	0
2	7	0	7
3	7	2	9
4	10	7	17
5	22	25	47
6	17	15	32
7	17	16	33
8	11	15	26
9	12	7	19
10	7	12	19
11	8	5	13
12	4	2	6
13	2	0	2
14	0	2	2
15	1	3	4
N =	125	111	236

$$\begin{aligned} \text{Median} &= 6.5 + \frac{118 - 112}{33} \times 1 \\ &= 6.682 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	62	62	124
Below Median	63	49	112
	125	111	236

$$\chi_c^2 = 0.6892 \quad \text{and} \quad df = 1$$

∴ P lies between 0.30 and 0.50

∴ χ_c^2 is not significant

9 TRAIT : DEFIANCE TO DISCIPLINE

Score	Normal (f)	Dull (f)	Total (f)
0	15	12	27
1	11	8	19
2	38	11	49
3	17	31	48
4	12	15	27
5	9	16	25
6	9	7	16
7	6	3	9
8	5	3	8
9	2	3	5
10	1	1	2
11	0	1	1
N = 125		111	236

$$\begin{aligned} \text{Median} &= 2.5 + \frac{118 - 95}{48} \times 1 \\ &= 2.979 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	61	80	141
Below Median	64	31	95
	<u>125</u>	<u>111</u>	<u>236</u>

$$\chi_c^2 = 12.29 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ_c^2 is significant

10 TRAIT : INTERESTED IN SCHOOL ACTIVITIES

Score	Normal (f)	Dull (f)	Total (f)
0	0	0	0
1	0	0	0
2	0	0	0
3	0	9	9
4	7	4	11
5	6	8	14
6	9	9	18
7	12	9	21
8	15	10	25
9	16	10	26
10	18	11	29
11	13	14	27
12	11	9	20
13	7	8	15
14	6	7	13
15	5	3	8
N = 125		111	236

$$\begin{aligned} \text{Median} &= 8.5 + \frac{118 - 98}{26} \times 1 \\ &= 9.27 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	60	52	112
Below Median	65	59	124
	125	111	236

$$\chi_c^2 = 0.002163 \text{ and } df = 1$$

P is greater than 0.95

∴ χ_c^2 is insignificant

11 TRAIT : UNCLEAN

Score	Normal (f)	Dull (f)	Total (f)
0	30	14	44
1	19	33	52
2	13	20	33
3	10	8	18
4	11	9	20
5	14	11	25
6	10	5	15
7	12	7	19
8	4	2	6
9	2	1	3
10	0	0	0
11	0	1	1
N = 125			111
			236

$$\begin{aligned} \text{Median} &= 1.5 + \frac{118 - 96}{33} \times 1 \\ &= 2.166 \end{aligned}$$

Applying Median Test,

	Normal	Dull	
Above Median	63	44	107
Below Median	62	67	129
	125	111	236

$$\chi_c^2 = 2.33 \text{ and } df = 1$$

∴ P lies between 0.10 and 0.20

∴ χ_c^2 is in-significant

A₃ : DISTRIBUTION OF STUDENTS FOR VARIOUS BEHAVIOUR ITEMS ACCORDING TO "TEACHERS' RATING"

1 TRAIT : TALKATIVE (CLASSROOM DISCUSSIONS)

Behaviour Item No. 7 :

Answers the questions from the study rightly or wrongly asked by the teacher.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	1 (4)	11 (28)	82 (71)	31 (22)	125
Dull	7 (4)	42 (25)	52 (63)	10 (9)	111
Total	8	53	134	41	236

$$\begin{aligned} (1-4)^2/4 &= 2.25 & (82-71)^2/71 &= 1.70 \\ (7-4)^2/4 &= 2.25 & (52-63)^2/63 &= 1.95 \\ (11-28)^2/28 &= 10.25 & (31-22)^2/22 &= 3.68 \\ (42-25)^2/25 &= 11.48 & (10-19)^2/19 &= 4.26 \end{aligned}$$

$$\therefore \chi^2 = 37.82 \text{ and } df = (4-1)(2-1) = 3$$

\therefore P is less than 0.01

$\therefore \chi^2$ is significant

Behaviour Item No.9 :

Inquires of the teacher about the curricular matters not properly understood :

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	36 (36)	21 (30)	52 (49)	16 (10)	125
Dull	32 (32)	36 (27)	40 (43)	3 (9)	111
Total	68	57	92	19	236

$$\chi^2 = 8.63 \quad \text{and} \quad df = 2^*$$

\therefore P lies between 0.01 and 0.02

$\therefore \chi^2$ is significant at 0.02 level

(*When any observed frequency is less than 5 in a column, the frequencies in that column are added in those in the adjacent column).

Behaviour Item No.19 :

Remains ready to answer the questions from the study asked by the students.

	Never	Rarely	Sometimes	Often	Total
Normal	5 (11)	52 (49)	56 (55)	12 (11)	125
Dull	15 (9)	40 (43)	47 (48)	9 (10)	111
Total	20	92	103	21	236

$$\chi^2 = 7.896 \quad \text{and} \quad df = 3$$

\therefore P lies between 0.02 and 0.05

$\therefore \chi^2$ is significant at 0.05 level

Behaviour Item No.21

Inquires of the classmates about the curricular matters not properly understood.

	Never	Rarely	Sometimes	Often	Total
Normal	2 (14)	42 (39)	65 (61)	16 (10)	125
Dull	25 (13)	32 (35)	51 (55)	3 (9)	111
Total	27	74	116	19	236

$$\chi^2 = 25.092 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.32

Takes part in the curricular talks held in the class.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	5 (14)	42 (37)	52 (56)	26 (17)	125
Dull	22 (13)	28 (33)	54 (50)	7 (16)	111
Total	27	70	106	33	236

$$\chi^2 = 23.88 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is significant

	<u>Never</u>	<u>Sometimes</u>	<u>Total</u>
Normal	5 (14)	120 (111)	125
Dull	22 (13)	89 (98)	111
Total	27	209	236

$$\chi^2 = 13.58 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

2 TRAIT : TALKATIVE (SOCIAL COMMUNICATIONS)Behaviour Item No.8 : Takes part in the class debates

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	22 (25)	36 (38)	47 (41)	20 (21)	125
Dull	25 (22)	36 (34)	30 (36)	20 (19)	111
Total	47	72	77	40	236

$$\chi^2 = 2.86 \text{ and } df = 3$$

∴ P lies between 0.30 and 0.50

∴ χ^2 is not significant

Behaviour Item No.10 : Inquires of the teacher about extra-curricular matters.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	36 (36)	58 (56)	26 (28)	5 (6)	125
Dull	32 (32)	47 (49)	26 (24)	6 (5)	111
Total	68	105	52	11	236

$$\chi^2 = 0.828 \text{ and } df = 3$$

∴ P lies between 0.80 and 0.90

∴ χ^2 is not significant

Behaviour Item No.20: Takes part in the school debates

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	5 (14)	16 (30)	93 (68)	11 (13)	125
Dull	21 (12)	40 (26)	36 (61)	14 (12)	111
Total	26	56	129	25	236

$$\chi^2 = 46.69 \text{ and } df = 3 \quad \therefore \text{P is less than } 0.01$$

∴ χ^2 is significant

Behaviour Item No.22 : Inquires of the classmates about extracurricular matters.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	32 (22)	32 (31)	44 (50)	17 (22)	125
Dull	10 (20)	26 (27)	50 (44)	25 (20)	111
Total	42	58	94	42	236

$$\chi^2 = 13.54 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.33 : Answers teachers' questions not related to study.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	5 (4)	57 (56)	52 (55)	11 (10)	125
Dull	3 (4)	49 (50)	51 (48)	8 (9)	111
Total	8	106	103	19	236

$$\chi^2 = 1.10 \text{ and } df = 3$$

∴ P lies between 0.70 and 0.80

∴ χ^2 is not significant

Behaviour Item No.42: Answers the questions not related to study if asked by his classmates.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	3 (3)	42 (32)	55 (61)	25 (29)	125
Dull	2 (2)	19 (29)	61 (55)	29 (25)	111
Total	5	61	116	54	236

$$\chi^2 = 9.01 \text{ and } df = 3$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

Behaviour Item No.48 : Takes part in the discussion of the composition work in the class.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	8 (14)	46 (40)	57 (60)	14 (11)	125
Dull	19 (13)	29 (35)	56 (53)	7 (10)	111
Total	27	75	113	21	236

$$\chi^2 = 9.30 \text{ and } df = 3$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

	<u>Never</u>	<u>Sometimes</u>	<u>Total</u>
Normal	8 (14)	117 (111)	125
Dull	19 (13)	92 (98)	111
Total	27	209	236

$$\chi^2 = 6.03 \text{ and } df = 1$$

∴ P lies between 0.01 and 0.02

∴ χ^2 is significant at 0.02 level

3 TRAIT : UNPUNCTUAL

Behaviour Item No.23 : Fails to bring the assignments of the subjects already done at home.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	11 (8)	48 (48)	55 (46)	11 (17)	125
Dull	5 (8)	42 (42)	42 (51)	22 (16)	111
Total	16	90	97	33	236

$$\chi^2 = 9.967 \text{ and } df = 3$$

∴ P lies between 0.01 and 0.02

∴ χ^2 is significant at 0.02 level

Behaviour Item No.25: Fails to bring the composition notebooks in time.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	31 (22)	26 (30)	57 (57)	11 (16)	125
Dull	10 (19)	31 (27)	51 (51)	19 (14)	111
Total	41	57	108	30	236

$$\chi^2 = 12.42 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is significant.

Behaviour Item No.37 : Brings through mistake the books of an unwanted for subject.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	11 (11)	42 (39)	71 (70)	1 (5)	125
Dull	10 (10)	31 (34)	62 (63)	8 (4)	111
Total	21	73	133	9	236

$$\chi^2 = 0.941 \text{ and } df = 2$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant.

Behaviour Item No.45 : Brings through mistake the books of the timetable allotted for another day

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	16 (14)	75 (70)	29 (26)	5 (15)	125
Dull	10 (12)	56 (61)	21 (24)	24 (14)	111
Total	26	131	50	29	236

$$\chi^2 = 15.917 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is significant

4 TRAIT : TRUANT

Behaviour Item No.5 : Runs away unpermitted from the school and reaches home at the expected time.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	63 (47)	31 (35)	15 (25)	16 (18)	125
Dull	26 (42)	35 (31)	32 (22)	18 (16)	111
Total	89	66	47	34	236

$$\chi^2 = 21.54 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.17 : Remains absent in the school without knowledge of the guardians.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	88 (60)	25 (27)	6 (30)	6 (8)	125
Dull	25 (53)	26 (24)	50 (26)	10 (8)	111
Total	113	51	56	16	236

$$\chi^2 = 70.502 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is highly significant

5 TRAIT : BULLYING

Behaviour Item No.6 : Picks up quarrels with his younger classmates outside or inside the class.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	57 (44)	26 (25)	40 (46)	2 (9)	125
Dull	27 (40)	22 (23)	47 (41)	15 (8)	111
Total	84	48	87	17	236

$$\chi^2 = 14.672 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.18: Threatens his classmates for the seat he desires to occupy.

	Never	Rarely	Sometimes	Often	Total
Normal	57 (55)	22 (25)	45 (43)	1 (2)	125
Dull	47 (49)	25 (22)	36 (38)	3 (2)	111
Total	104	47	81	4	236

$$\chi^2 = 0.971 \text{ and } df = 2$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

Behaviour Item No.31: Threatens his neighbouring examinees if they refuse to help him.

	Never	Rarely	Sometimes	Often	Total
Normal	93 (82)	16 (19)	11 (20)	5 (4)	125
Dull	61 (72)	19 (16)	28 (19)	3 (4)	111
Total	154	35	39	8	236

$$\chi^2 = 9.644 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

	Never	Sometimes	Total
Normal	93 (82)	32 (43)	125
Dull	61 (72)	50 (39)	111
Total	154	82	236

$$\chi^2 = 9.06 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant.

Behaviour Item No.41 : Gets his own way by force in games.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	81 (72)	16 (14)	26 (35)	2 (5)	125
Dull	54 (63)	10 (12)	40 (31)	7 (4)	111
Total	135	26	66	9	236

$$\chi^2 = 9.494 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

6 TRAIT : TEMPER OUTBURSTS

Behaviour Item No.4 : Cries when he is teased.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	68 (66)	17 (26)	30 (27)	10 (6)	125
Dull	56 (58)	32 (23)	21 (24)	2 (6)	111
Total	124	49	51	12	236

$$\chi^2 = 9.885 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

	<u>Never</u>	<u>Sometimes</u>	<u>Total</u>
Normal	68 (66)	57 (59)	125
Dull	56 (58)	55 (53)	111
Total	124	112	236

$$\chi^2 = 0.28 \text{ and } df = 1$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is insignificant

Behaviour Item No.16 : Speaks out an abusive language when he is jocked at.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	36 (30)	42 (41)	31 (40)	16 (14)	125
Dull	21 (27)	36 (37)	44 (35)	10 (12)	111
Total	57	78	75	26	236

$$\chi^2 = 7.53 \text{ and } df = 3$$

∴ P lies between 0.05 and 0.10

∴ χ^2 is not significant

Behaviour Item No.30: Fights when he is mocked at.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	52 (42)	42 (40)	26 (31)	5 (12)	125
Dull	28 (38)	33 (35)	32 (27)	18 (11)	111
Total	80	75	58	23	236

$$\chi^2 = 15.49 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is significant.

Behaviour Item No.40 : Tears-off the question-paper if it seems hard, after examination.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	100 (97)	14 (18)	9 (7)	2 (2)	125
Dull	94 (87)	20 (16)	5 (7)	2 (2)	111
Total	184	34	14	4	236

$$\chi^2 = 2.31 \text{ and } df = 2$$

∴ P lies between 0.30 and 0.50

∴ χ^2 is not significant

Behaviour Item No.47: Quarrels up in the games

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	57 (51)	31 (31)	26 (31)	11 (11)	125
Dull	40 (46)	28 (28)	33 (28)	10 (10)	111
Total	97	59	59	21	236

$$\chi^2 = 3.20 \text{ and } df = 3$$

∴ P lies between 0.30 and 0.50

∴ χ^2 is not significant

Behaviour Item No.54: Stamps out of the classroom in anger when ordered to leave the class.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	82 (84)	26 (21)	16 (18)	1 (2)	125
Dull	76 (74)	14 (19)	18 (16)	3 (2)	111
Total	158	40	34	4	236

$$\chi^2 = 3.558 \text{ and } df = 2$$

∴ P lies between 0.10 and 0.20

∴ χ^2 is not significant

7 TRAIT : TARDY

Behaviour Item No.2 : Comes late in the school.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	5 (5)	33 (30)	68 (68)	19 (21)	125
Dull	5 (5)	24 (27)	61 (61)	21 (19)	111
Total	10	57	129	40	236

$$\chi^2 = 1.034 \text{ and } df = 3$$

∴ P lies between 0.70 and 0.80

∴ χ^2 is not significant

Behaviour Item No.14: Reaches late on the play ground

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	56 (45)	26 (28)	41 (50)	2 (3)	125
Dull	28 (39)	26 (24)	53 (44)	4 (3)	111
Total	84	52	94	6	236

$$\chi^2 = 10.117 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.28 : Delays reporting to class following recess.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	42 (29)	26 (29)	54 (63)	3 (4)	125
Dull	13 (26)	28 (25)	65 (56)	5 (4)	111
Total	55	54	119	8	236

$$\chi^2 = 16.155 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.46 : Delays reporting to mass prayer.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	36 (24)	21 (26)	67 (68)	1 (6)	125
Dull	10 (22)	29 (24)	62 (61)	10 (5)	111
Total	46	50	129	11	236

$$\chi^2 = 15.581 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

8 TRAIT : CARELESS

Behaviour Item No.11 : Flings or breaks the science -

Apparatus while experimenting.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	108 (106)	11 (10)	5 (5)	1 (2)	125
Dull	92 (94)	8 (9)	9 (9)	2 (1)	111
Total	200	19	14	3	236

$$\chi^2 = 1.237 \text{ and } df = 2$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

Behaviour Item No.24 : Forgets books, compass-box, pencils etc. in the class.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	16 (16)	46 (39)	62 (68)	1 (2)	125
Dull	14 (14)	28 (35)	66 (60)	3 (2)	111
Total	30	74	128	4	236

$$\chi^2 = 4.146 \text{ and } df = 2$$

∴ P lies between 0.10 and 0.20

∴ χ^2 is not significant

Behaviour Item No.36 : Fails to return the things borrowed from the classmates.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	37 (39)	37 (39)	46 (40)	5 (8)	125
Dull	36 (34)	36 (34)	29 (35)	10 (7)	111
Total	73	73	75	15	236

$$\chi^2 = 4.79 \text{ and } df = 3$$

∴ P lies between 0.10 and 0.20

∴ χ^2 is not significant

Behaviour Item No.44 : The books or note-books are worn out quite from the beginning of the year.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	29 (26)	26 (25)	54 (56)	16 (17)	125
Dull	20 (23)	22 (23)	52 (50)	17 (16)	111
Total	49	48	106	33	125

$$\chi^2 = 1.09 \text{ and } df = 3$$

∴ P lies between 0.70 and 0.80

∴ χ^2 is not significant.

Behaviour Item No.49: The books and notebooks are torn-out or stained.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	14 (10)	36 (29)	72 (79)	3 (7)	125
Dull	5 (9)	18 (25)	78 (71)	10 (6)	111
Total	19	54	150	13	236

$$\chi^2 = 10.006 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

9 TRAIT : DEFIANCE TO DISCIPLINE

Behaviour Item No.3 : Intentionally comes late to the school or class.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	63 (60)	38 (40)	18 (20)	6 (4)	125
Dull	51 (54)	38 (36)	21 (19)	1 (3)	111
Total	114	76	39	7	236

$$\chi^2 = 0.528 \text{ and } df = 2$$

∴ P lies between 0.70 and 0.80

∴ χ^2 is not significant

Behaviour Item No.15: Enters into or goes out of the class without permission.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	64 (62)	24 (28)	32 (30)	5 (5)	125
Dull	53 (55)	28 (24)	25 (27)	5 (5)	111
Total	117	52	57	10	236

$$\chi^2 = 1.657 \text{ and } df = 3$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

Behaviour Item No.29 : Brings guide books in the school.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	42 (49)	11 (19)	46 (38)	26 (19)	125
Dull	50 (43)	25 (17)	26 (34)	10 (17)	111
Total	92	36	72	36	236

$$\chi^2 = 18.31 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.39 : Plays mischief or makes noise when the class is going on.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	41 (47)	27 (28)	39 (38)	18 (12)	125
Dull	48 (42)	25 (24)	33 (34)	5 (11)	111
Total	89	52	72	23	236

$$\chi^2 = 8.032 \text{ and } df = 3$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

Behaviour Item No.50: Comes without school Uniform.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	106 (107)	14 (13)	5 (5)	-	125
Dull	96 (95)	10 (11)	5 (5)	-	111
Total	202	24	10	-	236

$$\chi^2 = 0.186 \text{ and } df = 2$$

∴ P lies between 0.90 and 0.95

∴ χ^2 is not significant

Behaviour Item No.51: Disobeys the teacher during games and play

	Never	Rarely	Sometimes	Often	Total
Normal	93 (95)	26 (25)	6 (5)	-	125
Dull	87 (85)	21 (22)	3 (4)	-	111
Total	180	47	9	-	236

$$\chi^2 = 0.38 \text{ and } df = 1$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

TRAIT 10 : INTERESTED IN SCHOOL ACTIVITIES

Behaviour Item No.1 : Contributes in class cleanliness or decoration.

	Never	Rarely	Sometimes	Often	Total
Normal	25 (20)	36 (34)	59 (60)	5 (11)	125
Dull	12 (17)	28 (30)	55 (54)	16 (10)	111
Total	37	64	114	21	236

$$\chi^2 = 9.88 \text{ and } df = 3$$

∴ P lies between 0.01 and 0.02

∴ χ^2 is significant at 0.02 level

Behaviour Item No.13: Co-operates in magazine activities

	Never	Rarely	Sometimes	Often	Total
Normal	40 (38)	39 (48)	24 (20)	22 (19)	125
Dull	32 (34)	51 (42)	14 (18)	14 (17)	111
Total	72	90	38	36	236

$$\chi^2 = 6.56 \text{ and } df = 3$$

∴ P lies between 0.05 and 0.10

∴ χ^2 is insignificant

Behaviour Item No.27:Volunteers Science (Mathematics etc.) Club.

	Never	Rarely	Sometimes	Often	Total
Normal	48 (53)	24 (29)	35 (30)	18 (13)	125
Dull	52 (47)	30 (25)	22 (27)	7 (12)	111
Total	100	54	57	25	236

$$\chi^2 = 8.631 \text{ and } df = 3$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

Behaviour Item No.35: Takes part in the activities of the school-exhibition.

	Never	Rarely	Sometimes	Often	Total
Normal	40 (38)	58 (46)	26 (38)	1 (3)	125
Dull	32 (34)	28 (40)	46 (34)	5 (3)	111
Total	72	86	72	6	236

$$\chi^2 = 17.05 \text{ and } df = 2$$

∴ P is less than 0.01

∴ χ^2 is significant

Behaviour Item No.52: Participates in the Celebration of festivals or in the anniversaries of great people

	Never	Rarely	Sometimes	Often	Total
Normal	26 (24)	53 (39)	26 (32)	20 (30)	125
Dull	19 (21)	21 (35)	35 (29)	36 (26)	111
Total	45	74	61	56	236

$$\chi^2 = 20.52 \text{ and } df = 3$$

∴ P is less than 0.01

∴ χ^2 is significant.

11 TRAIT : UNCLEAN

Behaviour Item No.12: Comes in the school wearing dirty clothes.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	30 (29)	32 (32)	36 (40)	27 (24)	125
Dull	24 (25)	28 (28)	40 (36)	19 (22)	111
Total	54	60	76	46	236

$$\chi^2 = 1.70 \text{ and } df = 3$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

Behaviour Item No.26: Spits or snivels in the class.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	88 (87)	12 (12)	14 (14)	11 (12)	125
Dull	77 (78)	10 (10)	12 (12)	12 (11)	111
Total	165	22	26	23	236

$$\chi^2 = 0.197 \text{ and } df = 3$$

∴ P is greater than 0.95

∴ χ^2 is not significant.

Behaviour Item No.34: Attends the school with unkempt hair.

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	62 (58)	16 (23)	21 (23)	26 (21)	125
Dull	47 (51)	28 (21)	22 (20)	14 (19)	111
Total	109	44	43	40	236

$$\chi^2 = 7.92 \text{ and } df = 3$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

	<u>Never</u>	<u>Sometimes</u>	<u>Total</u>
Normal	62 (58)	63 (60)	125
Dull	47 (51)	64 (67)	111
Total	109	127	236

$$\chi^2 = 1.09 \text{ and } df = 1$$

∴ P lies between 0.20 and 0.30

∴ χ^2 is not significant

Behaviour Item No.38: Comes to School Unclean

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	46 (47)	36 (36)	23 (22)	20 (21)	125
Dull	42 (41)	32 (32)	18 (19)	19 (18)	111
Total	88	68	41	39	236

$$\chi^2 = 0.25 \text{ and } df = 3$$

∴ P is greater than 0.95

∴ χ^2 is not significant

Behaviour Item No.43: Requires instructions for teeth cleaning

	<u>Never</u>	<u>Rarely</u>	<u>Sometimes</u>	<u>Often</u>	<u>Total</u>
Normal	50 (39)	26 (31)	28 (32)	21 (23)	125
Dull	24 (35)	32 (27)	32 (28)	23 (21)	111
Total	74	58	60	44	236

$$\chi^2 = 9.72 \text{ and } df = 3$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

Behaviour Item No.53 : Throws rubbish like fragments of paper, skins of fruits inside the class or in the compound.

	Never	Rarely	Sometimes	Often	Total
Normal	32 (30)	25 (35)	63 (56)	5 (4)	125
Dull	25	41	43	2	111
Total	57	66	106	7	236

$$\chi^2 = 8.64 \text{ and } df = 2$$

∴ P lies between 0.01 and 0.02

∴ χ^2 is significant at 0.02 level

	Never	Sometimes	Total
Normal	32 (30)	93 (95)	125
Dull	25 (27)	86 (84)	111
Total	57	179	236

$$\chi^2 = 0.37 \text{ and } df = 1$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant.

A_4 : DISTRIBUTION OF STUDENTS REPORTED BY THEIR FATHERS FOR VARIOUS TRAITS

1 TRAIT : TALKATIVE (PERTAINING TO STUDY)

	Never	Sometimes	Total
Normal	92 (102)	33 (23)	125
Dull	101 (91)	10 (20)	111
Total	193	43	236

$$\chi^2 = \frac{(92-102)^2}{102} + \frac{(101-91)^2}{91} + \frac{(33-23)^2}{23} + \frac{(10-20)^2}{20}$$

$$= 0.98 + 1.10 + 4.35 + 5.00$$

$$= 11.43$$

$$\text{and } df = (2-1)(2-1)$$

$$= 1$$

∴ P is less than 0.01

∴ χ^2 is significant

2 TRAIT : TALKATIVE(SOCIAL COMMUNICATIONS)

	Never	Sometimes	Total
Normal	6 (4)	119 (121)	125
Dull	2 (4)	109 (107)	111
Total	8	228	236

$$\chi^2 = 2.070 \text{ and } df = 1$$

∴ P lies between 0.10 and 0.20

∴ χ^2 is not significant

3 TRAIT : UNPUNCTUAL

	Never	Sometimes	Total
Normal	33 (25)	92 (100)	125
Dull	15 (23)	96 (88)	111
Total	48	188	236

$$\chi^2 = 6.81 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

4 TRAIT : TRUANT

	Never	Sometimes	Total
Normal	111 (92)	14 (33)	125
Dull	62 (81)	49 (30)	111
Total	173	63	236

$$\chi^2 = 30.37 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

5 TRAIT : BULLYING

	Never	Sometimes	Total
Normal	67 (75)	58 (50)	125
Dull	75 (67)	36 (44)	111
Total	142	94	236

$$\chi^2 = 4.53 \text{ and } df = 1$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

6 TRAIT : TEMPER OUTBURSTS

	Never	Sometimes	Total
Normal	90(85)	35(40)	125
Dull	71(76)	40(35)	111
Total	161	75	236

$$\chi^2 = 1.96 \text{ and } df = 1$$

∴ P lies between 0.10 and 0.20

∴ χ^2 is not significant

7 TRAIT : TARDY

	Never	Sometimes	Total
Normal	80(48)	45(77)	125
Dull	10(42)	101(69)	111
Total	90	146	236

$$\chi^2 = 73.87 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

8 TRAIT : CARELESS

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	Never	Sometimes	Total
Normal	71(64)	54(61)	125
Dull	49(56)	62(55)	111
Total	120	116	236

$$\chi^2 = 3.33 \text{ and } df = 1$$

∴ P lies between 0.05 and 0.10

∴ χ^2 is insignificant.

9 TRAIT : DEFIANCE TO DISCIPLINE

	Never	Sometimes	Total
Normal	92 (94)	33 (31)	125
Dull	86 (84)	25 (27)	111
Total	178	58	236

$$\chi^2 = 0.37 \text{ and } df = 1$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

10 TRAIT : INTERESTED IN HOME ACTIVITIES

	Never	Sometimes	Total
Normal	29 (20)	96 (105)	125
Dull	9 (18)	102 (93)	111
Total	38	198	236

$$\chi^2 = 10.19 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

11 TRAIT : UNCLEAN

	Never	Sometimes	Total
Normal	63 (61)	62 (64)	125
Dull	53 (55)	58 (56)	111
Total	116	120	236

$$\chi^2 = 0.27 \text{ and } df = 1$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

A₅ : DISTRIBUTION OF STUDENTS REPORTED BY THEIR MOTHERS FOR VARIOUS TRAITS

1 TRAIT : TALKATIVE (PERTAINING TO STUDY)

	Never	Sometimes	Total
Normal	120 ₍₁₂₁₎	5 ₍₄₎	125
Dull	109 ₍₁₀₈₎	2 ₍₃₎	111
Total	229	7	236

$$\chi^2 = \frac{(120-121)^2}{121} + \frac{(109-108)^2}{108} + \frac{(5-4)^2}{4} + \frac{(2-3)^2}{3}$$

$$= 0.008 + 0.009 + 0.25 + 0.333$$

$$= 0.6$$

$$\text{and df} = (2-1)(2-1)$$

$$= 1$$

∴ P lies between 0.30 and 0.50

∴ χ^2 is not significant

2. TRAIT : TALKATIVE (SOCIAL COMMUNICATIONS)

	Never	Sometimes	Total
Normal	12 ₍₇₎	113 ₍₁₁₈₎	125
Dull	1 ₍₆₎	110 ₍₁₀₅₎	111
Total	13	223	236

$$\chi^2 = 8.19 \text{ and df} = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

3 TRAIT : UNPUNCTUAL

	Never	Sometimes	Total
Normal	36 (29)	89 (96)	125
Dull	19 (26)	92 (85)	111
Total	55	181	236

$$\chi^2 = 4.66 \text{ and } df = 1$$

∴ P lies between 0.02 and 0.05

∴ χ^2 is significant at 0.05 level

4. TRAIT : TRUANT

	Never	Sometimes	Total
Normal	120 (93)	5 (32)	125
Dull	55 (82)	56 (29)	111
Total	175	61	236

$$\chi^2 = 64.64 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is highly significant

5. TRAIT : BULLYING

	Never	Sometimes	Total
Normal	36 (34)	89 (91)	125
Dull	29 (31)	82 (80)	111
Total	65	171	236

$$\chi^2 = 0.344 \text{ and } df = 1$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant.

6. TRAIT : TEMPER OUTBURSTS

	Never	Sometimes	Total
Normal	76 (63)	49 (62)	125
Dull	43 (56)	68 (55)	111
Total	119	117	236

$$\chi^2 = 11.49 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

7. TRAIT : TARDY

	Never	Sometimes	Total
Normal	79 (50)	46 (75)	125
Dull	14 (43)	97 (68)	111
Total	93	143	236

$$\chi^2 = 60.00 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is highly significant

8. TRAIT : CARELESS

	Never	Sometimes	Total
Normal	77 (63)	48 (62)	125
Dull	42 (56)	69 (55)	111
Total	119	117	236

$$\chi^2 = 13.33 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

9. TRAIT : DEFIANCE TO DISCIPLINE

	Never	Sometimes	Total
Normal	88 (68)	37 (57)	125
Dull	41 (61)	70 (50)	111
Total	129	107	236

$$\chi^2 = 27.56 \text{ and } df = 1$$

∴ P is less than 0.01

∴ χ^2 is significant

10. TRAIT : INTERESTED IN HOME ACTIVITIES

	Never	Sometimes	Total
Normal	15 (14)	110 (111)	125
Dull	11 (12)	100 (99)	111
Total	26	210	236

$$\chi^2 = 0.173 \text{ and } df = 1$$

∴ P lies between 0.50 and 0.70

∴ χ^2 is not significant

11. TRAIT : UNCLEAN

	Never	Sometimes	Total
Normal	69 (62)	56 (63)	125
Dull	48 (55)	63 (56)	111
Total	117	119	236

$$\chi^2 = 3.32 \text{ and } df = 1$$

∴ P lies between 0.05 and 0.10

∴ χ^2 is not significant.