Chapter 3

Methodology

This chapter focuses on the aims and objectives of the study and the research design including the variable taken into consideration, hypotheses and the instruments used for the study. It describes the various phases under which the research was carried out including the construction and standardisation of the instruments to measure personality dimensions of working and non-working children.

AIM OF THE STUDY :

The aim was to examine frustration level, aggression level, adjustment patterns and self-concept in the working and non- working children below the age of 16.

OBJECTIVES OF THE STUDY :

The present study had the following basic objectives.

1. To study differences in, frustration - aggression responses between the sample of working and non-working children below the age of 16.

2 To examine the differences in the adjustment pattern of the working and non - working children.

3. To study the difference in the self - concept of the non-working and working children below the age of 16.

4. To examine the relationship between frustration - aggression and adjustment patterns of the two groups of children (working and non-working).

5 To examine the relationship between frustration - aggression and self-concept of

the working and non-working.

6 To study the relationship between adjustment and self-concept of working and non-working children

HYPOTHESES :

1. It was presumed that the working children would be high on frustration as compared to the non-working children.

2. It was also assumed that the working children would be high on aggression as compared to the non- working children.

3 Working children would be low in adjustment as compared to non-working children. This assumption is based on the possibility that due to the feeling of insecurity and complexes arising out of economic, instability, necessitating them to work may adversely effect their adjustment level, at home and in other areas of adjustment.

4. Working children would have a better self-concept as compared to the non-working children

5 It may be said that if a child is not adjusted properly there is going to be a certain amount of frustration, which may lead to aggressive responses. That is, there will be positive correlation between frustration level and aggressive behaviour.

6 Following the above hypotheses (5) it was also assumed that frustration level would be positively correlated with adjustment levels in all the areas.

7 It was also assumed that the aggression level would be positively correlated with adjustment levels in all the areas.

8. There would be a negative relationship between frustration and self-concept. It may be said that if a child is highly frustrated he may show low self- concept.

9. The same will hold true with aggression dimensions. That is, aggression and self-concept would also be negatively correlated.

10. Adjustment level and Self-concept would be positively correlated. It may be said that if a child is well-adjusted, his Self-concept would be high i.e. he would think about himself in a positive manner.

SAMPLE :

The total sample size taken were 150 children (75 working and 75 non-working) hailing from lower socio-economic strata falling between the age group of 13 to 16 years of age. Out of 150 children 140 were boys and 10 were girls. The mean age of the sample was 14.5 years. Most of the non-working children were not going to school. The working children were working as hawkers and few were self-employed. The sample was taken from the slum areas of Baroda.

VARIABLES UNDER STUDY :

The following four dimensions were identified for the present study. These entire variables have been separately defined. This research program set out to test the difference between working children and non-working children on four psychological parameters (dimension).

FRUSTRATION :

Frustration condition is a condition of being thwarted in the satisfaction of a motive. The schedule used to measure the frustration level yielded one composite dimension.

No sub-factors emerged in factor analysis.

AGGRESSION :

Aggression is a behaviour which may have a positive or a negative outcome. In this dimension, following five factors emerged after the factor analysis :

[1] Parental defiance, blaming and manipulation.

[2] Obstructing behaviour.

[3] Sulking.

[4] Retaliation, and

[5] Aggression and non- co-operation.

ADJUSTMENT INVENTORY :

Adjustment may be defined as the process of interaction between the individual and his environment for the sake of bringing harmony between them This factor has four dimensions of adjustment.

[1] Home adjustment,

[2] Health adjustment,

[3] Social adjustment, and

[4] Emotional adjustment.

SELF– CONCEPT :

The Self-concept means individual's evaluation of himself, the appraisal of the self by the individual him-self. This variable has four dimensions related to

[1] Physical self-concept,

[2] Social self-concept,

[3] Temperamental self-concept, and

[4] Moral self-concept.

TOOL :

Four tools were used for the study. Two available instruments were used and two instruments were developed by the present researcher especially for the purpose of this study. These scales were (i) Frustration scale, and (ii) Aggression scale.

FRUSTRATION SCALE: (F.S.)

As mentioned above, this scale was developed exclusively for the present study

[a] **Scale construction and standardisation :**

Various steps of test construction were taken, like, item analysis, factor analysis. Reliability and validity were also worked out. The test was designed to study the individual's tendency for frustrating reactions in children

[b] **Item construction and item selection :**

Item construction was done on the basis of a survey data based on unstructured interviews of the working children on the streets, in tea stalls, vendors, and factories in G.I.D.C. area People who had experience of working with street children were also visited by the researcher at the Gandhi Labour Institute. It was an enriching experience for the researcher to have met people working in this field. Information was also collected from various organizations like NGO's and other people working

in this area of research. And all the information collected during these meetings were very helpful while constructing the scale. References from library were also taken in order to prepare items for the scale.

Initially, the total number of items selected for this scale was 96. Some of the items were structured and some were unstructured. These items were given to 10 experts for their opinion. These experts included academicians from different fields like, Psychology, Home Science, HRD and Social work, who could rate the items related to frustration. They edited and selected items on the basis of the description of each dimension. The experts were instructed to rate the items on the basis of two criteria, namely ;

(1) Suitability / applicability in the context and meaning of the dimension (as given to them) and

(2) Clarity / vagueness of the items (i.e., clarity of language and meaning).

The retained items were those on which there was 100 percent agreement among the experts. The omitted items were those which were not agreed upon by the experts on the basis of the above mentioned criteria.

Following the two criteria of item selection / editing, by the experts, 59 items were dropped. That means, only 37 items were retained. Some of these items (37) were slightly modified and rephrased according to the suggestions given by the experts.

(c) Procedure :

For the purpose of this study a 5 – point scale was given to the respondents. The respondents were given the following choice for each item ranging from,

Not at all = 1 Rarely = 2 Some times = 3 Usually = 4 Always = 5

were given. These alternatives were same for all the items but only the sequence of choice of answers were changed for every alternative items. For example, for first (1) item, the alternative given is not at all to always and for the third (3) item the choice of answers would be always to not at all. However, scoring system remained the same, that is, 'not at all ' to be scored as 1 and ' rarely ' as 2, ' sometimes 'as 3, 'usually ' as 4 and ' always ' as 5. This was done in order to avoid the effect of set. This happens because of the kinds of mental set. The subjects were asked to tick (✓) mark the most appropriate choice representing their opinion. Though the instructions were written on the scale, yet the researcher explained them to the respondents to enable them to comprehend. For this purpose, the researcher followed a standard instruction format to explain the items and different terms. They were also asked to write down their name and class on the top of the response sheet.

(d) Item Analysis :

Thirty-seven (37) items were left after the judges' opinion and these were administered to a group of 50 school children (20 girls & 30 boys). They were selected from standard 8 & 9. These children belonged to the lower middle socio-economic strata, between the age group of 13 to 16 years. The mean age was 14.5 years. These method followed for item analysis was to correlate items' score with the total score obtained by the respondents on the scale.

Pearson's Product Moment correlation was worked out for this purpose. For the retention of the items, the correlation (r) values had to be significant at .05 level. These criteria yielded only 22 items, which were significantly correlated to the total scale's scores. The results have been shown below in Table - 1.

Table - 1 showing the correlation values of 37 retained items after item analysis (n = 50)

Item no	r - values	Items
1	.25***	Do you resent if you are not allowed to go out with other children.
2	.33***	Do you ever feel that your parents liked your sister more than you.
3	.30***	Do you feel hurt when you do something good and it is not appreciated.
4	.22	Do you feel bad if somebody comes and praises your best friend in front of you.
5	.20	Do you share your problems with your family members.
6	.19	Do you feel that if you were old enough things would be different for example you could take care of the family.
7	.06	Do you feel secure at home.
8	.30***	Would you hurt somebody just to get even with him / her.
9	.38*	Would you feel miserable in a situation which is out of control.
10	.21	Do you easily get upset.
11	.15	Do you feel guilty after doing anything wrong.
12	.43**	Do you ever wish that things would be different from what they are.
13	.26***	Would you get upset if somebody said that he did not like you.
14	.51**	Do you feel bad if there is no source of enjoyment at home (like T.V, radio).

**p = <0.001; *p = <0.01; ***p = <0.05

Table - 1 showing the correlation values of 37 retained items after item analysis (n = 50)

Item no	r - values	Items
15	.26***	Do you feel bad when you don't get enough time to play with friends.
16	.51**	Do you sulk if you are not allowed to play for a long time.
17	.41*	Do you have a long list of things to be unhappy about.
18	43**	Do you wish you were born in some other family.
19	.29***	Would you do certain things out of compulsion.
20	.31***	Do you get angry when someone does not trust you.
21	.51**	Do you believe that if need be one should break all the rules and regulations of the society.
22	.35**	Do you remember your past and cannot forget some memories.
23	.08	Do you like the situation in which you are in control.
24	.26***	If there is not enough to eat would you fight with your parents.
25	.07	Would you leave a person who does not care for you.
26	.30***	Would you feel humiliated if your father just sat at home and did nothing.
27	.43**	Do you hate anybody.
28	.55**	Do you go by your own rules least bothering about the society
29	.04	Do you feel one should be able to change himself / herself according to the circumstances.
30	.11	Would you be friend with a person even if you know that he / she is not faithful to you.

**p = <0.001; *p = <0.01; ***p = <0.05

Table - 1 showing the correlation values of 37 retained items after item analysis (n = 50)

Item no	r - values	Items
31	.10	What would you do if your friend cheated you.
32	.27***	How would feel when your parents scold you in front of others.
33	.16	How would you feel when you want money or something important and your parents say they don't have any money.
34	.14	How do you feel when you see other children get whatever they want and you cannot.
35	.03	How do you feel if your parents were busy somewhere else and paid less attention to you.
36	.05	Are you close to your family.
37	.47**	Would you hate if things were not going according to your plan.

**p = <0.001; *p = <0.01; ***p = <0.05

The above 37 items were subjected to factor analysis. The results of factor analysis follows.

FACTOR ANALYSIS :

Factor analysis was done on those significant items, which were obtained by item analysis Separate set of data was collected for this purpose. The sample for this purpose were 50 school children (20 girls & 30 boys). These children were from standard 8 & 9, between the age group of 13 to 16 years. Belonging to the lower middle socio- economic strata, the mean age was 14.5 years. The data thus obtained was subjected to factor analysis.

Procedure :

Procedure for data collection were similar to that followed for item analysis. When it was ensured that the instructions were understood by the respondents and all the queries satisfied only then the administration of the scale was done. The factor loading based on Varimax rotation method have been given below. Since the items found were scattered over all the factors, hence no subfactor could be identified.

Table - 2 shows items with their factor loading values

FACTORS	ITEM NOS.	Loading Value
Factor 1	02	.88
Factor 2	32	.70
	01	.64
	09	.59
Factor 3	27	.78
	28	.63
Factor 4	14	.76
	21	.73
	17	.50
Factor 5	22	.70
	15	.54
Factor 6	26	.88
	37	.61
Factor 7	13	.83
	24	.51

After factor analysis seven items [no.3, 8,12,16,18, 19 and 20] yielded negative factor loading. These items with negative factor loading values were dropped from the final scale for the sake of convenience in scoring and analysis. That means,

only 15 items (22-7) were retained and used for final data collection. After the items of the English version of the test were finally factor analysed, the researcher decided to go for Hindi translation of the test, because of the nature of the sample.

RELIABILITY :

Hindi version of the test was used for calculating the reliability of the scale. While translating items, all standard procedure of translation was followed. That is, Hindi experts who knew English equally well-translated items into Hindi. The Hindi version was again retranslated into English by another psychologist. The original version in English was compared with the retranslated English version to ensure that exact meaning / sense was not lost.

Reliability of Hindi version of the test :

(a) Sample :

For these purpose 100 students (40 girls & 60 boys) were contacted from a school at Baroda. These children were from standard 8 and 9. The children came from lower middle socio-economic background and belonged to the age group of 13 to 16 years. The mean age was14.5 years

(b) Procedure :

The conduction was carried out in a class room situation. Though the instructions were written on the questionnaire, it was read out and explained by the investigator, so that instructions were clearly understood by the respondents. All doubts raised by the respondents were clarified. Respondents were asked to write down their name and class on top of the response sheet

and were also instructed to check the statements on a five-point scale ranging from, not at all 1 to always 5.

STATISTICAL ANALYSIS :

Data thus collected were subjected to split – half (odd – even) reliability estimate following Spearman-Brown Prophency formula (Garrett, 1966 page 331). The scores were split in odd-even item of the schedule. The two groups of score obtained after splitting were subjected to Spearman-Brown Prophency formula. This yielded the split-half reliability value for frustration scale. This reliability value along with reliability obtained by test-retest for Frustration have been given below in Table-3

Test –retest Reliability :

The procedure followed was same as above.

(a) Sample :

The sample contacted was same as was for the split-half reliability, i.e., same children were contacted for this study as well. Out of100 children only 70 students (30 girls and 40 boys) were available for the conduction of the repeat administration of the scale. These children were taken from standard 8 & 9 belonging to the lower middle socio-economic background. The age group was between 13 to 16 years; the mean age was 14.5 years. The data collected was subjected to test and the retest reliability test. The test – retest reliability value and split-half reliability of the test for frustration scale have been given below in Table - 3.

Table - 3 shows the reliability values by two methods

Scale	Reliability Values by	
	Split-half Method (n = 100)	Test-Retest Method (n = 70)
Frustration Scale	.67	.58

Reliability value for the test-retest method was not found to be consistent with the other reliability score, this could be due to the unavailability of the whole sample.

VALIDITY :

Guilford's validity formula was applied to find the validity scores of the tests. According to Guilford square root of reliability co- efficient can be taken as validity of a test (Guilford 1954). The validity value for split – half and test-retest validity scores are given below in Table - 4.

Table - 4 .shows validity values on the basis of the reliability values

Scale	Validity Values based on	
	Split-half Method	Test-Retest Method
Frustration Scale	.81	.76

Since the experts have confirmed these items, the scale has face validity and now the statistical validity value is also given.

SCORING :

The scoring of the test i.e., frustration scale was done as 1,2,3,4,5, on a five point

scale from, not at all to always. If the respondents tick mark the first alternative, they will get 1 and if they tick mark the second alternative they will get 2; if they tick mark third alternative, they will get 3 and if they tick mark fourth one they will get 4 score; the fifth alternative will be given a 5 score. The total score on this scale will denote the level of frustration, if high or low.

AGGRESSION SCALE : (A.S.)

The present researcher for the present study developed this scale.

1. Scale construction and standardisation :

This part reports the various stages of test construction, which involved item construction, item analysis, factor analysis, reliability and validity of the scale.

The scale was designed to study individual's tendency for aggressive behaviour. Thus, the main objective of the test was to identify aggressive behaviour in children.

(a) Item construction and selection :

Item construction was done on the basis of a survey, conducted through unstructured interviews of the working children on the streets, in tea stalls, and factories in G.I.D.C. Industrial areas. Information was also collected from various organisations like NGO's and other people working in this field. Researcher also visited Gandhi labour institute met people who had experience of working on this subject of street children. These meetings and visits were indeed enriching experiences, which did enhance researcher's understanding of the various details, which proved quite valuable while constructing the items. In writing of items, help was also taken from library for the available literature on aggression.

The total number of items selected after initial editing for aggression scale was 105. Some of the items were open– ended, for example,' Do you easily get angry ?' Some other were unstructured, some were closed -ended structured items. The draft version of the scale having 105 items was given to 10 experts for their opinion These experts were academicians drawn from different fields like, Home science, Human Resource Development, Social work and Psychology. These experts had the expertise in the field of personality and could rate the items related to aggression. The experts were requested to edit, select or reject items on the basis of the description of each dimension, which were given to them. The experts were instructed to rate the items on the basis of two criteria, namely:

[1] Suitability / applicability in the context and meaning of the dimension (as given to them), and

[2] Clarity / vagueness of the items i.e., clarity of language and meaning)

The criteria for retention of items were 100 percent agreement among the experts on each item. That means, after getting the expert's opinion, all those items were rejected which were not approved on either of the two criteria given above. This method ultimately allowed the researcher to retain 42 items out of 105 items given to the experts.

Procedure :

A four point scale was given to the respondents, the choices given ranging from

Never = 1 *Rarely = 2* *Sometimes = 3* *Usually = 4*

were given for each item. Scoring system remained the same that is 'Never' to be scored as 1 and 'Rarely' as 2, 'Sometimes' as 3, and 'Usually ' as 4. The subjects

were asked to tick (✓) mark the most appropriate choice representing their opinion. Though the instructions were written on the scale. Still they were read out and explained by the researcher to the respondents in order to make them under stand it well. The researcher followed a standard explanation format to explain the items and different terms.

ITEMS ANALYSIS :

As mentioned above, researcher was left with 42 items after judges' opinion. These items were put to item analysis. The items were administered to a group of 50 school children of Baroda (20 girls & 30 boys), from standard 8 & 9. These children belonged to the lower middle class strata falling between the age group of 13 to 16 years. The mean age was 14.5 years.

The method followed for item analysis was to correlate items' score with total score obtained by the respondents on the scale. Pearson's correlation (r) values had to be significant at .05 level. This criteria yielded only 30 items which were positively and significantly correlated to the total scale's scores. The results have been shown below in Table - 5.

Table - 5 showing the correlation values of 42 retained items after item analysis (n = 50)

Item no	r - values	Items
1	.13	If a person plays mischief with you would you hit him.
2	.42**	Would you be rude to a person who spoke rudely to you.
3	.19	Would you ask somebody else to fight for you.
4	.32***	If you are losing in a game would you withdraw and stop the game immediately.
5	.10	Are you reluctant to help a person if you don't like him.
6	.42**	Would you insult your elders if they tried to impose their view on you.
7	.52**	Do you gossip about someone you are not happy with.
8	.21	If your friends made fun of you, would you stop talking to the them.
9	-.16	Would you just sit and listen if your friend is criticised by others.
10	.67**	Do you reply back to your elders when you are angry.
11	.30***	Would you argue with a person who tried to dominate you.
12	-.01	If your friend gets into trouble, would you try to help him out.
13	.43**	Do you prefer to just sit without speaking anything and not co-operate with your family members if you are angry.
14	.46**	If you don't like a friend, would you try to spread rumour about him / her.
15	.31***	If your brother / sister take away something from you, would you fight with him / her.

**p = <0.001; *p = <0.01; ***p = <0.05

Table - 5 showing the correlation values of 42 retained items after item analysis (n = 50)

Item no	r - values	Items
16	.43**	Do you sulk if your parents do not give something you want.
17	.23	Would you prevent others from getting first in the race where you are taking part.
18	.62**	Would you try to tease a person by making nasty remark.
19	.26*	If you are in a bad mood would you refuse to speak to others.
20	.36**	Would you set a trap so that your friend gets into trouble.
21	.55**	Do you tend to blame a person if you don't like him.
22	.36**	Would you fight with a person much younger to you if he / she tried to act smart in front of you.
23	.34**	If you find that the player of the other team is cheating would you beat that person.
24	.49**	Would you criticise your friend at his back.
25	.46**	If you don't like a friend would you set an obstacle on his / her way so that he / she dose not reach his goal.
26	.32*	Somebody you don't like ask you a question would you just look away and don't answer.
27	.35**	Would you fight with a person who said something bad about your father.
28	-.04	If your parents were very angry at your brother / sister would you come for his / her rescue.

**p = <0.001; *p = <0.01; ***p = <0.05

Table - 5 showing the correlation values of 42 retained items after item analysis (n = 50)

Item no	r - values	Items
29	.39*	Would you refuse to co-operate if you feel that people are not in your favour.
30	.35*	Would you have a fight with your sibling over a piece of sweet, would you grab it all and prevent others from sharing it.
31	.37*	If any one tries to humiliate you , would you hit that person.
32	.51**	If you are asked to do some work by your mother would you refuse her.
33	.24***	Do you beat your brother / sister in the absence of your parents.
34	.09	If somebody says something bad about your friend, do you find it difficult to defend him.
35	.16	Would you fight with a person if he hits you by accident while crossing the road.
36	.22	Would you beat a person if he spoils your clothes.
37	.39*	If you are in a bad mood, would you refuse to speak to others.
38	.46**	Would you fight with a person who complained to your parents about your behavior.
39	.40**	Would you argue, if you are scolded for coming late.
40	.43**	If you are unhappy with someone, would you refuse to talk to him.

**p = <0.001; *p = <0.01; ***p = <0.05

Table - 5 showing the correlation values of 42 retained items after item analysis (n = 50)

Item no	r - values	Items
41	.60**	Would you put the blame on somebody else for your own mistake.
42	.12	Would you gang up with others against your friend.

**p = <0.001; *p = <0.01, ***p = <0.05

After the item analysis 42 items were left and these items were subjected to factor analysis. The result of factor analysis follows.

FACTOR ANALYSIS :

Separate set of data was collected for this purpose on a student's sample of a school. All together 50 children (20 girls & 30 boys) were contacted to fill the scale of 31 items. These children were from standard 8 & 9. They belonged to the lower-middle class strata, falling between the age group of 13 to 16 years. The mean age was 14.5 years. The data obtained were subjected to factor analysis.

Procedure :

Procedure for data collection was similar to that followed for items analysis. The instructions were read out to the respondents to make them understand. The scale was administered only after the respondents had understood the instructions and all their queries were satisfied The factor loading based on Varimax rotation has been given below. The analysis yielded 5 factors. The five factors are as mentioned in the Table - 6 given below.

Table - 6 Description of five Factors

FACTORS	ITEM NOS.
Factor 1	Parental defiance, blaming and manipulations : Individual's tendency to blame elders, showing revolting behaviour and also manipulate the situation as and when required
Factor 2	Obstruction behaviur : Deriving pleasure by creating hurdles for the other person.
Factor 3	Sulking : Throwing tantrum when one's need / wants are not fulfilled.
Factor 4	Retaliation : Individual's tendency to get even with those who have caused humiliation / pain.
Factor 5	Aggression and non-cooperation : Showing temper / anger by not cooperating when things don't go according to one's wish.

Table - 7 The results have been shown below with factors and their loading values

FACTORS	ITEM NOS.	Loading Value
Factor 1	**41**	**.78**
	10	.77
	06	.68
	20	.68
	32	.67
Factor 2	**25**	**.79**
	24	.79
	14	.76
	21	.43
	07	.42
	30	.41
Factor 3	**37**	**.82**
	13	.82
	04	.79
	26	.76
	40	.63
Factor 4	**39**	**.78**
	22	.78
	11	.69
	38	.59
	27	.06
Factor 5	**23**	**.81**
	29	.72
	02	.71
	31	.60
	16	.58

After item analysis, out of 30 items four items (Nos.15,18,19 and 33) yielded negative factor loadings. These negatively loaded items were dropped from the final scale. That means, only 26 items (30-4) were used for final data collection for the study. These items with their serial numbers in the test have been shown in the Table - 8.

Table - 8 shows Item nos. in each Factor as given in the Aggression Scale

Factors	Item nos. in Scale
Factor 1 (Parental Defiance, Blaming and Manipulation)	3, 5, 11, 21, 24
Factor 2 (Obstructing Behaviour)	4, 7, 9, 13, 17, 19
Factor 3 (Sulking)	2, 14, 15, 25, 26
Factor 4 (Retaliation)	6, 10, 16, 22, 23
Factor 5 (Aggression and Non-cooperation)	1, 8, 12, 18, 20

RELIABILITY :

To find out the reliability of the scale, Hindi version of the test was used. While translating the items, all the standard procedures of translation were followed. That is, items were translated into Hindi by Hindi experts who knew English equally well. The Hindi version was again retranslated into English by another psychologist. The original version (in English) was compared with the retranslated version to ensure that exact meaning/sense was not lost in translation.

Reliability of Hindi version of the test

[a] Sample :

Respondents were 100 students (40 girls and 60 boys) of a high school at Baroda. They were from standard 8 & 9. These children hailed from lower middle socio- economic strata, belonged to the age group of 13 & 16 years. The mean age was 14.5 years.

[b] Procedure :

The data was collected in a class room situation. Though the instructions were printed on the questionnaire, it was read out and explained by the investigator, so that the instructions were clearly understood by the respondents. All doubts, raised by the respondents, were clarified. Respondents were asked to write their name & class on top of the response sheet and were also instructed to check the statements on a 4 – point scale ranging from Usually (4) to never (1).

(c) Statistical analysis:

Data thus collected were subjected to split–half (odd – even) reliability estimate following Spearman – Brown Prohency formula (Garrett, 1966 page 339).

$$rtt = \frac{2r}{1+r}$$

Where r = correlation

The scores were split on odd – even item basis of the schedule. These two groups of score obtained by splitting were subjected to Spearman–Brown Prophency formula.This yielded the split-half reliability value for aggression dimension. This reliability value along with reliability obtained by test–retest method have been given

below Table - 9.

Test –retest Reliability :

The procedure followed was same as for frustration scale. The same group of sample, i.e., 100 children comprising both girls and boys were used. Only 70 students were available (30 girls & 40 boys) for the conduction of the repeat administration of the scale. These children were from standard 8 & 9, belonging to the lower middle class socio- economic strata between the age group of 13 to 16 years. The mean age was 14.5 years. The collected data were subjected to test –retest reliability test. Pearson's r was worked out for correlating the two sets of scores obtained in first test and the re-test administration. The test- retest reliability values and the split-half reliability of the test for Aggression scale have been given below in Table - 9.

Table - 9 showing reliability values obtained by two methods on the sample of the pilot study

Scale	Reliability Values by	
	Split-half Method (n = 100)	Test-Retest Method (n = 70)
Aggression Scale	.79	.53

The above Table - 9 shows high reliability by split-half method but low test-retest reliability value does not show consistent results, this could be due to the unavailability of the total sample. It may also be due to the small sample size.

VALIDITY :

Guilford's (1954) validity formula was applied to find the validity scores of the test.

According to Guilford, square root of the reliability value of a test (Guildford, 1954) can be taken as an index of validity. The validity value of aggression scale has been shown in Table - 10.

Table - 10 showing validity scores obtained on the basis of reliability scores

Scale	Validity Values based on	
	Split-half Method	Test-Retest Method
Aggression Scale	.89	.73

Since the experts have confirmed these items, the scale has face validity and now the statistical validity value is also given.

SCORING :

The scoring of the test was done as 4, 3, 2, and 1, ranging from always (4) to never (1). If the respondent marked the ' first ' alternative, he / she will get 4 score, and if he / she chooses the second alternative he / she will get 3 score and if the third alternative is chosen, he / she will get 2 score and if he /she marks the 'fourth' alternative he /she will get 1 score. The total score on each dimension will give a score related to that dimension. The total score for all 5 (five) dimensions will show over all score for the entire scale. Higher the score on the scale, higher will be aggressive behaviour of the respondents.

ADJUSTMENT INVERTORY : (A.I)

Bell's adjustment inventory is well known in psychological literature dealing with adjustment. It was adapted and standardized by Mohsin and Hussain (1969) in Hindi.

This version of Mohsin and Hussain (1969) was readapted for the present use. This Inventory (Mohsin and Hussain, 1969) consists of 135 items. The inventory measures adjustment in four areas, viz,- home, health, social and emotional areas– separately. Besides individual scores in four areas it yields a composite, over all, adjustment score. Home adjustment is expressed in terms of satisfaction or dissatisfaction with home life. Health adjustment is expressed in terms of illness. Social adjustment in terms of shyness, submissiveness, introversion. Emotional adjustment is expressed in terms of depression, nervousness, etc,. High score on the inventory indicate low adjustment.

The present researcher adapted the inventory by making major reduction in number of items. This was done by taking the following steps.

(a) Items selection :

For the present study, 28 items were selected from 135 items i.e., 7 (seven) items from each area were picked up for this purpose. The criteria for selecting the items were three, viz.,

(i) suitability of items for the present sample, i.e., relevance for the sample. The next criteria,

(ii) was the understandability of the items for the present sample who were out of school children.

(iii) Simplicity of language of a particular item was taken as the third criteria. The socio–economic status of the sample was considered a vital factor in the choice of items. However, reliability of this highly truncated scale was worked out as described below.

Table - 11 shows nos. of items in the four dimension

Areas of Adjustment	No. of items identified / selected
Home Adjustment	7
Health Adjustment	7
Social Adjustment	7
Emotional Adjustment	7
Total items	28

(b) Sample :

150 children of both sexes were selected. They belonged to the lower socio - economic strata, belonged to the age group 13 to 16 years. The mean age was 14.5 years. There were130 boys and 20 girls.

(c) Procedure for administration :

Although no time limit was imposed, the questionnaire normally takes about 15 –20 minutes. Although the instructions for answering the questions were given on the inventory, still the researcher explained the instructions to the respondents, in order to make them understand it well. This was done as most of the respondents were not educated and hence could not read or write. After giving the instructions, all the necessary demographic information like name, place (where they stay), the kind of work they do, was noted down. The researcher, before taking down the responses ensured that, the respondents understood the instructions properly.The inventory (adjustment inventory) in this present research was administered individually but,

can also be administered in groups, at a time when respondents are capable of filling it themselves.

(d) Scoring Method :

The same response categories as provided by the author (Mohsin and Hassain, 1969) was accepted for the present version as well. The inventory is scored simply by counting the number of 'Yes' or 'No' responses(depending upon the scoring system) marked in each area of adjustment. The responses to which the score is to be given are noted below. Each corresponding response is to be given a score of one. Higher the score on any dimension indicated poorer the adjustment of the respondents on that dimension. The sum of scores obtained in all 4 (four) areas gives a measure of total adjustment level.

Table - 12 Response categories and scoring system for revised version of Adjustment Inventory

Items Home Adjustment		Items Health Adjustment		Items Social Adjustment		Items Emotional Adjustment	
2	Yes	1	Yes	6	No	3	Yes
5	Yes	4	Yes	9	Yes	7	Yes
8	Yes	11	Yes	10	No	15	Yes
12	Yes	13	Yes	17	No	16	Yes
14	Yes	19	Yes	21	Yes	20	Yes
18	Yes	22	Yes	23	No	25	Yes
24	Yes	26	Yes	27	No	28	Yes

(e) Reliability of the Revised Inventory :

The reliability value was found out by applying Cronbach's alpha formula.

$$\alpha = \frac{n}{n-1}\left(1 - \frac{\Sigma vi}{Vt}\right)$$

Where n = Total number of items

Σvi= Total variance of the part

Vt = Total variance

The reliability scores thus obtained have been given in table below.

Table - 13 Reliability value of the original inventory of Mohsin and Hussain (1969) and the present Revised Version

Dimension	Odd-even* reliability (1969) (n = 100)	α - Value** (n = 150)
Home	.806	.765
Health	.824	.956
Social	.738	.838
Emotional	.855	.799
Overall	.932	.840

*by Mohsin & Hussain(1966), **reliability value of the present study.

The above Table - 13 indicates that the present version of the scale is sufficiently reliable and stable to be used. However, given the nature of the present sample it would be prudent on our part to add that future researcher will ascertain its

usefulness on other types of sample. At the present, the present researcher can recommend for a limited use of the present form on similar sample only.

However, when compared to Mohsin and Hussain (1969) values, the present reliability values can also be considered fairly useful.

Validity of the Revised Version :

Again, as in other cases, validity of the present revised inventory was calculated by finding out the square root of reliability values (Guilford, 1954). This method yielded the following values.

Table - 14 Validity values of the present Revised Version

Serial Number	Dimensions of Adjustment	Validity Values
1	Home	.87
2	Health	.98
3	Social	.92
4	Emotional	.89

The result shows that it has fairly high reliability.

SELF- CONCEPT QUESTIONNAIRE : (S.C.Q)

The self–concept questionnaire of Saraswat (1989) provides six separate dimensions of self–concept, viz; physical, social, intellectual, moral, educational and temperamental. It also gives a total self–concept score. However, for the purpose of the study, two dimensions viz; intellectual and educational were dropped as they were not considered relevant for the present sample. The children of the present sample are not educated

and are not going to school. Since these two dimensions viz, intellectual and education are related to education and intellectual activities, they were dropped because the children used in this study are not literate and were not expected to indulge in these activities.

The operational definition of self –concept dimensions as given by Saraswat (1989) have been given below.

(1) Physical : Individual's view of his / her body, health, physical appearance and strength.

(2) Social : Individual's sense of worth in social interactions.

(3) Temperamental : Individual's view of their prevailing emotional state or predominance of a particular kind of emotional reaction.

(4) Moral : Individual's estimation of their moral worth, right and wrong activities.

Table - 15 shows the item nos. included in the four dimensions of self-concept used for the present study

Dimensions of Self-Concept	Item numbers in the questionnaire
Physical Self-Concept	2, 3, 7, 12, 14, 17, 19, 20
Social Self-Concept	1, 6, 13, 23, 24, 27, 30, 32
Temperamentall Self-Concept	4, 8, 9, 10, 11, 15, 16, 18
Moral Self-Concept	5, 21, 22, 25, 26, 28, 29, 31
Total items	32

a) Item selection :

The original inventory has 48 items but, as mentioned above, only four dimensions having 32 items are used for the present purpose. Each dimension contains eight items. Each item is provided with five alternative responses. There is no time limit but generally 20 minutes have been found sufficient for responding to all the items. Instructions for the administration of the inventory are also given on the test booklet.

b) Sample :

150 children of both sexes were selected. They belonged to the lower socio - economic strata, falling between the age group 13 to 16 years. The mean age was 14.5 years. There were130 boys and 20 girls.

c) Procedure :

For the administration of the test, the respondents were first made comfortable and put at ease. All the queries of the respondents were answered to their satisfaction and when it was made sure that the respondents were relaxed, all the preliminary information like, name, place where he / she stays, the kind of job he / she does, etc were noted down. After these preliminaries, the instructions were read out to the respondents for them to understand what they were supposed to do. Before taking down the responses, it was insured that the instructions were clearly understood by the respondents. The inventory, in the present research, was administered individually to each respondent. However, it can also be administered in-group situations.

Scoring Method :

Each respondents was provided with five alternatives to give his / her responses ranging from most acceptable (5) to least acceptable (1) description of their self – concept on each item. The alternatives of all responses were arranged in such a way that the scoring system for all the items would remain the same, i.e., ranging as 5, 4, 3, 2 and 1. Some of the items were negatively worded. Whether the items are positive or negative in expression, if the respondents put tick (✓) mark for the first alternative, the score is 5, for the second alternative the score is 4, for the third alternative score is 3, for the fourth it is 2 and for the fifth and the last alternative the score is 1. The scores for negative items were converted into positive. The summated score of all the 32 items provides the total self – concept score of an individual. A high score on this inventory indicates a higher self – concept. So, if all the score of each item on a particular dimension were added it would give a total score on that dimension. That means scores can be analysed both dimension-wise as well as in totality of the inventory.

Realibility :

Reliability of the inventory was found by test – retest method and it was found to be 91 for the total self – concept measure. Reliability coefficient of its various dimensions varies from .67 to .88 (Saraswat, 1989).

The present researcher also tried out reliability value by Cronbach's alpha (α) coefficient for scores of various dimensions obtained on the sample (150 children) used for the present research. They are cited below.

Table - 16 shows reliability values by two different methods on each sub-dimensions

Serial No.	Dimensions of Self-Concept	Croanbach's Realibility Value (n = 150)	Saraswat's Test-Retest Reliability Value (n = 1000)
A	Physical S.C.	.61	.77
B	Social S. C.	.84	.83
C	Temperamental S. C.	.87	.79
D	Moral S. C.	.84	.67
	Overall	.79	.91

*Present data.

Reliability value obtained for the present study was found to be quite high, signifying the high reliability of the test.

Validity :

Saraswat (1989) found validity of the scale by the method of expert's opinion. The validity values were also calculated on the basis of the reliability values of the revised version.

Table - 17 Validity values of the present Revised Version

Serial Number	Dimensions of Self-Concept	Validity Values
1	Physical	.78
2	Social	.92
3	Temperamental	.93
4	Moral	.92
	Overall	.89

The validity values were found to be fairly high for this study. In fact high reliability and validity values of the scales used for the present study indicates that they may be quite useful on Indian sample in future also.

PROCEDURE :

These four Hindi versions of Frustration, Aggression, Adjustment and Self-concept scales were used for the final data collection. Each scale was administered to each respondent of the sample individually and personally. In all 150 children (working and non-working children) were administered these scales. Data collected thus, was grouped and put to statistical analysis.

STATISTICAL ANALYSIS :

Analysis of variance (ANOVA), Student's t test, and Pearson Product Moment Correlations were computed for each variable i.e., Frustration, Aggression, Adjustment and Self-concept, their dimensions and also statementwise analysis for each dimension.

Table - 18

ANOVA Table for Frustration scores for working and non-working children on Frustration Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	116.1600	116.1600	2.9909	0.0858
Within Groups	148	5748.0000	38.8378		
Total	149	5864.1600			

This set of data related to Frustration scores of working and non-working children were put to ANOVA as well as t-test analysis. No significant result was obtained.

Table - 19

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Frustration Scale

Scale	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
Frustration	Working	30.28	0.72	6.27	1.76	1.90	not significant
	Nonworking	32.04	0.72	6.20			

Above Table - 19 shows means, SEs, SDs, mean difference and t-values for the Frustration dimension for the working and non-working groups and t-value was not significant. That means, the groups did not differ in their frustration level though the mean value was higher for the non-working children. The possible score range on Frustration scale was from 15 to 75, mid point being 45. Looking from this angle, we can say that both the groups were less frustrated.

Table - 20

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Frustration items for working and non-working children

ITEM	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
1	Working	2.85	0.16	1.34	-0.72	3.31	<0.001
	Nonworking	3.57	0.16	1.37			
2	Working	1.41	0.09	0.76	0.03	0.27	not significant
	Nonworking	1.44	0.07	0.64			
3	Working	1.75	0.11	0.96	0.10	0.65	not significant
	Nonworking	1.65	0.10	0.86			
4	Working	2.95	0.17	1.48	-0.64	2.58	<0.05
	Nonworking	3.59	0.17	1.43			
5	Working	2.05	0.14	1.25	0.093	0.47	not significant
	Nonworking	1.96	0.14	1.17			
6	Working	2.67	0.14	1.25	-0.65	3.32	<0 001
	Nonworking	3.32	0.15	1.32			
7	Working	1.81	0.11	0.93	0.34	2.87	not significant
	Nonworking	1.47	0.07	0.64			
8	Working	2.00	0.13	1.16	-0.24	1.29	not significant
	Nonworking	2.24	0.12	1.05			
9	Working	1.85	0.12	1.06	0.20	1.36	not significant
	Nonworking	1 65	0.11	0.95			
10	Working	1.89	0.12	1.06	-0.30	1.60	not significant
	Nonworking	2.19	0.14	1.17			
11	Working	1.57	0.10	0.90	0.37	2.91	<0.01
	Nonworking	1.20	0.07	0.64			
12	Working	1.52	0.12	1.07	0.17	1.08	not significant
	Nonworking	1.35	0.08	0.69			

Table - 20 (continued...)

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Frustration items for working and non-working children

ITEM	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
13	Working	1.88	0.13	1.14	0 04	0.24	not significant
	Nonworking	1.84	0.09	0.81			
14	Working	2.04	0.15	1.29	0.71	3.67	<0.001
	Nonworking	2.75	0.15	1.27			
15	Working	2.03	0.13	1.09	0.20	1.16	not significant
	Nonworking	1.83	0.11	0.94			

From the above Table - 20 showing mean, SEs, SDs, mean difference, t-value for each item of the Frustration scale for the working and non-working children. Out of 15 t-values, 5 Items nos. (1, 4, 6, 11 and 14) were significant. In case of Item nos. 1, (Not allowed to go out), 4 (Disliked by anyone) and 6 (Less time spent with friends) and 14 (Getting upset/angry), the mean values were high for the non-working groups. Whereas in case of Item no. 11 (Father being unemployed), the working children showed higher mean frustration level.

However, a closer look at the table reveals that none of the two groups can be counted as excessively frustrated. Since scores on each item could range from 1 (one) to 5 (five), mid point being 3, we can say that, generally speaking, both groups are less frustrated. Only in case of Item nos. 1 (Not allowed to go out), 4 (Disliked by anyone) and 6 (Not allowed to play for a longer time) means for the non-working group crossed 3 indicating high frustration level in this group.

Table - 21

ANOVA Table for Factor 1 (Parental defiance, blaming and manipulation) for working and non-working children on Aggression Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	45.9267	45.9267	5.0702	0.0258
Within Groups	148	1340.6133	9.0582		
Total	149	1386.5400			

Table - 22

ANOVA Table for Factor 2 (Obstructing for working and non-working children on Aggression Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	16.6667	16.6667	1.2480	0.2657
Within Groups	148	1976.4267	13.3542		
Total	149	1993.0933			

Table - 23

ANOVA Table for Factor 3 (Sulking) for working and non-working children on Aggression Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	443.7600	443.7600	51.3847	0.0000
Within Groups	148	1278.1333	8.6360		
Total	149	1721.8933			

Table - 24

ANOVA Table for Factor 4 (Retaliation) for working and non-working children on Aggression Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	233.1267	233.1267	26.5624	0.0000
Within Groups	148	1298.9333	8.7766		
Total	149	1532.0600			

Table - 25

ANOVA Table for Factor 5 (Aggression and non-cooperation) for working and non-working children on Aggression Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	478.8267	478.8267	40.9961	0.0000
Within Groups	148	1728.6133	11.6798		
Total	149	2207.4400			

This set of data related to Aggression scores of working and non-working children were put to ANOVA as well as t test analysis. This yielded significant results in case of Factor 1 (Parental defiance, blaming and manipulation), Factor 3 (Sulking), Factor 4 (Retaliation) and Factor 5 (Aggression and non-cooperation).

Table - 26

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Aggression Scale for working and non-working children

Dimensions	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
Factor 1	Working	9.03	0.41	3.51	1.1	2.40	<0.05
	Nonworking	10.13	0.28	2.41			
Factor 2	Working	9.37	0.44	3.5	0.67	1.2	not significant
	Nonworking	10.04	0.41	3.8			
Factor 3	Working	12.97	0.37	3.21	3.44	7.9	<0.001
	Nonworking	16.41	0.31	2.65			
Factor 4	Working	11.89	0.37	3.17	2.49	4.98	<0.001
	Nonworking	14.38	0.32	2.75			
Factor 5	Working	12.69	0.44	3.78	3.6	6.1	<0.001
	Nonworking	16.27	0.35	3.01			

The above Table - 26 showing mean, SEs, SDs, mean difference and t-values for factors in aggression scale for the working and non-working groups. Out of 5 t-values, four differences were significant. And on all the four factors, i.e., Factor 1 (Parental defiance, blaming and manipulation), Factor 3 (Sulking), Factor 4 (Retaliation) and Factor 5 (Aggression and non-cooperation) dimension of aggression, the mean values were higher for the non-working groups, showing that the non-working group was likely to be more aggressive than the working group. However, each of these dimension had 5 items (except in case of Factor 2 which contained six items) which were to be scored on 4 point scale ranging 1 to 4. That means, the possible score range for each of these dimension may vary from 4 to 20, mid-point being 12, looking from that angle, we can say that only on Factor 3, 4, and 5 the non-working group are really aggressive. On Factor 1 both groups are on the lower side of the spectrum, i.e., low on aggression.

Table - 27

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Parental defiance, blaming and manipulation dimension (Factor 1) of aggression for working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
3	Working	1.40	0.095	0.82	-0.29	2.15	<0.05
	Nonworking	1.69	0.112	0.97			
5	Working	1.95	0.14	1.18	-0.90	5.21	<0.001
	Nonworking	2.85	0.11	0.98			
11	Working	1.52	0.12	1.07	0.16	1.00	not significant
	Nonworking	1.36	0.096	0.83			
21	Working	2.40	0.14	1.24	-0.30	2.00	<0.05
	Nonworking	2.72	0.09	0.76			
24	Working	1.76	0.13	1.15	0.25	1.50	not significant
	Nonworking	1.51	0.09	0.74			

Above Table - 27 shows mean, SEs, SDs, mean difference and t-values for the items of Parental defiance, blaming and manipulation dimension of aggression for the working and non-working children. Out of 5 t-values, only three were significant that is, the differences in the means of working and non-working were significant. These items were, Item nos. 3 (Disrespectful to your elder), 5 (Reply back to elders), and 21 (Don't listen to your mother). On all these items, the mean values were higher for the non-working children as compared to the working children, indicating that non-working children are likely to show more aggressive behaviour though both on the lower side.

However, again since scores on each item could range from 1 (one) to 4 (four), mid point being 2.5, we can say that, both groups were low on aggression. Except in case of Item nos. 5 and 21 where the mean values were high for the non-working groups.

Table - 28

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Obstructing behaviour dimension (Factor 2) of aggression for working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
4	Working	1.71	0.12	1.04	-0.18	1.26	not significant
	Nonworking	1.89	0.11	0.95			
7	Working	1.57	0.11	0.96	0.067	0.55	not significant
	Nonworking	1.51	0.09	0.76			
9	Working	1.33	0.09	0.81	-0.34	2.36	<0.05
	Nonworking	1.67	0.097	0.84			
13	Working	1.32	0.09	0.81	-0.11	0.72	not significant
	Nonworking	1.43	0.097	0.84			
17	Working	1.57	0.11	0.98	0.26	2.16	<0.05
	Nonworking	1.31	0.09	0.75			
19	Working	1.87	0.14	1.19	-0.37	2.02	<0.05
	Nonworking	2.24	0.14	1.24			

From Table - 28 showing mean, SEs, SDs, mean difference and t-values for the items of Obstructing behaviour dimension of aggression for the working and non-working children. Out of 6 t-values, only three (Item nos. 9, 17, and 19) were significant. In case of Item nos. 9 (Disliking and blaming) and 19 (Fighting behaviour) the mean values obtained were higher for the non-working group and in case of Item no. 17 (Setting an obstacle) the mean value was higher for the working children.

Overall picture indicates that the non-working children were found to be more obstructively aggressive than the working children. However, a closure look at the table reveals that none of the two groups can be counted as excessively aggressive since all the mean values are on the lower side.

Table - 29

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Sulking dimension (Factor 3) of aggression for working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
2	Working	2.24	0.12	1.06	-0.84	4.72	<0.001
	Nonworking	3.08	0.12	1.04			
14	Working	2.71	0.12	1.10	-0.74	4.77	<0.001
	Nonworking	3.45	0.09	0.78			
15	Working	3.16	0.12	1.07	-0.48	3 60	<0.001
	Nonworking	3.64	0.08	0.65			
25	Working	2.69	0.14	1.19	-0.78	4.48	<0.001
	Nonworking	3.47	0.10	0.86			
27	Working	2.17	0.13	1.08	-0.60	3.58	<0.001
	Nonworking	2.77	0.10	0.83			

From the Table - 29 showing mean, SEs, SDs, mean difference and t-values for the items in Sulking dimension of aggression for the working and non-working groups. Out of 5 t-values, all were significant. That is, the differences in the means of the working and non-working children were found significant on Item nos. 2 (Loosing and withdrawing), 14 (Bad mood, stop talking), 15 (Refusing to cooperate when angry), 25 (Angry and stop talking), and on 26 (Ignoring the person, you dislike), on all these items the mean values were higher for the non-working groups as compared to the working groups. From the above results it can be inferred that the working children are less likely to be aggressive.

However in case of significant results, the score range from 1 (one) to 4 (four) and the mid point being 2.5, looking at the table in detail reveals that the non-working group were found to be high on all the items, whereas the working groups were high on item nos. 14, 15, and 25.

Table - 30

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Retaliation dimension (Factor 4) of aggression for working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
6	Working	2.39	0.13	1.16	-0.46	2.89	<0.01
	Nonworking	2.85	0.11	0.98			
10	Working	1.80	0.13	1.14	-0.13	0.62	not significant
	Nonworking	1.93	0.15	1.28			
16	Working	3.32	0.13	1.12	-0.41	2.55	<0.05
	Nonworking	3.73	0.09	0.76			
22	Working	2.45	0.15	1.27	0.98	5.35	<0.001
	Nonworking	3.43	0.10	0.86			
23	Working	1.93	0.11	0.96	-0.51	3.52	<0 001
	Nonworking	2.44	0.09	0.78			

The above Table - 30 shows mean, SEs, SDs, mean difference and t-values for the items on Retaliating dimension of aggression for the working and non-working groups. Out of 5 t-values only four mean differences were significant. In case of Item nos. 6 (Dominating), 16 (Fight with a person), 22 (Complained to your parents) and on 23 (Argue when scolded). On all these items the mean values found were higher for the non-working children. High score indicate high on aggression. So it may be inferred from the above results that the working children were found to be less aggressive than the non-working children.

Since the score ranges on each item from 1 (one) to 4 (four), the mid point being 2.5, looking at the results from this point of view, reveals that on all items except, Item no. 10 (Would you fight with a younger person) the mean values were high for the non-working groups. Whereas in case of working groups, the mean values were low on all the items except Item no. 16 which is concerning fight with a person.

Table - 31

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the Aggressive non-cooperation dimension (Factor 5) of aggression for working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
1	Working	2.05	0.15	1.29	-0.88	4.27	<0.001
	Nonworking	2.93	0.14	1 23			
8	Working	2.31	0.13	1.16	-0.73	3.75	<0.001
	Nonworking	3.04	0.11	0.97			
12	Working	3.04	0.14	1.21	-0.73	4.31	<0.001
	Nonworking	3.77	0.08	0.69			
13	Working	2.31	0.13	1.12	-0.66	3.89	<0.05
	Nonworking	2.97	0.11	0.93			
20	Working	2.99	0.15	1.26	-0.56	2.69	<0.01
	Nonworking	3.55	0.11	0.92			

Above given Table - 31 shows mean, SEs, SDs, mean difference and t-values for the items on Aggressive non-cooperation dimension of aggression for the working and non-working groups. Out of 5 t-values all were significant. And these items were, Item nos. 1 (Being rude), 8 (Getting angry), 12 (Beat a person), 18 (Non-cooperation) and 20 (If any one tries to humiliate you). On all these items the mean values were found to be higher for the non-working children, suggesting that non-working children are likely to be more aggressive on this dimension.

Looking at all the significant results, the score on each item ranges from 1 (one) to 4 (four), the mid point being 2.5. Hence, all the mean values which fall below 2.5 score would show low aggression. In case of non-working group the mean values were high on all the items but for the working children the mean values were high on Item nos. 12 and 20.

Table - 32

Shows correlation values between various dimensions of Frustration and Aggression for the working and non-working children (n - 150)

Frustration	Dimensions of Aggression									
	Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
	W	NW	W	NW	W	NW	W	NW	W	NW
W	-.14		-.22		.09		.12		.01	
NW		.36#		.44#		.45#		.54#		.52#

* p = <0.05; ** p = <0.01; W = Working group; NW = Nonworking group

Table - 32 shows r-values. Out of 10 correlation value, only 5 values were found to be significant. In case of non-working group, Frustration dimension was found to be significantly and positively correlated with Factor 1 (Parental defiance, blaming and manipulation), Factor 2 (Obstructing behaviour), Factor 3 (Sulking), Factor 4 (Retaliation), and Factor 5 (Aggression and non-cooperation) variables of Aggression dimension.

Table - 33

ANOVA Table for Home Adjustment of working and non-working children on Adjustment Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	26.4600	26.4600	19.0273	0.0001
Within Groups	148	205.8133	1.3906		
Total	149	232.2733			

Table - 34

ANOVA Table for Health Adjustment of working and non-working children on Adjustment Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	0.2400	0.2400	0.1146	0.7355
Within Groups	148	310.0000	2.0946		
Total	149	310.2400			

Table - 35

ANOVA Table for Social Adjustment of working and non-working children on Adjustment Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	10.6667	10.6667	6.6584	0.0108
Within Groups	148	237.0933	1.6020		
Total	149	247.7600			

Table - 36

ANOVA Table for Emotional Adjustment of working and non-working children on Adjustment Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	3.5267	3.5267	2.0756	0.1518
Within Groups	148	251.4667	1.6991		
Total	149	254.9933			

This set of data related to Adjustment dimensions of working and non-working children were put to ANOVA as well as t-test analysis. This yielded similar results. Significant results were obtained only in case of Health and Social Adjustment. These results have been summarised above.

Table - 37

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the dimensions of Adjustment for the working and non-working children

Dimension	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
Home	Working	2.06	0.14	1.16	-0.84	4.47	<0.001
	Nonworking	1.20	0.13	1.20			
Health	Working	1.24	0.16	1.42	0.08	0.34	not significant
	Nonworking	1.32	0.17	1.47			
Social	Working	2.31	0.15	1.34	-0.54	2.50	<0.05
	Nonworking	1.77	0.14	1.19			
Emotional	Working	2.17	0.16	1.42	0.31	1.50	not significant
	Nonworking	2.48	0.14	1.18			

Table - 37 given above shows mean, SEs, SDs, mean difference and t-values of all the areas of adjustment for the working and non-working children. Out of 4 t-values, only two means in the areas of Home Adjustment and Social Adjustment were significant. In case of Home and Social Adjustment the means were higher for the working children, indicating their poorer adjustment in comparison to non-working children. It means that the working children are likely to be more maladjusted in the Home and Social areas.

However, since the scores on any of the Adjustment dimension can range from 0 to 7, it can be said that both groups of children are well adjusted, but when we compare the two groups, the non-working children are better adjusted at Home and in Social areas but less adjusted in Health and Emotional areas.

Table - 38

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the dimensions of Home Adjustment for the working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
2	Working	0.29	0.053	0.46	0.22	3.67	<0.001
	Nonworking	0.071	0.03	0.25			
5	Working	0.13	0.04	0.34	0.12	2.84	<0.01
	Nonworking	0.013	0.01	0.12			
8	Working	0.23	0.05	0.42	0.19	3.55	<0.001
	Nonworking	0.04	0.02	0.20			
12	Working	0.37	0.06	0.49	0.06	0.82	not significant
	Nonworking	0.31	0.05	0.46			
14	Working	0.24	0.05	0.43	0.15	2.79	<0.01
	Nonworking	0.09	0.03	0.29			
18	Working	0.57	0.06	0.50	-0.07	0.82	not significant
	Nonworking	0.64	0.06	0.48			
24	Working	0.23	0.05	0.42	0.16	2.66	<0.01
	Nonworking	0.07	0.03	0.25			

Table - 38 shows mean, SEs, SDs, mean difference and t-values on all the items of the Home adjustment for the working and non-working children. Out of 7 t-values, 5 values were significant. That is, the differences in means of the working groups and non-working groups were significant. In case of Item nos. 2 (Desire to run away), 5 (Relationship with father), 8 (Parents object to the type of friends), 14 (Parents being too strict), and 24 (Parents getting angry), mean values obtained were higher for the working children. The results show that the working children are less adjusted in their homes than non-working children. They are likely to stay aloof and reserved.

Table - 38 (continued ...)

However, again since the scores on each item could range from 0 (zero) to 1 (one), mid point being 0.5, we can say that, generally speaking both groups are well adjusted on various matters related to home. Only, in case of Item no 18, mean for both groups crossed 0.5 marks, indicating equally poor adjustment for both groups. The Item no. 18 is concerned with "To maintain peace in the house".

Table - 39

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the dimensions of Health Adjustment for the working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
1	Working	0.20	0.05	0.40	0.05	0.78	not significant
	Nonworking	0.15	0.04	0.36			
4	Working	0.19	0.05	0.40	0.11	1.82	not significant
	Nonworking	0.08	0.03	0.27			
11	Working	0.21	0.05	0.41	0.10	1.92	not significant
	Nonworking	0.11	0.04	0.31			
13	Working	0.20	0.05	0.40	-0.05	0.75	not significant
	Nonworking	0.25	0.05	0.44			
19	Working	0.17	0.04	0.38	-0.30	4.32	<0.001
	Nonworking	0.47	0.06	0.50			
22	Working	0.05	0.03	0.23	-0.11	2.04	<0.05
	Nonworking	0.16	0.04	0.37			
26	Working	0.21	0.05	0.41	0.10	1.82	not significant
	Nonworking	0.11	0.04	0.31			

Table - 39 shows mean, SEs, SDs, mean difference and t-values of all the items of the Health adjustment dimension for the working and non-working children. Out of 7 t-values, the difference in the means of the working and non-working groups were significant on only two items. In case of Item nos. 19 (Health problem) and 22 (Often falling sick), the mean values were higher for the non-working groups. That means, that the non-working groups were less adjusted physically than the working children. Across seven items, however the result was mixed. In non-significant ways, the working children obtained higher means on four items viz. Item nos. 1 (Do you catch cold easily), 4 (Do you often get headache), 11 (Do you feel dizzy), and 26 (Do you have to be more

Table - 39 (continued.....)

careful about your health) whereas on the three Items i.e. Item nos. 13 (Do your eyes pain), 19 (Do you have vomiting sensation or feel dizzy) and 22 (Do you often fall sick) the non-working children scored higher mean values.

Table - 40

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the dimensions of Social Adjustment for the working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
6	Working	0.47	0.06	0.50	-0.03	0.32	not significant
	Nonworking	0.49	0.06	0.50			
9	Working	0.08	0.03	0.27	-0.12	2.00	<0.05
	Nonworking	0.20	0.05	0.40			
10	Working	0.19	0.05	0.39	0.05	0.89	not significant
	Nonworking	0.13	0.04	0.34			
17	Working	0.35	0.06	0.48	0.27	4.17	<0.001
	Nonworking	0.08	0.03	0.27			
21	Working	0.52	0.06	0.50	-0.16	1.93	not significant
	Nonworking	0.68	0.05	0.47			
23	Working	0.45	0.06	0.50	0.32	4.65	<0.001
	Nonworking	0.13	0.04	0.34			
27	Working	0.25	0.05	0.44	0.20	3.33	<0.001
	Nonworking	0.05	0.03	0.23			

Table - 40 shows mean, SEs, SDs, mean difference and t-values of all the items of the Social adjustment for the working and non-working children. Out of 7 t-values, only 4 were significant (Item nos. 9, 17, 23, and 27). In all but one (Item no. 9 concerned with Having difficulty talking to a person whom you have just met) mean values were higher for working group as compared to the non-working groups. On Items nos. 17 (Enjoy dancing), 23 (Easily make friends) and 27 (Participate in festive occasions) the mean values were higher for the working groups. Indicating that the working children were significantly socially less adjusted as compared to the non-working children. This could be due to the busy schedule and lack of time for such activity.

Table - 41

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the dimensions of Emotional Adjustment for the working and non-working children

Item No.	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
3	Working	0.24	0.05	0.43	0.13	2.43	<0.05
	Nonworking	0.11	0.04	0.31			
7	Working	0.29	0.05	0.46	-0.06	0.68	not significant
	Nonworking	0.35	0.06	0.48			
15	Working	0.24	0.05	0.43	-0.23	3.03	<0.01
	Nonworking	0.47	0.06	0.50			
16	Working	0.20	0.05	0.40	0.04	0.57	not significant
	Nonworking	0.16	0.04	0.37			
20	Working	0.43	0.06	0.50	-0.05	0.65	not significant
	Nonworking	0.48	0.06	0.50			
25	Working	0.65	0.06	0.48	-0.23	3.51	<0.001
	Nonworking	0.88	0.04	0.33			
28	Working	0.12	0.04	0.33	0.08	1.93	not significant
	Nonworking	0.04	0.02	0.20			

Table - 41 shows mean, SEs, SDs, mean difference and t-values of all the items of the Emotional adjustment for the working and non-working children. Out of 7 t-values, only three were significant. In case of Item no 3 (Easily get dejected) the mean value was higher for the working group and in case of Item no. 15 (Easily get angry) and 25 (Easily get disturbed), the mean values were higher for the non-working group. From the above findings, it can be said that the non-working children were found to be emotionally less adjusted as compared to the working children on Item nos. 15 and 25. This may be due to the fact that working children while working on the job may have learnt to keep control of their emotions as they are working in a restrained (formal) set up. On Item no. 25 both groups have crossed the mid point (0.5) indicating their mal-adjustment on this count.

Table - 42

Shows correlation values between various dimensions of Adjustment and Frustration for the working and non-working children (n = 150)

Dimensions of Adjustment		Frustration	
		W	NW
Home	W	.07	
	NW		.48#
Health	W	-.13	
	NW		.04
Social	W	-.04	
	NW		.16
Emotional	W	-.08	
	NW		-.01

#*p* = <0 001, W = Working group; NW = Nonworking group

Table - 42 shows correlation values. Out of 8 corrrelation values tabulated, only one was found to be significant. In case of non-working group, Home dimension of Adjustment was found to be positively and significantly correlated with Frustration dimension.

Table - 43

Shows correlation values between various dimensions of Adjustment and Aggression for the working and non-working children (n = 150)

Dimensions of Adjustment		Dimensions of Aggression									
		Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
		W	NW	W	NW	W	NW	W	NW	W	NW
Home	W	.38#		.46#		.22		.34*		.16	
	NW		.34**		.46#		.32**		.30**		.30*
Health	W	.32*		.25*		.07		.03		-.03	
	NW		-.06		-.02		-.18		-.22		-.19
Social	W	.15		.21		-.16		.10		-.10	
	NW		.13		.10		.20		.25*		.20
Emotional	W	.41*		.41*		02		.03		-.01	
	NW		-.17		-.08		.04		-.03		08

* p = <0 05, ** p = <0 01; #p = <0.001; W = Working group, NW = Nonworking group

Table - 43 shows out of 40 corrrelation values, 12 were found to be significant. In case of non-working group, Home dimension of Adjustment was found to be significantly and positively correlated with Factor 1 (Parental defiance, blaming and manipulation), Factor 2 (Obstructing behaviour), Factor 3 (Sulking), Factor 4 (Retaliation) and Factor 5 (Aggression and non-cooperation) of Aggression dimension.

In case of working groups, Home dimension of Adjustment was significantly and positively correlated with Factor 1 (Parental defiance, blaming and manipulation), Factor 2 (Obstructing behaviour) and Factor 4 (Retaliation) variables of Aggression dimension. In case of working group, Health dimension of Adjustment was significantly and positively correlated with Factor 1 (Parental defiance, blaming and manipulation), Factor 2 (Obstructing behaviour) of Aggression dimension.

Table - 43 (continued.....)

In case of non-working group, Social dimension of Adjustment was found to be significantly and positively correlated with Factor 4 (Retaliation) of Aggression dimension.

In case of working groups, Emotional dimension of Adjustment was found to be significantly and positively correlated with Factor 1 (Parental defiance, blaming and manipulation) and Factor 2 (Obstructing behaviour) of Aggressive dimension.

Table - 44

ANOVA Table for Physical Dimension of Self-Concept of working and non-working children on Self-Concept Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	447.2067	447.2067	14.5610	0.0002
Within Groups	148	4545.4667	30.7126		
Total	149	4992.6733			

Table - 45

ANOVA Table for Social Dimension of Self-Concept of working and non-working children on Self-Concept Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	346.5600	346.5600	17.6419	0.0000
Within Groups	148	2907.3333	19.6441		
Total	149	3253.8933			

Table - 46

ANOVA Table for Temperament Dimension of Self-Concept of working and non-working children on Self-Concept Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	844.9067	844.9067	60.1940	0.0000
Within Groups	148	2077.3867	14.0364		
Total	149	2922.2933			

Table - 47

ANOVA Table for Moral Dimension of Self-Concept of working and non-working children on Self-Concept Scale

Source	D. F.	Sum of Squares	Mean Squares	F ratio	p
Between Groups	1	28.1667	28.1667	1.1524	0.2848
Within Groups	148	3617.4933	24.4425		
Total	149	3645.6600			

This set of data related to self-concept of working and non-working children were put to ANOVA as well as t-test analysis, which yielded similar results. Significant results were obtained only in case of Physical, Social and Temperamental Self-Concept. The results have been summarised in the above Tables 44, 45, 46, and 47.

Table - 48

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the dimensions of Self-Concept for the working and non-working children

Dimensions	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
Physical	Working	30.68	0.66	5.8	-3.45	3.97	<0.001
	Nonworking	27.23	0.62	5.3			
Social	Working	26.8	0.55	4.75	-3.00	4.90	<0.001
	Nonworking	23.8	0.47	4.83			
Temperament	Working	30.60	0.46	4.0	-4.75	7.90	<0.001
	Nonworking	25.85	0.40	3.48			
Moral	Working	29.10	0.55	4.8	-0.88	1.26	not significant
	Nonworking	28.22	0.59	5.12			

In the above Table - 48 mean, SEs, SDs, mean difference and t-values on all the dimensions of the Self-Concept for the working and non-working children are shown. Out of 4 t-values, only 3 were significant i.e., in the area of Physical Self-Concept, Social Self-Concept, and Temperamental Self-Concept. The mean values were found to be high for the working groups. That is, the working groups are likely to have better Physical Self-Concept, Social Self-Concept and Temperamental Self-Concept.

However, each of these dimensions had 8 items which were to be score on 5 point scale ranging from 1 to 5. That means, the possible score range on each of these dimensions may vary from 8 to 40, mid point being 24, looking from this angle, we can say that on Physical, Temperamental and Moral dimensions of Self-Concept, both the working and non-working had a high Self-Concept. On Social dimension the non-working children were found to fall in the average category.

Table - 49

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the items of Physical Self-Concept for the working and non-working children

Items	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
2	Working	3.83	0.14	1.18	0.62	3.73	<0.001
	Nonworking	3.21	0.12	1.06			
3	Working	3.69	0.14	1.19	0.81	4.36	<0.001
	Nonworking	2.88	0.14	1.21			
8	Working	3.52	0.13	1.16	0.53	3.28	<0.01
	Nonworking	2.99	0.11	0.95			
12	Working	3.87	0.12	1.04	0.63	4.46	<0.001
	Nonworking	3.24	0.08	0.65			
14	Working	3.97	0.12	1.05	0.09	0.62	not significant
	Nonworking	3.88	0.10	0.85			
17	Working	4.32	0 13	1.15	0.39	2.08	<0.05
	Nonworking	3.93	0.13	1.14			
19	Working	3.87	0.15	1.27	0.31	1.59	not significant
	Nonworking	3.56	0.13	1.14			
20	Working	3.61	0.15	1.31	0.08	0.41	not significant
	Nonworking	3.53	0.13	1.10			

Table - 49 above shows mean, SEs, SDs, mean difference and t-values on all the items of Physical Self-Concept for the working and non-working children. Out of 8 t-values, five values were significant. That is, the differences in means of the two groups, working and non-working were significant in case of Item nos. 2 (Your looks), 3 (Stamina), 7 (How do you like your face), 12 (Your personality) and 17 (Your voice) and the mean values were found to be higher (ranging from 3.25 to 4.32) for the working groups as compared to the non-working groups (mean values 2.88 to 3.93). Though both were on

Table - 49 (continued.....)

the higher side, indicating a high Physical Self-Concept for both the groups. However, since scores on each items could range from 1 (one) to 5 (five), mid point being 3, we can say that generally speaking both groups are having high Physical Self-Concept. Only in case of Item nos. 3 (physical stamina) and 8 (Keeping oneself in good humour), the mean values were below 3 for the non-working group.

Table - 50

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the items of Social Self-Concept for the working and non-working children

Items	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
1	Working	2.68	0.15	1.31	0.37	1.75	not significant
	Nonworking	2.31	0.15	1.26			
6	Working	2.85	0.16	1.42	0.78	3.91	<0.001
	Nonworking	2.07	0.15	1.31			
13	Working	3.73	0.14	1.21	0.17	0.99	not significant
	Nonworking	3.56	0.11	0.98			
23	Working	2.86	0.13	1.08	0.80	5.07	<0.001
	Nonworking	2.07	0.11	0.98			
24	Working	3.05	0.17	1.44	0.40	1.74	not significant
	Nonworking	2.65	0.18	1.55			
27	Working	4.56	0.09	0.78	0.10	0.57	not significant
	Nonworking	4.46	0.12	1.07			
30	Working	4.62	0.09	0.79	-0.19	1.42	not significant
	Nonworking	4.81	0.08	0.73			
32	Working	2.45	0.11	0.98	0.60	3.53	not significant
	Nonworking	1.85	0.13	1.08			

Table - 50 given above shows mean, SEs, SDs, mean difference and t-values on all the items of Social Self-Concept for the working and non-working children. Out of 8 t-value, the differences in the means of the working and the non-working groups were significant on Item nos. 6 (Able to convey one's feelings in front of others) (mean value for non-working 2.07 and for the working children 2.85) 23 (Participate in organizing functions) (mean value for working groups 2.86 and 2.07 for non-working groups) and 32 (Consider other people) (mean value for working group was 2.45 and non-working group was 1.82), and on all these three items the means values were higher for

Table - 50 (continued.....)

the working groups indicating that the working children have a better Self-Concept. Thus, both the groups were found to be higher on most of the items on this dimension of Self-Concept, indicating, that both the working children and non-working children had high Social Self-Concept.

However, giving a closer look at the table, since means on each items range from 1 (one) to 5 (five), mid point being 3, then from this view point we can say that, both the groups had higher mean than in case of Item nos. 13 (If liking other people's company), 27 (Like to stay with people of opposite sex), 30 (Consider what is important). Though in case of Item no. 1 (Do friends come to take advice), 6 (Express views in front of others), 23 (Help in organizing) and 32 (Consider other people's wishes) the mean values were lower than 3 for both the groups, but mean values were quite low for the non-working group in case of Item nos. 6, 23, 32.

Revealing from the above discussion, the overall view shows that the working groups were found to be relatively higher in Social self-concept than are non-working groups.

Table - 51

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the items of Temperament Self-Concept for the working and non-working children

Items	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
4	Working	3.66	0.13	1.08	0.65	4.54	<0.001
	Nonworking	3.01	0.08	0.65			
8	Working	3.04	0.13	1.08	0 79	4.78	<0.001
	Nonworking	2.25	0.11	0.92			
9	Working	2.71	0.12	1.02	0.40	2.74	<0.01
	Nonworking	2.31	0.10	0.85			
10	Working	4.25	0.11	0.97	0.24	1.50	not significant
	Nonworking	4.01	0.10	0.88			
11	Working	4.34	0.11	0.98	0.66	3.51	<0.001
	Nonworking	3.68	0.15	1.31			
15	Working	4.82	0.06	0.55	0.50	3.59	<0.001
	Nonworking	4.32	0.12	1.04			
16	Working	4.92	0.05	0.43	0.44	3.15	<0.01
	Nonworking	4.48	0.13	1.10			
18	Working	2.84	0.20	1.71	1.05	4.15	<0.001
	Nonworking	1.79	0.15	1.31			

The above Table - 51 shows mean, SEs, SDs, mean difference and t-values for all the items of Temperament Self-Concept for the working and non-working children. Out of 8 t-values, 7 values were significant. That is, the difference in the means on Item nos. 4, 8, 9, 15, 16, and 18 were significant. In case of Item nos. 4 (Like your nature), 8 (Keep yourself happy), 9 (Consider yourself as cool person), 11 (Get irritated), 15 (Get irritated by small things), 16 (Get afraid easily) and 18 (Curiosity to know the end), on all these items the mean values were higher for the working children i.e. 2.71 to 4.92 and 2.25 to 4 48 for non-working group indicating that though the mean values may be higher for the

Table - 51 (continued.....)

working children but the non-working children also fall on the higher side showing high Temperament Self-Concept.

Across 8 items, however, the result was mixed In significant ways, both groups obtained higher means than 3 (mid point) on 5 items viz. Item Nos. 1 (Do friends come to take advice), 10 (Disrespect others), 11 (Get irritated if anything goes wrong), 15 (Get irritated on small things), and 16 (Get afraid)) whereas in case of Item no. 8 (Keep in good humour) the mean value was higher for the working group than the non-working children. In case of Item nos. 9 (Cool type of person) and 18 (Want to know the end while reading and watching movie) the mean values were lower than 3 for both the groups.

Table - 52

Showing $\bar{X}$s, SEs, SDs, $\bar{X}$-diff, t-values for the items of Moral Self-Concept for the working and non-working children

Items	Category	$\bar{X}$s	SEs	SDs	$\bar{X}$ - ds	t*	p
5	Working	3.79	0.13	1.15	1.26	6.44	<0.001
	Nonworking	2.53	0.17	1.45			
21	Working	3.48	0.11	0.96	0.33	2.17	<0.001
	Nonworking	3.15	0.10	0.87			
22	Working	2.88	0.15	1.27	0.27	1.38	not significant
	Nonworking	2.61	0.14	1.24			
25	Working	3.25	0.16	1.40	-0.26	1.01	not significant
	Nonworking	3.51	0.18	1.58			
26	Working	3.45	0.17	1.46	-1.12	6.26	<0.001
	Nonworking	4.57	0.10	0.84			
28	Working	3.93	0.16	1.39	0.08	0.39	not significant
	Nonworking	3.85	0.15	1.29			
29	Working	3.83	1.14	0.99	-0.07	0.42	not significant
	Nonworking	3.90	1.28	1.11			
31	Working	4.48	0.13	1.10	0.37	2.34	<0.05
	Nonworking	4.11	0.13	1.16			

Table - 52 given above shows mean, SEs, SDs, mean difference and t-values for all the items of Moral Self-Concept for the working and non-working children. Out of 8 t-value, four differences were significant. That is, the differences in the means of Item nos. 5, 21, 26 and 32 were significant. In case of Item no. 5 (Believe in religious ceremonies), 21 (Honesty), 26 (Caste distinction), and 32 (Money matter). The mean values found were higher for the working children than the non-working children. Indicating that the working children would be morally high.

Table - 52 (continued.....)

On each item the score ranges from 1 to 5, the mid point being 3, giving a closer look at the table shows that for the most of the item, both working and the non-working groups are at higher side i.e. above 3 score indicating that working as well as non-working children were found to be having really high moral self-concept. However, the results were mixed in the non-significant ways, both the groups obtained a higher mean on six items, i.e Item nos. 21 (How honest do you feel you are), 25 (During exams would you take help of unfair means), 26 (What would you do if you have to drink water in a house of low caste person), 28 (If the the coming bus gets full before your chance to catch it what would you do), 29 (If you come to know that your friend is not good what would you do) and 31 (What would you do if somebody gives certain amount of money and you find more than what he gave you). Whereas on the Item no. 5 (Believes in religious ceremonies and rituals) mean was higher for the working group and lower for both the groups on Item no. 22 (Obey the rules of public properties / places).

Table - 53

Shows correlation values between various dimensions of Frustration and Self-Concept for the working and non-working children (n = 150)

Frustration	Dimensions of Self Concept							
	Physical		Social		Temperamental		Moral	
	W	NW	W	NW	W	NW	W	NW
W	-.11		-.16		-.11		-.26*	
NW		.09		.18		-.15		-.35*

* p = <0 05, W = Working group; NW = Nonworking group

In Table - 53 out of 8 correlations only two values were significant. In case of both the non-working group and working groups, Frustration dimension was found to be significantly and negatively correlated with Moral dimension of Self-Concept.

Table - 54

Shows correlation values between various dimensions of Self-Concept and Aggression for the working and non-working children (n = 150)

Dimensions of Self Concept		Dimensions of Aggression									
		Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
		W	NW	W	NW	W	NW	W	NW	W	NW
Physical	W	-.01		.09		-.08		-.09		-.16	
	NW		.12		04		.07		.07		.05
Social	W	.02		.12		-.11		-.14		-.17	
	NW		.13		.10		.21		.17		.14
Tempera-mental	W	-.17		-.11		-.27		-.15		-.32*	
	NW		-.09		-.8		-.27*		-.09		-.04
Moral	W	.11		.05		-.12		-.09		-.18	
	NW		-.23*		-.35**		-.19		-.08		-.27*

* p = <0 05, ** p = <0 01; W = Working group, NW = Nonworking group

In Table - 54 out of 40 corrrelation values, only 5 values were significant. In case of working groups, Temperamental dimension of Self-Concept was significant but negatively correlated with Factor 3 (Sulking) and Factor 5 (Aggression and non-cooperation) dimension of Aggression.

In case of non-working groups, Moral dimension of Self-Concept was significantly and negatively correlated with Factor 1 (Parental defiance, blaming and manipulation), Factor 2 (Obstructing behaviour) and Factor 5 (Aggression and non-cooperation) dimension of aggression.

Table - 55

Shows correlation values between various dimensions of Adjustment and Self-Concept for the working and non-working children (n = 150)

Dimensions of Adjustment		Dimensions of Self Concept							
		Physical		Social		Temperamental		Moral	
		W	NW	W	NW	W	NW	W	NW
Home	W	-.02		.04		-.12		-.11	
	NW		.14		.19		.02		.21
Health	W	-.07		.19		.11		.12	
	NW		-.15		-.18		-.06		.16
Social	W	-.04		.01		.04		.16	
	NW		.06		.13		.15		.11
Emotional	W	-.08		-.03		.09		.07	
	NW		-.35*		-.07		.19		.27*

* p = <0.05, W = Working group; NW = Nonworking group

The Table - 55 given above shows, out of 32 correlation values, only 2 values were significant for non-working groups. Emotional dimension of Adjustment was significantly and positively correlated with Moral dimension of Self-Concept whereas it was significantly and negatively correlated with Physical dimension of Self-Concept.