

**CHAPTER - IV**

**RESULTS AND DISCUSSION**

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### RESULT AND DISCUSSION

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## RESULTS AND DISCUSSION

Data collected following the methodology presented in the previous chapter were scored according to the standard procedures described in the Manuals of the tests. The percentage of marks obtained by the students in annual examinations were written from the records of the schools. It is the measure of criterion variable Y. Means and standard deviations of criterion (Dependent) variable and twelve predictor variables among each of the eight groups have been computed. The multiple regression analysis was conducted to discover the most effective predictor of academic success among the eight groups of study. Details of the analysis, results obtained and their interpretation are presented in the following section.

### 4.1 Predictors of Academic Achievement of SC Girls :

The results of multiple regression analysis among SC girls sample has been presented in Table-2.

From the table it may be inferred that 21.2% of variance ( $R^2 = .212$ ) was explained by the predictor variables of school environment and self-concept. The F-value of 2.15 is significant at .05 level but t-value for any predictor is not significant. Thus, school environment and self-concept have some predictive value for academic success of SC girls but

TABLE - 2

Multiple Regression Analysis For Predicting Academic Achievement in Scheduled Caste Girls Sample

Variables	Mean	Standard Deviation	Regression coefficient	S.E. of Regression	t
<b>A. School Environment :</b>					
Creative Stimulation	46.73	8.68	-0.0144	0.3845	0.04
Cognitive Encouragement	26.27	5.39	0.6327	0.4371	1.45
Permissiveness	25.92	4.71	-0.3535	0.4843	0.73
Acceptance	25.08	6.02	-0.2660	0.4478	0.59
Rejection	25.86	5.07	-0.6729	0.6436	1.05
Control	25.27	5.47	-0.1217	0.4518	0.27
<b>B. Self-Concept :</b>					
Physical	29.00	3.89	-0.2493	0.7352	0.34
Social	27.92	2.93	-0.1217	0.9011	0.14
Temperamental	30.05	4.60	-0.2008	0.5160	0.39
Educational	30.89	4.84	-0.3572	0.6470	0.55
Moral	28.70	4.15	0.4837	0.6770	0.71
Intellectual	27.78	3.56	0.3420	0.5723	0.60
<b>Criterion (Y) :</b>					
Academic Achievement	54.84	9.22			

General Details :

Multiple R = 0.460  
 R Square = 0.212  
 S.E. of Estimate = 10.020  
 F. Value = 2.15 \*

\* Significant at .05 level.

no any dimension in separation has predictive value. A few regression coefficients being high are needed to be described. The variables with positive regression coefficient are cognitive encouragement (.6327), moral (.4837) and intellectual (.3420) and with negative relationships are permissiveness (-.3535), acceptance (-.2660), rejection (-.6729), physical (-.2493), temperamental (-.2008) and educational (-.3572). There is a few contradictory relationships, e.g. negative relationship with acceptance as well as with rejection showing an inconsistency of predictor variables of academic achievement in SC girls sample.

Therefore, it may be concluded that the dimensions of school environment and self-concept have very little predictive value for the academic achievement of SC secondary school girls. But, the girls getting stimulation in schools, aware of their moral and intellectual abilities, careless of their physical health and relations to schools, restricted and unrecognising school climate, having unstructured view of their emotional state and their not so smooth relation with school, teachers and extracurricular activities achieve high academic standards.

These findings to some extent are in accordance with the studies reported by Panda, Sahoo and Sahoo (1995), Vyas (1993), Singhal (1991) regarding the school environment and Agarwal and Brijbushan (1967), Deo and Sharma (1970) and Vasantha (1971) regarding the self-concept. They have measured a

different dimensions of school environment and self-concept as a whole. Therefore, exact comparisons can not be made. The studies related to academic achievement of socially backward caste, viz; Mehta (1992), Singh (1993), Lidhoo and Khan (1990), Jamuna and Ramamurti (1989), Mc Inerney (1990) and Bender and Ruiz (1974) support the findings of present research.

#### 4.2 Contributors to Academic Achievement of SC Boys :

Among the rural SC boys group 25% of variances (R Square = .250) are accounted for the predictors but it is not statistically significant. The F ratio is 1.63. The results of the multiple regression analysis has been presented in Table 3. It can be seen from the table that the regression coefficient of any of the predictor variable is also not significant. A few variables have yielded high regression coefficients which need to be recognised. Cognitive encouragement (-.4482), physical (-1.40) and intellectual (-1.4705) dimensions have negative whereas prmissiveness (.2038), rejection (.4451), control (.3836), social (.8023) temperamental (.4340) and educational (.4230) have positive regression coefficients. Like the SC rural girls sample the relationships among boys sample are also inconsistence and difficult for interpretation in the light of existing researches.

Though insignificant regression coefficient, the high relationship may be discussed. The rural SC boys getting cognitively discouraging, rejecting, control and permissive

TABLE - 3

Multiple Regression Analysis for Predicting Academic  
Achievement in Scheduled Caste Boys Sample

Variables	Mean	Standard Deviation	Regression coefficie- nt	S.E. of regre- ssion	t
A. School Environment:					
Creative Stimulation	50.49	9.15	0.1781	0.5226	0.34
Cognitive Encouragement	26.92	6.39	-0.4482	0.7397	0.61
Permissiveness	25.84	5.43	0.2038	0.9593	0.21
Acceptance	25.41	4.89	-0.1335	0.8192	0.16
Rejection	21.32	5.40	0.4451	0.6909	0.64
Control	26.68	4.76	0.3836	0.9383	0.41
B. Self-Concept:					
Physical	31.92	3.97	-1.4000	1.4000	1.00
Social	28.11	4.71	0.8023	0.7528	1.07
Temperamental	32.43	3.58	0.4340	1.2120	0.36
Educational	34.03	4.32	0.4230	1.2670	0.33
Moral	31.76	3.29	-0.0280	1.0920	0.03
Intellectual	28.29	3.81	-1.4705	0.9613	1.53
Criterion (Y) :					
Academic achievement	60.86	16.79			
General Details :					
Multiple R	=	0.500			
R Square	=	0.250			
S.E. of Estimate	=	17.82			
F-Value	=	1.63			

school environment and having sense of social interaction, structured view of their emotional state, developed self-concept of their relation to school, teachers and extracurricular activities but having negative self-concept towards their body, health, physical appearance and strength and less aware of their intelligence and capacity of their problem solving and judgments are likely to be better in academic performance.

The academic achievement of SC boys are relatively better as compared to SC girls. The results of multiple regression finds support in many studies described in section 4.1 above but with the limitation that in these studies some different dimensions of school environment and self-concept have been undertaken. No study has been reported showing the difference in academic performance of deprived boys and girls group but the comparison has been made between SC and upper caste. Therefore, the comparison between SC boys and SC girls' predictor variables of academic success can not be supported by relevant research findings.

#### 4.3 Determinants of Academic Achievement of BC Girls:

The multiple regression analysis for predicting academic achievement of BC girls reveals that the value of multiple R is insignificant ( $F=1.190$ ), but 39.7% of the variations ( $R\text{ Square}=.397$ ) is explained by the school environment

and self-concept variables. The results of the multiple regression analysis has been presented in Table 4.

It is clear from the table that the regression coefficient of only one self-concept variable 'intellectual' is significant at .05 level. It has inverse relationship (-1.4710) with academic achievement. It means more the intellectual ability a student has, his academic achievement will be less.

There are some other variables having high regression coefficient (more than .50) may be described though t-values are insignificant. Cognitive encouragement (.5269), acceptance (.6184), and control (.7356) dimensions of school environment have positive relationship and permissiveness (-1.0212) has inverse relationship with academic achievement. Educational (1.5357) dimension of self-concept has direct relationship with criterion variable. Therefore, it may be concluded that BC girls receiving stimulation for cognitive development from their teachers in schools, getting unconditional love and recognition as well as restrictions to discipline themselves, achieve higher academic standard. But if the school climate provides opportunities to express the views of the students freely and act according to their desires with no interruption from teachers the academic achievement of the BC girls are not upto the mark.

BC girls with developed views of themselves in relation

TABLE - 4

## Multiple Regression Analysis for Predicting Academic Achievement in Backward Caste Girls Sample

Variables	Mean	Standard Deviation	Regression Coefficient	S.E.of Regression	t
<b>A. School Environment:</b>					
Creative Stimulation	55.41	4.24	0.0120	0.4612	0.03
Cognitive Encouragement	29.89	3.35	0.5269	0.5643	0.93
Permissiveness	29.87	2.75	-1.0212	0.6714	1.52
Acceptance	29.81	3.46	0.6184	0.5485	1.13
Rejection	29.84	3.24	-0.1382	0.4828	0.29
Control	30.51	2.91	0.7356	0.8602	0.86
<b>B. Self-concept:</b>					
Physical	33.35	2.93	-0.1844	0.8516	0.22
Social	36.59	2.98	-0.0363	0.8038	0.05
Temperamental	32.95	3.32	-0.0965	0.6132	0.16
Educational	32.87	3.43	1.5357	0.8221	1.87
Intellectual	32.78	2.75	-1.4710	0.7225	2.04*
<b>Criterion (Y) :</b>					
Academic Achievement	50.22	7.90			

## General Details :

Multiple R	=	0.630
R Square	=	0.397
S.E.of Estimate	=	7.510
F-Value	=	1.190

\* Significant at .05 level.

to school, teachers and extracurricular activities (Educational) are likely to achieve higher academic standards.

The above findings are partially in accordance with the studies reported by Panda, Sahoo and Sahoo (1995) where the students studying in schools of open and control climate were better in academic performance as compared to that of the closed climate schools. Ahluwalia (1990), Banfield (1972), Rice (1968) and Reddy (1994) have also reported that open and controlled school climate seems to be more conducive and favourable on the part of the students to secure high percentage of marks.

The effect of dimensions of self-concept on academic achievement have not been studied earlier. Bhatnagar (1966), Aggarwal and Brijbhushan (1967), Deo and Sharma (1970) and Vasantha (1971) have found a positive relationship between self-concept and academic achievement. Verma and Swain (1990) reported that sense of deprivation in high school boys and girls was found to be significantly and negatively related with self-esteem and academic achievement. These studies support our results to some extent but not in full.

#### 4.4 Determinants of Academic Achievement of BC Boys :

None of the regression coefficients have reached the desirable level of significance in rural BC boys sample but

26.40% of variations ( $R^2 = .2640$ ) were explained significantly by predictor variables of school environment and self-concept. The F-value is 2.21 significant at .05 level. The results of the multiple regression analysis of BC boys has been presented in Table 5.

Referring table 5 it can be seen that though regression coefficients are not statistically significant, some coefficients are very high to draw our attention. Creative stimulation (-.2550), acceptance (-.7391), social (-.6608) and temperamental (-.4405) variables have inverse relationships whereas permissiveness (.2519), rejection (.5436), control (.3894), moral (.2319) and intellectual (.3575) variables have direct relationship with academic achievement among BC boys sample.

Therefore, it may be inferred that the academic achievements of BC boys are higher in permissive, rejecting and controlled school environment in which teacher's activities does not provide conditions and opportunities to stimulate creative thinking and students not receiving unconditional love and recognition to have the right to express feelings to uniqueness and to become autonomous individuals.

The BC boys who had not developed the self-concept of their body, health, physical appearance and strength (Physical), having little sense of worth, in social interactions (social),

**TABLE - 5**  
**Multiple Regression Analysis for Predicting Academic**  
**Achievement in Backward Caste Boys Sample**

Variables	Mean	Standard Deviation	Regression Coefficient	SE of Regression	t
<b>A. School Environment:</b>					
Creative Stimulation	48.32	7.89	-0.2550	0.3449	0.74
Cognitive Encouragement	27.42	4.84	0.1119	0.5560	0.20
Permissiveness	26.42	5.23	0.2519	0.4774	0.53
Acceptance	22.11	5.09	-0.7391	0.4587	1.61
Rejection	22.13	5.80	0.5436	0.4297	1.27
Control	26.16	5.92	0.3894	0.4486	0.87
<b>B. Self-Concept:</b>					
Physical	33.39	3.69	-0.0227	0.8549	0.03
Social	27.05	4.39	-0.6608	0.5270	1.25
Temperamental	34.00	3.47	-0.4405	0.7438	0.59
Educational	34.79	3.76	0.0449	0.7066	0.06
Moral	31.71	3.88	0.2319	0.6431	0.36
Intellectual	29.68	4.44	0.3575	0.7102	0.50
<b>Criterion (Y) :</b>					
Academic Achievement	49.53	11.21			

**General Details :**

Multiple R = 0.5138  
R Square = 0.2640  
S.E. of Estimate = 11.71  
F-Value = 2.21 \*

\* Significant at .05 level

lack of understanding of their prevailing emotional reaction (temperamental), but aware of their moral worth (moral) and their intellectual ability and capacity of problem solving and judgments are likely to achieve high academic success.

The researches cited in preceding sections can be referred here to support the findings of regression analysis of the data obtained from the BC boys sample. As stated earlier, the researches not exactly confirm the findings but in approximation. Further, the dimensions of school environment and self-concept studied earlier also do not resemble the dimensions of the present research.

#### 4.5 Predictors of Academic Achievement of MS Girls :

Table 6 gives the results of the multiple regression analysis to reveal the independent predictor variables of the criterion variable (academic achievement) among Muslim girls sample. It can be seen from the table that the value of R is significant at .01 level ( $F=5.47$ ). This is indicative of the fact that the academic achievement of Muslim girls could be predicted by independent variables of school environment and self-concept. A 37.9% of variance ( $R\text{ Square}=.379$ ) in academic achievement could be accounted for by the independent variables.

The regression coefficient of only one independent

TABLE - 6

Multiple Regression Analysis for Predicting Academic Achievement in Muslim Girls Sample

Variables	Mean	Standard Deviation	Regression Coefficient	S.E. of Regression	t
<b>A. School Environment:</b>					
Creative Stimulation	52.92	9.44	0.0193	0.1201	0.16
Cognitive Encouragement	27.68	7.16	0.2317	0.1337	1.73
Permissiveness	25.86	5.33	-0.0158	0.2096	0.08
Acceptance	24.16	5.51	0.0722	0.1601	0.45
Rejection	22.08	7.80	0.0410	0.1301	0.31
Control	27.03	4.19	-0.3950	0.1945	2.03*
<b>B. Self-Concept :</b>					
Physical	30.68	3.89	0.0641	0.1827	0.35
Social	28.84	4.17	0.2237	0.2014	1.11
Temperamental	32.08	3.78	-0.1540	0.2013	0.76
Educational	35.16	3.83	0.2794	0.2386	1.17
Moral	30.97	4.34	-0.2391	0.2088	1.15
Intellectual	29.73	5.11	0.1792	0.1775	1.01
<b>Criterion (Y) :</b>					
Academic Achievement	62.41	3.80			

General Details :

Multiple R = 0.6156  
 R Square = 0.3790  
 S.E. of Estimate = 3.6730  
 F-Value = 5.4700 \*\*

\*\* Significant at .01 level

\* Significant at .05 level

variable, show a significant t-value at .05 level. This independent variable is control dimension of school environment which has an inverse relationship (-.3950) with academic achievement. Thus, we may conclude that as far as the prediction of academic achievement of Muslim girls is concerned, the independent variables seem to have a say in it, more particularly the control school environment. Thus, if the Muslim girls study in such a atmosphere of the school in which several restrictions are imposed on students to discipline them are likely to show low academic achievement.

There are several other independent variables that have developed a little <sup>high</sup> but not significant regression coefficients. The variables are cognitive encouragement (.2317), social (.2237), educational (.2794) and moral (-.2391). Therefore, it may be inferred that in a cognitively stimulating school environment the muslim girls' academic achievement will be better and if they are free to social interactions and understanding of their educational necessity can do still better in academic achievement. But estimation of their moral worth, and right and wrong activities predict a poor academic success. This trend seems to be reasonably correct as muslim girls in our country face utmost restrictions and do not get freedom to schooling and social interactions.

These findings find support in the researches described in preceding sections of 4.1 and 4.3 of this chapter. There are no

specific studies that reveal the predictive value of school environment and self-concept of academic achievement of muslim girls and boys. This research has undertaken Muslim girls and boys as sample, for the study of their academic achievement in relation to school environment and self-concept. It is one of its kind in India comprising of rural sample.

#### 4.6 Determinants of Academic Achievement of MS Boys :

In Muslim boys sample the results of multiple regression analysis has been presented in Table 7. It reveals that 51.6% of variations ( $R^2 = .5160$ ) were explained significantly by the independent variables of school environment and self-concept. The F-Value of 3.47 is significant at .01 level indicating that the academic success can be predicted by independent variables.

The regression coefficient of only one dimension of school environment, viz; rejection show a t-value significant at .01 level. It has direct relationship (.5532) with academic achievement. Thus, it may be concluded that Muslim boys in a school climate in which teachers do not accord recognition to students' rights to deviate, act freely and autonomous persons give better academic performance.

Though not statistically significant, there are a few variables having considerable amount of regression coefficient

**TABLE - 7**  
**Multiple Regression Analysis for Predicting Academic**  
**Achievement in Muslim Boys Sample**

Variables	Mean	Standard Deviation	Regression Coefficient	S.E.of Regression	t
<b>A. School Environment:</b>					
Creative Stimulation	47.24	8.98	-0.0263	0.1246	0.21
Cognitive Encouragement	25.50	4.40	0.3826	0.2342	1.63
Permissiveness	24.05	5.61	0.1556	0.1932	0.86
Acceptance	29.08	5.71	0.0725	0.1697	0.43
Rejection	22.37	4.56	0.5532	0.1889	2.93**
Control	26.63	5.62	-0.3895	0.1998	1.95
<b>B. Self-Concept:</b>					
Physical	32.76	5.83	-0.1961	0.1772	1.11
Social	29.53	4.13	-0.2334	0.2304	1.01
Temperamental	32.26	4.34	0.0158	0.1787	0.09
Educational	34.40	4.10	0.2973	0.2569	1.16
Moral	31.95	3.93	0.2184	0.2619	0.83
Intellectual	28.63	4.84	0.2440	0.2088	1.17
<b>Criterion (Y) :</b>					
Academic Achievement	59.21	4.98			

**General Details :**

Multiple R = 0.7183  
R Square = 0.5160  
S.E.of Estimate = 4.2220  
F-Value = 3.4700 \*\*

\*\* Significant at .01 level

that need to be described. The variables are cognitive encouragement (.3826) and control (-.3895) of school environment and social (-.2334), educational (.2973), moral (.2184) and intellectual (.2440) dimensions of self-concept. Therefore, it may be inferred that more cognitively encouraging and less restricted school environment help the muslim boys achieve high academic standards. With underdeveloped self-concept in social interaction but good relation with school, teachers and extracurricular activities, having estimation of moral worth right and wrong activities and being aware of intellectual capabilities makes a muslim boy to get high scores in examinations.

These results can not be compared with other researches in the field because no research has been reported showing the determinants of academic achievement in rural muslim boys and girls. Researches available for other samples has been discussed in first three sections of this chapter support some of the findings as most of them deals with some different dimensions of school environment and self-concept.

#### 4.7 Predictors of Academic Achievement of UC Girls :

The multiple regression analysis for the prediction of academic success measured interms of the percentage of marks obtained in annual examinations of upper caste girls has been presented in Table 8. It is revealed that the value of multiple R

TABLE - 8

Multiple Regression Analysis for Predicting Academic Achievement in Upper Caste Girls Sample

Variables	Mean	Standard Deviation	Regression Coefficient	S.E. of Regression	t
<b>A. School Environment:</b>					
Créative Stimulation	51.73	11.28	-0.3635	0.1990	1.83
Cognitive Encouragement	29.32	6.21	-0.2176	0.4523	0.48
Permissiveness	26.30	6.52	0.6290	0.3136	2.01*
Acceptance	23.27	4.51	0.4312	0.3272	1.32
Rejection	19.46	5.79	-0.5033	0.2267	2.22*
Control	26.41	6.50	0.3316	0.3005	1.10
<b>B. Self-concept:</b>					
Physical	29.27	4.76	1.0436	0.5145	2.03*
Social	29.19	4.24	0.6162	0.2983	2.07*
Temperamental	31.16	4.11	0.7546	0.3990	1.89
Educational	32.60	4.04	-1.1669	0.5973	1.95
Moral	31.41	4.34	-0.2421	0.3605	0.67
Intellectual	26.51	5.15	-0.2011	0.3096	0.65
<b>Criterion (Y) :</b>					
Academic Achievement	63.92	8.38			

General Details :

Multiple R = 0.7476  
R Square = 0.5590  
S.E. of Estimate = 6.8180  
F-Value = 2.6600 \*\*

\*\* Significant at .01 level

\* Significant at .05 level

is significant at .01 level ( $F=2.66$ ) and 55.9% of variations ( $R$  Square=.5590) in academic achievement is accounted for by the independent variables. This is indicative of the fact that academic achievement could be predicted by predictor variables of school environment and self-concept.

The regression coefficients of four independent variables show a t-value significant at .05 level. These independent variables are permissiveness and rejection dimensions of school environment and physical and social dimensions of self-concept. Permissiveness (.629), physical (1.0436) and social (.6162) have direct relationship and rejection (-.5033) has inverse relationship. There are some other variables that have high regression coefficients but not statistically significant. These variables are creative stimulation (-.3635), cognitive encouragement (-.2176), acceptance (.4312), control (.3316), temperamental (.7546), educational (-1.1669), moral (-.2421) and intellectual (-.2011).

Therefore, it may be concluded that as far as the prediction of academic achievement of UC rural girls is concerned, the independent variables of school environment and self-concept seem to have a say in it. The school environment providing opportunities to express students' views freely and act according to their desires with no interruptions from teachers (permissiveness), teacher's unconditional love and recognition of

students' right to express their feelings and to be autonomous individuals (acceptance and rejection-), an autocratic atmosphere of the school imposing restrictions on students to discipline them (control), providing less opportunities to stimulate creative thinking (creative stimulation-) and students perceiving school environment as less stimulating the cognitive development and their action and behaviour (cognitive encouragement-) are likely to be more conducive for better academic achievement among upper caste rural girls.

The UC rural girls who are aware of their body, health, physical appearance and strength (physical), have a sense of worth in social interactions (social), aware of their emotional reactions (temperamental) but underdeveloped views of themselves in relation to school, teachers and extracurricular activities (Educational-); their moral worth (moral-) and intellectual abilities and capacities of problem solving and judgements (intellectual-) are well set for higher academic achievements.

In UC rural girls the maximum number of predictors have emerged as significant contributors to academic success. The findings have support of the researches described in sections 4.1 and 4.3 of this chapter. Therefore, it may be inferred that school environment and self-concept are most important determinants of academic success among rural UC girls.

#### 4.8 Determinants of Academic Achievement of UC Boys :

The multiple regression analysis for predicting academic achievement of upper caste boys has been presented in Table 9. The analysis reveals that 55.3% of variance ( $R^2 = .553$ ) is significantly explained by the predictor variables. The multiple  $R$  is significant ( $F = 2.03$ ) at .05 level indicating the fact that academic achievement could be predicted by independent variables of school environment and self-concept.

The regression coefficient of two independent variables show a  $t$ -value significant at .01 and .05 level. These independent variables are cognitive encouragement which has an inverse ( $-1.8816$ ) relationship and control (.8462) having direct relationship. It may therefore, be concluded that cognitively encouraging school environment leads to low academic achievement where as control environment results into high achievement.

There are some other dimensions of school environment and self-concept, though statistically insignificant but considerably high to be described. Creative stimulation (.5391), permissiveness (.6156) and acceptance ( $-.3719$ ) dimensions of school environment have high regression coefficients. Therefore, it may be inferred that the academic performance of upper caste rural boys were high in a school environment where they get an opportunity of creative thinking and to express their views

TABLE - 9

Multiple Regression Analysis for Predicting Academic  
Achievement in Upper Caste Boys Sample

Variables	Mean	Standard Deviation	Regression Coefficient	S.E.of Regression	t
<b>A. School Environment:</b>					
Creative Stimulation	52.97	7.43	0.5391	0.3279	1.64
Cognitive Encouragement	32.18	4.26	-1.8816	0.6497	2.90**
Permissiveness	28.29	6.01	0.6156	0.5620	1.10
Acceptance	24.97	5.23	-0.3719	0.3719	1.00
Rejection	24.61	6.76	0.0653	0.2169	0.30
Control	28.34	5.04	0.8462	0.4305	1.97*
<b>B. Self-Concept:</b>					
Physical	31.61	3.43	0.7937	0.6769	1.17
Social	29.84	3.66	0.0077	0.4132	0.02
Temperamental	33.30	3.55	-0.4158	0.5283	0.79
Educational	34.92	3.72	0.6718	0.4427	1.52
Moral	32.42	3.07	-0.8244	0.5696	1.45
Intellectual	28.08	3.89	0.2607	0.5038	0.52
<b>Criterion (Y) :</b>					
Academic Achievement	67.71	9.00			

General Details :

Multiple R	=	0.7436
R Square	=	0.5530
S.E.of Estimate	=	7.3150
F. Value	=	2.0300 *

\*\* Significant at .01 level

\* Significant at .05 level

freely and act according to their desires with no interruption from teachers. Their academic performance is hampered in a school climate where teachers do not recognise the students' right to express feelings, to uniqueness and to be autonomous individuals.

The dimensions of self-concept having high regression coefficients are : physical (.7937), educational (.6718) and intellectual (.2607) with direct relationships and temperamental (-.4158) and moral (-.8244) with inverse relationships. It may be concluded that academic achievement of UC rural boys were high if they had developed views of their body, health, physical appearance and strength; had views of themselves in relation to school, teachers and extracurricular <sup>activities</sup> and awareness of their intelligence and capacity of problem solving and judgements. But individuals unaware of their emotional state and their moral worth are likely to achieve low academic standards.

These findings also find partial support in following researches. Ahluwalia (1990), Banfield (1972), Rice (1968) and Reddy (1994) have reported that open and controlled school climate seems to be more conducive and favourable to secure high percentage of marks. Vyas (1993) has found that academic failure has been associated with lower affiliation, teacher control, rule clarity and teacher support variables. Singhal (1991) found a significant positive correlation between academic achievement,

affiliation, teacher support, task orientation, competition and innovation dimensions of classroom social climate. Bhatnagar (1966, 1969), Mehta (1968), Deo and Sharma (1970), Vasantha (1971) and Varma and Swain (1990) have found in their studies a positive relationships between self-concept and academic achievement.

#### 4.9 A comparison of Determinants of Academic Achievement Among all the Groups and An Overall Interpretation :

A summary of the dominant predictor variables of academic achievement in each of the eight groups have been presented in Table 10. It can be seen from the table that predictor variables of school environment and self-concept have contributed significantly to academic achievement of SC girls, BC boys, MS girls, MS boys, UC girls and UC boys. The contribution of predictor variables has been insignificant in SC boys and BC girls sample.

The dimensions of school environment significantly contributing to academic achievement are control in MS girls, rejection in MS boys, permissiveness and rejection in UC girls and control and cognitive encouragement in UC boys. These findings are partially in accordance with hypothesis 1 stating that the dimensions of school environment would be significantly

TABLE-10

A COMPARISON OF PREDICTOR VARIABLES OF ACADEMIC achievement of All the Eight Groups

Groups	R-Square F-value	Predietors of Academic Achievement			
		School Environment		Self-Concept	
		Direct Relationships	Inverse Relationships	Direct Relationships	Inverse Relationships
Sc Girls	0.212 2.15*	Congnitive encouragement	Permissiveness, Acceptance, Rejection	Moral, Intellectual	Physical, Temperamental, educational
SC Boys	0.25 1.63	Permissiveness, Rejection, Control	Congnitive encouragement	social, Temperamental, Educational	Physical, Intellectual
BC Girls	0.397 1.19	Congnitive encouragement, Acceptance, Control	Permissiveness	Educational	Intellectual*
BC Boys	0.264 2.21*	Permissiveness, Rejection, Control	Creative stimulation, Acceptance	Moral, Intellectual	Social, Temperamental
MS Girls	0.516 5.47**	Congnitive encouragement	Control*	Social, Educational	Moral
MS Boys	0.516 3.47**	Congnitive encouragement, Rejection**	Control	Educational, Moral, Intellectual	Social
UC Girls	0.559 2.66**	Permissiveness*, Acceptance, Control	Rejection*, creative stimulation, cognitive encouragement	Physical*, Social*, Temperamental	Educational, Moral, Intellectual
UC Boys	0.553 2.03*	Creative stimulation, Permissiveness, control*	Cognitive encouragement**, Acceptance	Physical, Educational, Intellectual	Temperamental, Moral

\*\* Significant at .01 level

\* Significant at .05 level

related and contribute to academic achievement. The hypothesis is true for the MS and UC girls and boys samples only.

the dimensions of self-concept have contributed significantly in BC girls and UC girls sample only. Intellectual in BC girls and physical and social in UC girls sample have significant contributions to academic achievement. This findings partially support the hypothesis 2 which states that all the dimensions of self-concept would significantly contribute to academic achievement.

The hypothesis 3 - 'the patterns of contribution of school environment and self-concept would be different among each of the caste group' is fully supported by the findings of this research. We have a different set of the dimensions of school environment and self-concept contributing significantly and insignificantly (but high) to academic achievement in each caste groups.

Control dimension of school environment has found to be contributing significantly with inverse relationship in MS girls and with direct relationship in UC boys. Rejection has direct relationship in MS boys but inverse relationship in UC girls sample contributing significantly to academic achievement. No any dimension of self-concept has developed significant

regression coefficient with the criterion variable among MS girls and boys samples, but intellectual in BC girls has inverse relationship and physical and social in UC girls have direct relationships. These results are in full accordance with hypothesis 4 which states that school environment and self-concept would contribute differently among Hindu and Muslim children.

If we consider the significant predictors among boys and girls sample of each caste and religious group, it is clear from Table-10 that there is no similarity in predictor variables of academic success in boys and girls. It confirms the hypothesis 5 that contributions of school environment and self-concept would be different among boys and girls.

The school environment and self-concept variables have emerged as significant contributors of academic success of SC girls, BC boys, MS girls and boys and UC girls and boys but the different dimensions are significant in BC girls, MS girls and boys and UC girls and boys only. The maximum number of dimensions (4) have emerged as most effective contributors to academic success in UC girls group followed by UC boys, MS boys and girls and BC girls. In MS boys and girls and in BC girls sample only one dimensions has emerged as contributor. It seems that school environment and self-concept variables are effective predictors of academic achievement among upper caste students

and to some extent in Muslim sample. For SC and BC samples perhaps atmosphere of the school and self-concept have no meaning. They do not seem to care for the school environment and the development of self-concept.

It may be attributed to the socio political condition of our country in which many statutory protectionistic facilities are assured to the SC and BC students by the constitution of our country in the form of lower qualifications for eligibility for admission to courses of studies and jobs, jobs reservations and some political crusade for quick compensation for all the past exploitations without developing adequate capacities among them. Therefore, SC and BC students are not at all interested in their studies and in achievement of higher academic standards. They are also least interested in school environment in which they study and the development of their self-concept. Their academic achievement is also relatively poor as compared to those of upper caste students.

The Triandis (1977) model of social behaviour put forth the multidimensional causality of behaviour. Academic achievement is also determined by many variables. This study has focused on school environment and self-concept variables and has revealed that these variables are effective determinants of academic success but the socio political situation of our country pushing back the process of academic excellence.

Cottle and Klineberg (1974) have postulated that a person who is capable of utilizing the past experience as pre-knowledge, anticipates future and plans the present, is always effective and successful. In other words a future oriented person is a highly performing person. In a sample of eleventh standard boys and girls Promod (1996) has found a positive relationship between academic achievement and future time perspective. Due to reservation and other protectionistic facilities available to SC and BC, and upper caste not getting their due recognition of abilities in admissions and appointments, there exists a scenario of future time perspective in which SC, BC and UC children are not motivated for high academic achievement. The postulation of Cottle and Klineberg seems to be proved by the findings of this research.