



CONSTRUCTION AND STANDARDIZATION OF FAMILY CLIMATE INVENTORY

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ABSTRACT :

The purpose of this study is to construct and validate a research inventory for measuring the family climate of the higher secondary students. For this study, simple random sampling technique was used for selecting the sample. For constructing this inventory, 112 items were framed for the pilot study. The pilot study was conducted for a sample of 100 higher secondary students. After the pilot study, item analysis was done to standardize the research inventory. Finally, 72 items were selected for the final study.



KEYWORDS : Family Climate.

FAMILY

Family is the Roman word taken from the root word “famulus” means a servant. Sills (1968), suggest that the word family has its origin in a Latin word which could be roughly equated with domestic group. A domestic group may be defined as a group of people who habitually share a common dwelling and a common food supply. New Websters Dictionary (2004) defines ‘Family’ as a group of persons, consisting of parents and their children.

According to Frank (1948), “The family is the only socially recognized relation for child bearing and the essential agency for child rearing, socialization, and introducing the child to the culture of the society, thereby shaping the basic character structure of our culture and forming the child’s personality”. Thus, family is the primary and basic group in the society where the child learns how to behave and communicate with the social environment. Family serves as an enriching ground for early socialization and personality development, the healthy outcomes of which are the provision of unconditional love and acceptance, understanding, behavioural management and guidance, academic encouragement and assistance (Das Gupta and Sanyal, 2008). Generally, family can be seen as a group of people who have biological, emotional or legal ties to each other (McDaniel et. al., 1990). Thus family is the socio biological unit which shows the greatest influence on the development of the individual. Family is the primary institution which not only satisfies the basic needs of the individual but also responsible for the socialization of the child.

CLIMATE

Climate refers to social, moral, economic, political, physical and intellectual factors which influence the development of an individual. The climate covers all the surrounding factors which

influence the life of the individual from the beginning. The various definitions described by the different authors about the climate are described below;

New Websters Dictionary (2004) defines 'Climate or Environment' as the aggregate of all external and internal conditions affecting the existence, growth, and welfare of organisms. Boring, Langsfield and Welf (1961) "The climate is everything that affects the individual except his genes". Webster's New World College Dictionary (2010) states that "All physical, social and cultural factors and conditions influencing the existence or development of an organism or assemblage of organisms." Family, food, geography, culture, religion, literature, art, music, school and other informal agencies of specializations like radio, press, television etc. are some of the prominent constituents of environment.

FAMILY CLIMATE

Family climate usually refers to the environment, both physical and emotional, and the state of the family whether it is good, bad, dysfunctional etc. (Knapp, 1993). Thus family climate refers to the mutual relationship occurs among the family members and their behaviour with one another. In fact, family climate refers to the "sum total of the conditions which surrounds man from the very beginning of his life. (Sadaf Jafri, 2011).

Construction of Family Climate Inventory

As per the researcher knowledge, only few standardized tool are available for measuring the Family Climate of students. The standardized Family Climate tool was constructed on environment which is different from our society. So, the investigator decided to construct and standardize the Family Climate Inventory which is suitable for the current research area.

Steps Involved in Constructing the Family climate Inventory

1. Investigator's personal experience and observation of the surrounding problems.
2. Investigator's discussion with the teachers, experts and students of various schools, family members and their opinions.
3. Collecting information from enormous review of related literature from journals, articles and also from newspapers related to the research problem.

ITEM POOLING

By reviewing various related literature, the investigator classified the Family Climate scale in to four dimensions. The researcher framed 112 statements for the pilot study. The researcher classified Family Climate Inventory in to 4 dimensions as follows;

1. Encouragement

'Encouragement' refers to the supportive and motivational activities provided by the family members and social factors to the individuals.

2. Care Taking

'Care taking' refers to the affection and care given by the parents, family members and other surrounding members.

3. Disciplining

'Disciplining' refers to the rules and regulations given by the family and community to the individuals and the disciplines followed by the individual.

4. Relationship

'Relationship' refers to the type of relationships of the individual with the other members and their attitude towards them.

Table 1: Family Climate Inventory Statements and its Dimensions

S.No.	Dimensions	Serial-wise Statement Numbers	No. of Statements
1.	Encouragement	1 - 28	28
2.	Care taking	29 - 56	28
3.	Disciplining	57 - 84	28
4.	Relationship	85 - 112	28
Total No. of Statements			112

Pilot Study

In order to perfectly construct the inventory, a pilot study was conducted among 100 higher secondary biology students in five schools located in Chennai, Kancheepuram and Tiruvallur districts. For the pilot study, 100 tools were distributed to 50 male and 50 female higher secondary biology students. The questionnaire were distributed and collected through individual contact with the students in the premises of the respective school principals and higher authorities. The 100 inventories administrated to the pilot study were scored and arranged in descending order from the top most scorer to the bottom most scorer. Two criterion groups, the upper group consisting of 27 tools and the lower group of 27 tools were arranged. Then they were subjected to item analysis.

Item Analysis and Scoring Procedure

The pilot study inventory has 112 statements. This inventory has 95 positive and 15 negative statements. Each statement has 5 responses and their scoring procedure is listed in the following table.

Table 2: Scoring Procedure for Family Climate Inventory

Responses of the Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Positive Statements	5	4	3	2	1
Negative Statements	1	2	3	4	5

In this way, one can get a maximum score of 560 and the minimum score of 112. Then the responses are subjected to critical ratio analysis of 't' and correlation analysis of 'r'.

Table 3: Family Climate Inventory (Pilot study)

S.No.	STATEMENTS	't' value	'r' value	Remarks
Dimension 1: ENCOURAGEMENT				
1.	Whenever, I score good marks in the class, my father presents me a gift.	5.298	0.494	Selected
2.	My parents appreciate me if I join in extracurricular activities.	6.813	0.599	Selected
3.	My parents encourage me to write the competitive examination regularly.	3.493	0.299	Selected
4.	Whenever I participates an event in the school, my parents attend it.	4.411	0.534	Selected
5.	My father inspires me to study newspaper daily.	7.248	0.600	Selected
6.	My brothers/sisters help me to complete my home work quickly.	4.396	0.476	Selected
7.	My father easily gives permission for me to go for	1.866	0.095	Not

	excursion.			Selected
8.	My parents allow me to take own decision.	3.170	0.302	Selected
9.	My father gives more money than I need. (N)	1.606	0.162	Not Selected
10.	My parent praises me before my friends and neighbours.	2.440	0.320	Selected
11.	If I go to any new place alone my father appreciates my courageous act.	3.367	0.362	Selected
12.	My father encourages me to go to library.	3.012	0.309	Selected
13.	My grandfather gives many practices for my handwriting.	0.769	0.021	Not Selected
14.	My father wants success in every step of my life.	1.187	0.241	Not Selected
15.	My mother motivates me to go to exhibitions.	2.900	0.433	Selected
16.	If I do any social work, my family members appreciate me.	4.706	0.442	Selected
17.	My father grants much freedom for me in studies than my relatives.	2.828	0.272	Selected
18.	My mother encourages me to learn other languages.	3.905	0.469	Selected
19.	My grandmother advises me to sing devotional songs.	4.179	0.358	Selected
20.	My father gives me enough money for my study.	2.487	0.315	Selected
21.	Good hobbies are encouraged by our family members.	1.987	0.306	Selected
22.	When I achieve small goal, my parents appreciate me.	4.395	0.410	Selected
23.	My grandfather gives money for doing my hobbies.	1.296	0.055	Not Selected
24.	My parents do not support me to use cell-phone often.	0.111	0.047	Not Selected
25.	Whenever I feel sad, my mother will not motivate me.	1.751	0.442	Not Selected
26.	My mother do not allow me when I talk with strangers.(N)	0.269	0.043	Not Selected
27.	My parents do not disturb me during my study hours.	2.950	0.285	Not Selected
28.	My parents don't give any important task to me.(N)	2.678	0.343	Selected
Dimension 2: CARE TAKING				
29.	My father is quite worried about my future.	0.196	0.001	Not Selected
30.	My mother repeatedly watches me whether I have taken food or not.	6.898	0.607	Selected
31.	If I return late from school, my mother starts to enquire about the delay.	4.305	0.441	Selected
32.	If I get low marks, my parents do not allow me to watch TV.	0.624	0.062	Not Selected
33.	My family members want to know the background of my friends.	2.950	0.310	Selected
34.	Whenever I get low marks than their expectations my parents scold me.	0.010	0.009	Not Selected
35.	My parents keep in touch with my teachers to know my progress.	2.341	0.306	Selected

36.	My parents willingly fulfill all my needs before I ask.	5.712	0.525	Selected
37.	My grandparents care about me very well.	2.938	0.364	Selected
38.	My grandmother advices me not to do work beyond my capacities.	1.390	0.191	Not Selected
39.	When I am in confusion my mother identifies my problem.	5.839	0.570	Selected
40.	Whenever, I fall on sick, my father gives the best medical care even though it is costly.	2.499	0.293	Selected
41.	My mother will not sleep till I return home at night.	3.024	0.431	Selected
42.	Whenever I am trapped in difficult problem my father gives best solution to come out of the problem.	4.417	0.498	Selected
43.	If I get low marks in exam, my mother arrange tuition for me.	0.732	0.044	Not Selected
44.	My parents attend all my PTA meeting regularly.	1.296	0.291	Not Selected
45.	During exam time my mother refreshes me by giving a cup of tea.	5.041	0.567	Selected
46.	My parents pay school fees in time.	1.321	0.129	Not Selected
47.	Whatever I ask, my mother buys and gives only if it is necessary.	1.507	0.236	Not Selected
48.	My family members take care of each other's.	4.246	0.433	Selected
49.	My grandfather desire is that I should get Government Job.	0.837	0.063	Not Selected
50.	My mother sacrifices her pleasure to educate us only.	3.689	0.474	Selected
51.	Even though my father is busy at his work, he listens to my problems.	6.178	0.525	Selected
52.	Our parents do not stay outside without us.	1.388	0.264	Not Selected
53.	Whenever I am in sad my family members comforts me.	5.455	0.471	Selected
54.	My parents do not render help to me to do my homework (N)	3.043	0.286	Selected
55.	If I go to any new place my mother sends some persons along with me.(N)	1.103	0.135	Not Selected
56.	My father does not give pocket money to me. (N)	3.621	0.350	Selected
Dimension 3: DISCIPLINING				
57.	My parents insist me to follow school rules properly.	2.249	0.306	Selected
58.	Religious rituals are strictly followed in my home.	2.867	0.334	Selected
59.	My mother advices me to give respect to elders.	1.910	0.278	Not Selected
60.	My father wants me to do all the works on my own.	1.066	0.250	Not Selected
61.	If I misbehave outside home, my parents punish me.	2.801	0.291	Selected
62.	All members of our family follow the elder's words.	3.348	0.368	Selected
63.	My grandmother advices me not to hurt anyone while talking.	1.414	0.113	Not Selected
64.	I can express my opinions freely in front of the guests also.	0.657	0.061	Not Selected
65.	My parents want me, to be punctual.	3.312	0.401	Selected

66.	My parents do not talk, our family problems in my presence.	1.887	0.268	Not Selected
67.	My family members used to keep things in order.	4.659	0.493	Selected
68.	We do not tease one another in my family.	1.353	0.202	Not Selected
69.	I must finish homework in proper time otherwise, my mother scolds me.	3.376	0.339	Selected
70.	I have to study in my study room.	1.198	0.204	Not Selected
71.	My father does not want to bring friends to my house.	1.970	0.243	Selected
72.	My parents are very strict about my dress code.	3.678	0.360	Selected
73.	My mother used to advise me to be polite with others.	3.552	0.450	Selected
74.	My grandparents teach me to avoid entrapped persons than to oppose them.	2.268	0.276	Selected
75.	Whenever I slam the door due to anger my father scolds me.	1.164	0.054	Not Selected
76.	My father tells me about his childhood days.	4.741	0.496	Selected
77.	I will not go out without informing my parents.	3.883	0.436	Selected
78.	My grandfather teaches me how to behave in social functions.	3.559	0.334	Selected
79.	Without asking my parents I will not buy anything.	1.831	0.211	Not Selected
80.	My parents scold me when I disturb them during their work time. (N)	0.852	0.081	Not Selected
81.	My family members use to blame each other's. (N)	3.969	0.401	Selected
82.	I often quarrel with my family members. (N)	2.959	0.342	Selected
83.	My mother scolds me if I have oppositive gender friends. (N)	0.936	0.188	Not Selected
84.	Breaking things due to anger is quite common in my family. (N)	2.751	0.353	Selected
Dimension 4: RELATIONSHIP				
85.	My mother knows my weakness and strengths.	4.646	0.459	Selected
86.	I used to discuss with my family members, before I make any important decision.	2.327	0.272	Selected
87.	My father and myself use to discuss about my future career.	4.910	0.516	Selected
88.	My family members support me a lot to overcome my problems.	4.634	0.532	Selected
89.	If I face any difficult problem, my family members will give solution for that.	1.439	0.280	Not Selected
90.	My family members are well known about their responsibilities.	3.253	0.407	Selected
91.	My family members do not talk each other, when they are angry.	1.352	0.189	Not Selected
92.	All important decisions in our family are taken by elders only.	0.123	0.092	Not Selected
93.	I like to do petty works for my father when he is doing minor work.	4.468	0.475	Selected
94.	During, leisure time my family members freely discuss their problems.	3.491	0.420	Selected

95.	Watching Tv is the only entertainment in my family.	1.021	0.032	Not Selected
96.	I feel happy being with my family.	3.493	0.425	Selected
97.	My parents never ask about my friends' caste and religion.	0.554	0.126	Not Selected
98.	My parents freely talk with my friends.	1.879	0.359	Selected
99.	My parents do not disturb me while I am studying.	3.560	0.380	Selected
100.	When I am sad, it will reflect in my family also.	2.292	0.301	Selected
101.	When my mother goes to market, I accompanying with her.	3.984	0.404	Selected
102.	I help my mother in cleaning the house.	1.682	0.225	Not Selected
103.	My parents trust me that I will not do bad things.	2.699	0.349	Selected
104.	I freely ask my parents about the needed things.	3.022	0.373	Selected
105.	My grandmother taught some medical tips which help me in critical situation.	1.139	0.160	Not Selected
106.	My parents do not believe if anyone complaint about me.	2.866	0.252	Selected
107.	I regret after quarrelling with my family members.	3.956	0.488	Selected
108.	My parents used to compare me with others (N)	2.900	0.334	Selected
109.	My parents don't like to take me to the market with them (N)	1.905	0.278	Not Selected
110.	My parents believe my words fully.	5.653	0.516	Selected
111.	All my family members should take food together at night.	4.101	0.429	Selected
112.	My parents do not allow me to stay with my friends during night time (N)	0.259	0.069	Not Selected

In this study, the statements having satisfied the level of both 't' value and 'r' value were selected for the main study. The statements used in the pilot study were 112, out of these only 72 statements were selected for the final study.

Table 4: Family Climate Scale Dimensions and the No. of Statements in Each Dimension (Final Study)

S.No.	Dimensions	No. of Statements
1.	Encouragement	19
2.	Care taking	17
3.	Disciplining	17
4.	Relationship	19
Total No. of Statements		72

These selected 72 statements constitute the final form of Family Climate inventory which having satisfied level of both 't' value and 'r' value. The selected items are presented in the Table-5. The following 40 items have been rejected, since the 't' value and the 'r' value were not at the level of significance. The rejected items numbers are 7, 13, 14, 23, 24, 26, 29, 32, 33, 34, 38, 43, 44, 46, 47, 49, 52, 55, 56, 59, 60, 63, 66, 68, 70, 75, 79, 83, 89, 91, 92, 95, 97, 102, 105, 108, 110, 111, 112.

Table 5: Statements Selected for Final Form of Family Climate Inventory

No. of Statements Selected	't' value	'r' value	Remarks
1.	5.298	0.494	Selected
2.	6.813	0.599	Selected
3.	3.493	0.299	Selected
4.	4.411	0.534	Selected
5.	7.248	0.600	Selected
6.	4.396	0.476	Selected
8.	3.170	0.302	Selected
10.	2.440	0.320	Selected
11.	3.367	0.362	Selected
12.	3.012	0.309	Selected
15.	2.900	0.433	Selected
16.	4.706	0.442	Selected
17.	2.828	0.272	Selected
18.	3.905	0.469	Selected
19.	4.179	0.358	Selected
20.	2.487	0.315	Selected
21.	1.987	0.306	Selected
22.	4.395	0.410	Selected
28.	2.678	0.343	Selected
30.	6.898	0.607	Selected
31.	4.305	0.441	Selected
33.	2.950	0.310	Selected
35.	2.341	0.306	Selected
36.	5.712	0.525	Selected
37.	2.938	0.364	Selected
39.	5.839	0.570	Selected
40.	2.499	0.293	Selected
41.	3.024	0.431	Selected
42.	4.417	0.498	Selected
45.	5.041	0.567	Selected
48.	4.246	0.433	Selected
50.	3.689	0.474	Selected
51.	6.178	0.525	Selected
53.	5.455	0.471	Selected
54.	3.043	0.286	Selected
56.	3.621	0.350	Selected
57.	2.249	0.306	Selected
58.	2.867	0.334	Selected
61.	2.801	0.291	Selected
62.	3.348	0.368	Selected
65.	3.312	0.401	Selected
67.	4.659	0.493	Selected
69.	3.376	0.339	Selected
71.	1.970	0.243	Selected

72.	3.678	0.360	Selected
73.	3.552	0.450	Selected
74.	2.268	0.276	Selected
76.	4.741	0.496	Selected
77.	3.883	0.436	Selected
78.	3.559	0.334	Selected
81.	3.969	0.401	Selected
82.	2.959	0.342	Selected
84.	2.751	0.353	Selected
85.	4.646	0.459	Selected
86.	2.327	0.272	Selected
87.	4.910	0.516	Selected
88.	4.634	0.532	Selected
90.	3.253	0.407	Selected
93.	4.468	0.475	Selected
94.	3.491	0.420	Selected
96.	3.493	0.425	Selected
98.	1.879	0.359	Selected
99.	3.560	0.380	Selected
100.	2.292	0.301	Selected
101.	3.984	0.404	Selected
103.	2.699	0.349	Selected
104.	3.022	0.373	Selected
106.	2.866	0.252	Selected
107.	3.956	0.488	Selected
109.	2.900	0.334	Selected
110.	5.653	0.516	Selected
111.	4.101	0.429	Selected

Reliability

Reliability refers to consistency through a series of measurements. 'A scale or test is reliable to the extent that repeat measurements made by it under constant conditions will give the same result' (Moser & Kalton, 1989). To establish the reliability of the inventory in the study, split-half method was employed. The reliability co-efficient by Split-half method was found to be 0.73. The co-efficient indicates that the constructed inventory possess the reliability at significant level.

Validity

The concept of appropriateness and accuracy as applied to a research process is called validity (Ranjit Kumar, 2011). The research inventory constructed by the investigator was validated by applying Face Validity method. For establishing validity the investigator distributed a set of objectives and the tool constructed for the study to 25 experts including post graduate teachers, Head Masters, professors and some of the student teachers to check whether the statements given in various dimensions of the tool were related to the present study and satisfy the objectives of the study. On the basis of their suggestions, minor corrections were made for clarity in the tool.

Norms for Family Climate Inventory

The minimum score for the Family Climate was found to be 72 and the maximum score for the Family Climate inventory was found to be 360.

Table 6: Different Levels of Family Climate Inventory

Interpretation of Family Climate Inventory				
S.No.	Dimensions	Low	Average	High
1.	Encouragement	19 - 44	45 - 70	71-95
2.	Care taking	17 - 40	41-64	65-85
3.	Disciplining	17-40	41-64	65-85
4.	<i>Relationship</i>	20 - 48	49 - 75	76 - 100
	Family Climate Scale	72 - 168	169 - 271	272 - 360

CONCLUSION

The final form of Family Climate Inventory consists of 72 statements with four dimensions. The investigator believe that the four dimensions and the 72 statements framed in the inventory are meaningful and reflect the Family Climate situation of the higher secondary students and it will helpful to measure the level of their Family Climate situation.

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