

# CHAPTER-11

DATA ACQUISITION

## CHAPTER - IV

Data, its Analysis and Interpretation

In present investigation has been conceived on premise that classroom climate has its constitu attributes and students perception on these affect classr learning environment. The presumption is tested thro data collection from the administration of the follow research tools:

Tool-I A study into Pupils' Opinion about Classro Climate.

Tool-II Rating Scale on Pupils' perception on Readiness for learning.

Tool-III Pupil's Rating on Teacher's Behaviour in the Classroom.

The above tools were administered on a sample of hundred and eleven respondents of whom 46 were boys an were girls. The respondents were selected from urban rural schools, the number being 61 respondents consist of 21 boys and 40 girls from urban schools and respondents consisting of 25 boys and 25 girls from ru schools.

To find the difference in perception, the responde were further classified into categories of high and achievers on the criterion that students with achievem level below 60% were treated as low achievers and students achievement level above 60 percent were treated High achievers

The result of last annual examination and term examination of this year was taken into consideration the categorisation of students on achievement basis.

A description of three tools used in the study is given in the previous chapter whereas the tools are given Annexure II to IV.

The data was consolidated on all the items of every tool separately. Regarding tool number 3 titled :

Pupil's Rating on Teacher's Behaviour in Classroom responses were obtained for three teachers, teaching Language (Hindi), Mathematics and Science (Biology) respectively. These were combined to have a consistent view of pupils' perception regarding the role of teacher contributing to classroom climate.

The following is the presentation of the analysis of the data done on chi-square contingency tables:

1 Analysis of Responses on Tool I : A Study into Pupil's Opinion about Classroom Climate.

Under this tool, responses were sought on a four choice criterion as the following:

- A - Very Good
- B - Somewhat Good
- C - Neither Good nor Bad
- D - Somewhat Bad.

The four choices have been checked as follows:

Table 4.1.1

Item I : Opinion of High and Low Achievers o  
relationship with teachers.

Category of Respondents	A	B	C	D	Total
High Achievers	48 (55)	35 (26.5)	17 (18.5)	--	100
Low Achievers	62 (55)	18 (26.5)	20 (18.5)	--	100
	110	53	37	--	200

Chi-square value : 748

: 3

Significance of Value

0.05 level : Not Significant

Conclusion :

The obtained value of chi-square as 748 is less than the tabulated value of chi-square as 7.815 with 3 degrees of freedom at 0.05 level. It implies that there is no difference in the perception of high and low achievers on relationship with teachers as an aspect of classroom climate.

Table 4.1.2

2 : Opinion of High and Low Achievers on Classroom teaching methods of different subjects.

Category of students	A	B	C	D	Total
Achievers	07 (6.5)	64 (67.5)	26 (22.5)	03 (3.5)	100
Achievers	06 (6.5)	71 (67.5)	19 (22.5)	04 (3.5)	100
	13	135	45	07	200

chi-square value = 1.67

: 3

Significance of value

0.05 level : Not significant

Conclusion:

The obtained value of chi-square as 1.67 is less than the tabulated value of chi-square as 7.815 with 3 degrees of freedom at 0.05 level. It implies that there is no difference in the perception of high and low achievers on classroom teaching methods of different subjects as a

Table 4.1.3

n 3 : Opinion of High and Low Achievers about the content of different subjects.

Category of respondents	A	B	C	D	Total
High Achievers	17 (22.5)	81 (73)	02 (4.5)	--	100
Low Achievers	28 (22.5)	65 (73)	07 (4.5)	--	100
	45	146	09	--	200

chi-square value : 11.16

: 3

Significance of value

0.05 level : Significant

0.01 level : Not Significant

Conclusion:

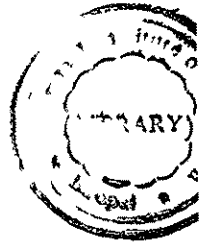
The obtained value of chi-square as 11.16 is more than the tabulated value of chi-square as 7.815 with 3 degrees of freedom at 0.05 level but less at 0.01 level. This shows that there is a difference in the perception of high and low achievers.

Table 4.1.4

Item 4 : Opinion of High and Low Achievers on hard working on school work compared with others in the classroom.

Category of respondents	A	B	C	D	Total
High Achievers	36 (26.5)	50 (51)	14 (22.5)	--	100
Low Achievers	17 (26.5)	52 (51)	31 (22.5)	--	100
	53	102	45	--	200

chi-square value : 13.27  
df : 3  
Significance of value  
at 0.01 level : Significant



Reference:

The obtained value of chi-square as 13.16 is more than the tabulated value of chi-square as 11.341 with 3 degrees of freedom at 0.01 level. It implies that high and low achievers have difference in perception on hard working on school work compared with others as an aspect of classroom climate.

Table 4.1.5

Item 5 : Opinion of High and Low Achievers on doing/follow what the teacher suggests in the classroom.

Category of respondents	A	B	C	D	Total
High Achievers	26 (22)	45 (50)	12 (14.5)	17 (13.5)	100
Low Achievers	18 (22)	55 (50)	17 (14.5)	10 (13.5)	100
	44	100	29	27	200

Chi-square value : 6.39

df : 3

Significance of value

at 0.05 level : Not Significant

Inference:

The obtained value of chi-square as 6.39 is less than the tabulated value of chi-square as 7.815 with 3 degrees of freedom at 0.05 level. It implies that there is no significant difference in perception of high and low achievers on doing/following what the teacher suggests in the classroom as an aspect of classroom climate.



Table 4.1.6

Figure 6 : Opinion of High and Low Achievers about teacher's  
their helping nature on class work in classroom.

Category of Respondents	A	B	C	D	Total
High Achievers	62 (57.5)	33 (34)	-- (4.5)	05 (4)	100
Low Achievers	53 (57.5)	35 (34)	09 (4.5)	03 (4)	100
	115	68	09	08	200

Chi-square value : 10.26

: 3

Significance of value

0.05 level : Significant

0.01 level : Not Significant.

Conclusion:

The obtained value of chi-square as 10.26 is more than the tabulated value of chi-square as 7.815 with 3 degrees of freedom at 0.05 level, but less at 0.01 level. This shows that there is a difference in the perception of high and low

Table 4.1.7

Item 7 : Opinion of High and Low Achievers on their school work compared with the work of others in the class

Category of respondents	A	B	C	D	Total
High Achievers	43 (48.5)	52 (46.5)	05 (46.5)	-- (0.5)	100
Low Achievers	54 (48.5)	41 (46.5)	04 (46.5)	01 (0.5)	100
	97	93	09	01	200

chi-square value : 3.66  
df : 3  
Significance of value  
at 0.05 level : Not Significant

#### Inference:

The obtained value of chi-square as 3.66 is less than the tabulated value of chi-square as 7.815 with 3 degrees of freedom at 0.05 level. It implies that there is no difference in the perception of high and low achievers on their school work compared with the work of others in the class as an aspect of classroom climate.

Table 4.1.8

Item 8 : Opinion of High and Low Achievers on help to each other on their school work.

Category of Respondents	A	B	C	D	Total
High Achievers	34 (43.5)	32 (32.5)	25 (19.5)	01 (0.5)	100
Low Achievers	53 (43.5)	33 (32.5)	14 (19.5)	-- (0.5)	100
	87	65	39	01	200

Chi-square value : 8.27

df : 3

Significance of value

at 0.05 level : Significant

at 0.01 level : Not Significant

Inference:

The obtained value of chi-square as 8.27 is more than the tabulated value as 7.815 with 3 degrees of freedom at 0.05 level, but less at 0.01 level. This shows that there is a difference in the perception of high and low achievers (upto 95%) still there may be marginal cases where there is no perception of high and low achievers as hundred percent cases on doing help each other on their school work as

Table 4.1.9

em 9 : Opinion of High and Low achievers on their friendly act towards one another.

Category of respondents	A	B	C	D	Total
High Achievers	53 (57)	33 (21.5)	14 (21.5)	--	100
Low Achievers	61 (57)	10 (21.5)	29 (21.5)	--	100
	114	43	43	--	200

chi-square value : 18.09

: 3 \*

Significance of value

0.01 level : Significant

Conclusion:

The obtained value of chi-square as 18.09 is more than the tabulated value of chi-square as 11.341 with 3 degree of freedom at 0.01 level. It implies that high and low achievers have difference in perception on their friendly act towards one another as an aspect of classroom climate.

Table 4.1.10

Item 10 : Opinion of High and Low Achievers on their interest in the teaching-learning process.

Category of Respondents	A	B	C	D	Total
High Achievers	26 (34)	52 (45.5)	22 (19.5)	-- (1)	100
Low Achievers	42 (34)	39 (45.5)	17 (19.5)	02 (1)	100
	68	91	39	02	200

Chi-square value . 8.26

df . 3

Significance of value

at 0.05 level : Significant

at 0.01 level : Not Significant

Inference:

The obtained value of chi-square as 8.26 is more than the tabulated value of chi-square as 7.815 with 3 degrees of freedom at 0.05 level, but less at 0.01 level. This shows that there is difference in the perception of high and low achievers still there may be marginal cases where there is no difference in the perception of high and low achievers on this aspect at 0.01 level pertaining to their interest in the teaching-learning process as an aspect of classroom

From the above inferences, the following results are obtained:

High and low achievers have the same perception of classroom climate in regard to the following aspects:

Item 1 : Opinion of High and Low Achievers on relationship with teachers.

Item 2 : Opinion of High and Low Achievers on classroom teaching methods of different subjects.

Item 3 . Opinion of High and Low Achievers on doing following what the teacher suggests in the classroom.

Item 4 . Opinion of High and Low Achievers on their school work compared with the work of others in the classroom.

High and Low achievers quite differ with each other on the following aspects of classroom climate:

Item 5 : Opinion of High and Low achievers on hard work on school work compared with others in the classroom.

Item 6 : Opinion of High and Low achievers on the friendly act towards one another.

I. There is a difference in the perception of High and Low achievers on the following aspects to a large extent (0. level) but not wholly. These aspects can therefore be considered as borderline items where improvement in the interplay-shaping classroom environment could further influence High achievers in overcoming difference perception.

Item 3 : Opinion of High and Low achievers about content of different subjects.

Item 6 : Opinion of High and Low achievers about teacher on their helping nature on classwork in class

Item 8 : Opinion of High and Low achievers on doing help each other on their schoolwork.

Item 10: Opinion of High and Low achievers on their interest in the teaching-learning process.

#### 4.2 Analysis of Responses on Tool II :

##### Readiness for Learning:

Under this tool, responses were sought on a five choice criterion as the following:

1. Agree strongly
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Disagree strongly

The five choices have been shown under the columns of 1,

2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Table 4.2.1

Item 1 : Sometimes I get a little nervous about my work in this class.

Category of Respondents	1	2	3	4	5	Total
High Achievers	48 (41.5)	33 (42)	12 (8)	07 (7)	-- (1.5)	100
Low Achievers	35 (41.5)	51 (42)	04 (8)	07 (7)	03 (1.5)	100
	83	84	16	14	03	200

Chi-square value : 12.9

df : 4

Significance of value

at 0.05 level : Significant

at 0.01 level : Not Significant

Inference:

The obtained value of chi-square as 12.9 is more than the tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level but less at 0.01 level. This shows that there is a difference in the perception of high and low achievers (upto 95%) still there may be marginal cases where there is no difference in the perception of high and low achievers as a hundred percentage case on the statement "Sometimes I get a little nervous about my work in this class", as an aspect of classroom climate.



Table 4.2.2

Item 2 : I want to do really well in this class.

Category of Respondents	1	2	3	4	5	Total
High Achievers	88 (75)	10 (22.5)	-- (1.5)	--	02 (1)	100
Low Achievers	62 (75)	35 (22.5)	03 (1.5)	--	-- (1)	100
	150	45	03	--	02	200

chi-square value : 23.4

df : 4

Significance of value

at 0.01 level : Significant

**Inference:**

The obtained value of chi-square as 23.4 is more than the tabulated value of chi-square as 13.277 with 4 freedom

at 0.01 level. It implies that high and low achievers have difference in perception on the statement, 'I want to do really well in this class', as an aspect of classroom climate.

Table 4.2.3

Item 3 : I usually have to do boring things in this class

Category of

Respondents

	1	2	3	4	5	Total
High Achievers	12 (15.5)	50 (40)	09 (17.5)	24 (20)	05 (7)	100
Low Achievers	19 (15.5)	30 (40)	26 (17.5)	16 (20)	09 (7)	100
	31	80	35	40	14	200

Chi-square value : 17.58

df : 4

Significance of value

at 0.01 level : Significant

Inference:

The obtained value of chi-square as 17.58 is more than the tabulated value of chi-square as 13.277 with 4 degrees of freedom at 0.01 level. It implies that high and low achievers have a difference in perception on the statement, 'I usually have to do boring things in this class', as an aspect of classroom

Table 4.2.4

Item 4 : This is a very pleasant class

Category of respondents	1	2	3	4	5	Total
High Achievers	22 (30.5)	40 (39)	26 (22.5)	12 (8)	--	100
Low Achievers	39 (30.5)	38 (39)	19 (22.5)	04 (8)	--	100
	61	78	45	16	--	200

Chi-square value : 9.88

: 4

Significance of value

0.01 level : Significant

0.05 level : Not Significant

Conclusion:

The obtained value of chi-square as 9.88 is more than the related value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level but less at 0.01 level. This shows that there is a significant difference in the perception of high and low achievers (upto 95% confidence level). In all there may be marginal cases where there is no difference in the perception of high and low achievers on statement, 'This

Table 4.2.5

Item 5 : If I try, I can usually manage my classwork  
in this class

Category of Students	1	2	3	4	5	Total
High Achievers	79 (63.5)	21 (35)	-- (1.5)	--	--	100
Low Achievers	48 (63.5)	49 (35)	03 (1.5)	--	--	100
	127	70	03	--	--	200

Chi-square value : 21.77

: 4

Significance of value

0.01 level : Significant

Conclusion:

The obtained value of chi-square as 21.77 is more than the related value of chi-square as 13.277 with 4 degrees of freedom at 0.01 level. It implies that high and low achievers have a significant difference in perception on the statement, 'If I try, I can usually manage my class work in this class', as an aspect of classroom climate.

Table 4.2.6

Item 6 : I really don't care about teachers  
opinion very much

Category	1	2	3	4	Total	
High Achievers	12 (13.5)	26 (27.5)	33 (33)	17 (17)	12 (9)	100
Low Achievers	15 (13.5)	29 (27.5)	33 (33)	17 (17)	06 (9)	100
	27	55	66	34	18	200

Chi-square value : 2.49

df : 4

Significance of value

at 0.05 level : Not Significant

#### Inference:

The obtained value of chi-square as 2.49 is less than the tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level. It implies that there is no difference in the perception of high and low achievers on the statement, 'I really don't care about teachers opinion very much'.

Table 4.2.7

Item 7 : My teacher is the only one who decides  
what to do in the class.

Category of respondents	1	2	3	4	5	Total
High Achievers	21 (23.5)	17 (21)	26 (19.5)	14 (18.5)	22 (17.5)	100
Low Achievers	26 (23.5)	25 (21)	13 (19.5)	23 (18.5)	13 (17.5)	100
	47	42	39	37	35	200

Chi-square value : 10.88

: 4

Significance of value

0.05 level : Significant

0.01 level : Not Significant

Conclusion:

The obtained value of chi-square as 10.88 is more than tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level but less at 0.01 level. This shows that there is a significant difference in the perception of high and low achievers (upto 95%) in the perception of high and low achievers on the statement, 'My teacher is the only one who decides what to do in the class', although there may be marginal cases where there is no difference.

Table 4.2.8

Item 8 : My teacher seldom writes comments on homework.

Category of respondents	1	2	3	4	5	Total
High Achievers	12 (15.5)	52 (47)	12 (16)	17 (14.5)	07 (7)	100
Low Achievers	19 (15.5)	42 (47)	20 (16)	12 (14.5)	07 (7)	100
	31	94	32	29	14	200

Chi-square value : 5.5

Degrees of freedom : 4

Significance of value

0.05 level : Not Significant

Inference:

The obtained value of chi-square as 5.5 is less than the tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level. It implies that there is no difference in the perception of high and low achievers on the statement. 'My teacher, seldom write comments on homework', as an aspect of classroom climate.

Table 4.2.9

Item 9 : I worry a lot all the time about my work in this class

Category of Respondents	1	2	3	4	5	Total
High Achievers	17 (15)	45 (45)	14 (15)	22 (21)	02 (4)	100
Low Achievers	13 (15)	45 (45)	16 (15)	20 (21)	06 (4)	100
	30	90	30	42	08	200

Chi-square value : 2.79

df : 4

Significance of value

at 0.05 level : Not Significant

Inference:

The obtained value of chi-square as 2.79 is less than the tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level. It implies that there is no difference in the perception of high and low achievers on the statement, "I worry a lot all the time about my work in this class", as an aspect of classmate's work.



Table 4.2.10

Item 10 : We never work in groups in this class.

Category of

Respondents	1	2	3	4	5	Total
High Achievers	05 (9)	31 (33)	17 (16.5)	33 (27.5)	14 (14)	100
Low Achievers	13 (9)	35 (33)	16 (16.5)	22 (27.5)	14 (14)	100
	18	66	33	55	28	200

chi-square value : 6.03

df : 4

Significance of value

at 0.05 level : Not Significant

Inference:

The obtained value of chi-square as 6.03 is less than the tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level. It implies that there is no difference in the

Table 4.2.11

tem 11 : Sometimes we are graded for group work in this class

Category of

Respondents	1	2	3	4	5	Total
High Achievers	12	43	24	14	07	100
	(17)	(48.5)	(17.5)	(10.5)	(6.5)	
Low Achievers	22	54	11	07	06	100
	(17)	(48.5)	(17.5)	(10.5)	(6.5)	
	34	97	35	21	13	200

chi-square value : 11.43

: 4

Significance of value

0.05 level : Significant

0.01 level : Not Significant

Inference:

The obtained value of chi-square as 11.43 is more than the tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level, but less at 0.01 level. This shows that there is a significant difference in the perception of high and low achievers (upto 95%) on the statement, 'Sometimes we are graded for group work in this class', as at all there may be marginal cases where there is no difference in the perception of high and low achievers on the statement, 'Sometimes we are graded for group work in this class', as at

Table 4.2.12

Item 12 : This class makes me feel unhappy.

Category of respondents	1	2	3	4	5	Total
High Achievers	12	21	24	24	19	100
	(12)	(21.5)	(19)	(31.5)	(16)	
Low Achievers	12	22	14	39	13	100
	(12)	(21.5)	(19)	(31.5)	(16)	
	24	43	38	63	32	200

chi-square value : 7.35

df : 4

Significance of value

at 0.05 level : Not Significant

**Inference:**

The obtained value of chi-square as 7.35 is less than the tabulated value of chi-square as 9.488 with 4 degrees of freedom at 0.05 level. It implies that there is no difference in the perception of high and low achievers on the statement, 'This class makes me feel unhappy', as an aspect of classmate's

Table 4.2.13

Item 13 : Interesting things happen in my class.

Category of Respondents	1	2	3	4	5	Total
High Achievers	31	38	29	--	02	100
	(31.5)	(38.5)	(25.5)	(3)	(1.5)	
Low Achievers	32	39	22	06	01	100
	(31.5)	(38.5)	(25.5)	(3)	(1.5)	
	63	77	51	06	03	200

chi-square value : 7.32

df : 4

Significance of value

at 0.05 level : Not Significant

**Inference:**

The obtained value of chi-square as 7.32 is less than the tabulated value of 9.488 with 4 degrees of freedom at 0.05 level. This implies that there is no difference in the perception of high and low achievers on the statement, "Interesting things happen in my class", as an aspect of classroom climate.

Table 4.2.14

Item 14 : The classroom climate is in a very unpleasant.

Category of

Respondents

	1	2	3	4	5	Total
High Achievers	02	51	24	38	05	100
	(7)	(33.5)	(25)	(26)	(8.5)	
Low Achievers	12	36	26	14	12	100
	(7)	(33.5)	(25)	(26)	(8.5)	
	14	67	50	52	17	200

Chi-square value : 21.55

df : 4

Significance of value

at 0.01 level : Significant

Inference:

The obtained value of chi-square as 21.55 is more than the tabulated value of chi-square as 13.277 with 4 degrees of freedom at 0.01 level. It implies that high and low achievers have a significant difference in perception on the statement, 'This classroom climate is in a way unpleasant', as an aspect of classroom climate. In other words, pleasantness is a positive attribute

No.	Item	Raw positive Score	Position above or below the mean score
1.	Shows to pupils how to take up on an answer when the pupils can't find it themselves.	225	Above
2.	Ask the pupils what they would like to study in next lesson.	49	Below
3.	Feels disappointed when pupils get something wrong.	83	Below
4.	Asks the class what they think of something, a pupil had said.	253	Above
5.	Modifies his/her attendings towards the pupils.	155	Below
6.	Supporting the lesson with examples from day-to-day life.	199	Above
7.	Cordially welcomes any new comer to the class.	192	Above
8.	Cares for developing friendship among all students.	212	Above
9.	Behaves equally with every student.	219	Above
10.	Does everything possible to restore the efficiency of the students.	186	Above
11.	Insists upon the completion of the home task.	202	Above
12.	Keeps in touch with other subjects in addition to the subject of teaching.	71	Below
13.	Helps the pupils to learn by themselves	202	Above

Table 4.2.15

Item 15 : Our teachers tell us why one gets the grade on homework.

Category of respondents	1	2	3	4	5	Total
High Achievers	02 (12)	38 (32.5)	29 (27)	21 (16.5)	10 (7)	100
Low Achievers	22 (12)	27 (32.5)	25 (27)	22 (16.5)	04 (7)	100
	24	65	54	33	14	200

Chi-square value : 22.9

: 4

Significance of value

0.01 level : Significant

Inference:

The obtained value of chi-square as 22.9 is more than the tabulated value of chi-square as 13.277 with 4 degrees of freedom at 0.01 level. It implies that high and low achievers have a significant difference in perception on the statement, "Our teachers tell us why one gets the grade on homework", as an aspect of classroom climate.

Discussion on analysis and statement inferences made for items  
vol II

From the above inferences, the following results are obtained.

High and low achievers have the same perception of classroom climate in regard to the following aspects:

- Item 6 : I really don't care about teachers opinion very much
- Item 8 : My teachers seldom writes comments on homework.
- Item 9 : I worry a lot all the time about my work in this class
- Item 10: We never work in group in this class.
- Item 12: This class makes me feel unhappy.
- Item 13: Interesting things happen in my class.

High and Low achievers have different perception of classroom climate in regards to the following aspects:

- Item 2 : I want to do really well in this class.
- Item 3 : I usually have to do boring things in this class.
- Item 5 : If I try, I can usually manage my classwork in this class.
- Item 14: The classroom climate is in a way unpleasant.
- Item 15: Our teachers tells us why one gets the grade on homework.

[I. High and Low achievers have different perception on classroom climate (upto 95%) regards to the following aspects:

- Item 1 : Sometimes I get a little nervous about my work in this class.
- Item 4 : This is a very pleasant class.



Item 7 : My teacher is the only one who decides what to do in the class.

Item 11: Sometimes we are graded for group work in this class

### 3 Analysis of Responses on Tool III:

#### Pupil's Rating on Teacher's Behaviour in the Classroom

This tool was developed with the objective to study pupils' perceptions on how teacher behaviour influences classroom environment building. In the beginning, it was assumed that pupil perceptions could vary about the contribution of different subject teachers and that by aggregating the perceptions on them against the respective items, it could be possible to obtain an overview of teacher behaviour variables. The data on variation between perceptions of different subjects could have yielded an analysis but it was not done due to limitations of time. The data presented herein is the summation of three responses on individual items as Pupils' Perceptions of Teacher Behaviour contributing to the Classroom Climate.

Pupils' responses were collected on a three-point rating scale as 'Yes', 'No', 'Seldom'. Herein the response 'Yes' has been picked up as the one instrumental for contributing to positive climate building and has been worked out in

As the items included in Tool III on Teacher Behaviour contributing to shaping classroom environment are quite large - number, a cut off point was decided to identify the important behaviours. The mean of raw scores was computed as 156. Items below this mean value were rejected as less important while items above this mean value were retained as important behaviours. These are stated here in order of their relative importance.

Table 4.3.1

All Respondent's Perception on Teacher's Behaviour in contributing to classroom learning climate.

No.	Item	Raw positive Score	Position above or below the mean score
1.	Enjoys remarks made by pupils.	107	Below
2.	Praises what pupils say in class discussion.	138	Below
3.	Tells pupils about some interesting things.	161	Above
4.	Influencing pupils with his/her own example.	157	Above
5.	Suggests to pupils helpful ways of studying.	164	Above
6.	Talks with pupils after school about ideas the pupils have.	75	Below

No.	Item	Raw positive Score	Position above or below the mean score
3.	Shows to pupils how to take up on an answer when the pupils can't find it themselves.	225	Above
7.	Ask the pupils what they would like to study in next lesson.	49	Below
2.	Feels disappointed when pupils get something wrong.	83	Below
1.	Asks the class what they think of something, a pupil had said.	253	Above
2.	Modifies his/her attendings towards the pupils.	155	Below
3.	Supporting the lesson with examples from day-to-day life.	199	Above
4.	Cordially welcomes any new comer to the class.	192	Above
5.	Cares for developing friendship among all students.	212	Above
5.	Behaves equally with every student.	219	Above
7.	Does everything possible to restore the efficiency of the students.	186	Above
3.	Insists upon the completion of the home task.	202	Above
7.	Keeps in touch with other subjects in addition to the subject of teaching.	71	Below
2.	Helps the pupils to learn by themselves	202	Above

ference:

The following Teacher's Behaviour have been identified as contributing to building classroom educational climate.

Teachers informing pupils about interesting things.

) Teachers influencing pupils with personal example.

1) Teachers suggesting to pupils helpful ways for enhancing learning.

) Teachers helping pupils in problem solving by appropriate methods.

Teachers seeking and maintaining pupils attention through classroom questioning.

) Teachers explaining textual content through familiar examples.

11) Teachers cordial welcome to new comers to the class

111) Teachers attempt to build social relationship among all students of the class.

x) Teachers equality of behaviour towards all students.

) Teachers efforts for improving students efficiency classroom activities.

1) Teachers persuasion of students for completing homework in time.

11) Teachers skills for helping pupils to learn by themselves.

The other eight items of the inventory were rejected

NO.	Desired teacher Behaviour	Raw scores Boys	Rank order Boys	Raw scores Girls	Rank order Girls	Rank diff.
	Teachers explaining textual content through familiar examples.	8.9	II.5	110	IX	6
	Teachers cordial Welcome to new comers to the class.	59	X.5	133	IV	
	Teachers attempt to build social relationship among all students of the class.	78	VII	134	III	4
	Teachers equality of behaviour towards all students.	89	II.5	130	V	2.
0	Teachers efforts for improving student efficiency in classroom activities.	71	VIII	115	VIII	
1	Teachers persuasion of students for completing homework in time.	85	IV.5	117	VII	
2	Teachers skill for helping pupils to learn by themselves.	80	VI	122	VI	

Computing Spearman Rank Order Correlation Coefficient the rho ( $\rho$ ) comes out as follows.

$$\text{Rho } (\rho) = 1 - \frac{6 \sum D^2}{N(N-1)} = 0.1$$

Which shows a positive correlation between perception of boys and girls on different aspects of teacher behaviour contributing to classroom climate building. correlation is not quite high because of divergence perception of boys and girls on the following teacher behaviour.

6. Teachers explaining textual content through familiar examples.
7. Teachers cordial welcome to newcomers to the class.
8. Teachers attempt to build social relationship among students of the class.

There is a (+1.0) positive relationship in the perception of boys and girls on the following teacher behaviour.

5. Teachers seeking and maintaining pupils attention through classroom questioning.
10. Teachers efforts for improving students efficiency classroom activities.

Analysing the rank orders given in table 4.31 and 4.32, we find that the following are the critical teacher behaviours that operate in the building of an educational learning climate in the classroom.

The teacher:

1. Asks the class what they think of something, a pupil had said: .
2. Shows pupils how to look up to an answer when pupils can't find it themselves.
3. Behaves equally with every student.
4. Cares for developing friendship among all students.
5. Insists upon the completion of the home task.
6. Helps the pupils to learn by themselves.

The findings in this chapter from the analysis of data obtained on the tools of research have been summed up in the next chapter titled "Findings & Conclusions of the Study"