

## **Does Temperament Differ In Students of Single and Dual Earning Families?**

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**Abstract:** *The present study was conducted to identify the level of different temperament traits of students belonging to single and dual earning families. It also aimed to determine difference, if any, in temperament of students belonging to single and dual earning families. The sample comprised of randomly selected 100 students studying in IX and X standard, with 50 of them each from single and dual earning families, studying in five different Government Models Schools of Chandigarh. The findings highlighted that majority of students from dual earning families as compared to those from single earning families were found to have more of low level of a large number of positive temperament traits. Students belonging to single earning families were found to have higher mean scores as compared to those from dual earning families with regard to traits of sociability, placidness, vigorousness, cooperativeness, persistence, tolerance, and tough mindedness. While the students from dual earning families were found to have higher mean scores than those of their counterparts from single earning families in traits like secretiveness, impulsivity and aggressiveness .*

**Keywords:** *Aggressiveness, impulsivity, placidness, sociability, vigorousness*

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### **I. Introduction**

Temperament is typically defined as an individual's manner of responding to the environment and is widely conceptualized as biologically based. It is primary building block of personality [1]. It is an individual's innate style of responding to the environment in both behavioural and emotional ways [2].

According to M.K. Rothbart and M.R. Rueda, "It refers to individual differences in behaving, feeling and thinking which are relatively stable across time and situation and which reflect "the relatively enduring biological makeup of the organism, influenced over the time by heredity, maturation and experience" [3].

According to N.K. Chadha and S.Chandana, there are fifteen main dimensions of temperament – sociability, ascendance, secretiveness, reflectiveness, impulsivity, placidness, acceptance, responsibility, vigorousness, cooperativeness, persistence, warmth, aggressiveness, tolerance, and tough-mindedness [4].

#### **1.1 Effect of Temperament on Academic Performance**

According to H. Palisin, temperament has been hypothesized to be a mediating factor in the learning environment and therefore a predictor of intellectual development. Many of the researchers examining temperament in young children have examined relations between temperament and adjustment in various structured environments as schools[5]. The child who is better to adjust to his/her environment is more likely to work his/her potential in academic achievement. Children with level of temperament that allow them to easily adjust to their environment are likely to experience academic success[6].

Temperament is also associated with the academic achievement through the way teacher's respond to certain dimensions. Teacher's estimation of children, their expectations and behaviours may indirectly affect academic achievement.M. Pullis and J. Caldwell in a study found that temperament appeared to influence the educational decisions made by teachers. In a study of the appraisal of teachers with respect to their students' intelligence [7]. V.J.Lerner and N.L. Galambos attempted to test the "goodness of fit model" between temperament and academic achievement. He found that teacher's expected successful students to have low activity level, reactivity, and distractibility as well as high adaptability, approach and rhythmicity. In the academic environment, the expectations of teachers influence which dimensions of temperament will best facilitate the child's ability to learn and perform well academically[8]. L.S.Dana found that a child who is easily aroused and upset performs less well academically as this high emotionality may be interfering with his/her ability to learn and perform academically. Perhaps the testing environment arouses so much emotion that the child is unable to perform well [9].

Over the last few decades, Indian society has witnessed the split of joint family system into nuclear family system as well as entry of a large chunk of women into workforce. Women want to realize their potentials, achieve their identity and get security and satisfaction besides supplementing their family income. The multifarious responsibility of a woman in dual earning family may sometimes lead to difficulty in

performing her various roles especially as effective mother with her children due to her tight work schedule. This motivated the investigator to study temperament of students in single and dual earning families.

## II. Objectives of the Study

- To determine level of different dimensions of temperament in students of single and dual earning families.
- To compare temperament of students in single and dual earning families.

## III. Method

### 3.1 Participants

A list of all Government Model Schools of Chandigarh was obtained from District Education office, Chandigarh. From this list, 5 Government Model Schools were selected randomly. From each selected school, two comprehensive lists of students studying in class IX and X were prepared who belonged to single and dual earning families, respectively. From these lists, 20 students (10 from single earning and 10 from dual earning families) were selected randomly irrespective of their caste, creed, economic status and ordinal position. Same procedure was carried out in the other selected Government Model Schools for the selection of respondents. Thus, the final sample size comprised of 100 students.

### 3.2 Procedure

Prior permission from the Principals of the selected schools was sought out in order to carry out the study. Rapport was established with the subjects. They were briefed about the study and confidentiality of the results. Taking into consideration their convenience, days were fixed up for administration of tools. On the scheduled days, the selected subjects were administered.

### 3.3 Instruments

#### 3.3.1 Dimensions of Temperament Scale

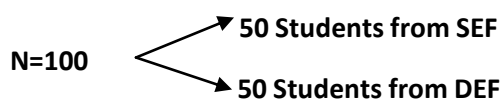
Dimensions of Temperament Scale developed by Chadha and Chandna (1984) is simply a measure the way one behaves. Temperament is one of the most important dimensions of personality. For the whole scale, the reported test-retest reliability is found to be 0.94. It is also reported to be a valid tool. The scale consists of 152 items measuring the following 15 dimensions viz. sociability, ascendance, secretiveness, reflectiveness, impulsivity, placidness, acceptance, responsibility, vigorousness, cooperativeness, persistence, warmth, aggressiveness, tolerance, and tough mindedness. The medium of the scale is English and it is a self administering tool.

### 3.4 Statistical Analysis

Frequency, percentage, means and standard deviation were used to process various variables of the study, t-test was used for testing the significance of difference in the mean scores of temperament of subjects belonging to single and dual earning families.

## IV.

## Results and Discussion



**Table-1**

**Level of different dimensions of temperament in students from single and dual earning families**

Variable	Dimensions	Categories	Students from SEF (%)	Students from DEF (%)	Total Sample (%)
Temperament	Sociability	Low	10.0	36.0	23.0
		Moderate	38.0	<b>44.0</b>	41.0
		High	<b>52.0</b>	20.0	36.0
	Ascendance	Low	<b>44.0</b>	24.0	34.0
		Moderate	32.0	34.0	33.0
		High	24.0	<b>42.0</b>	33.0
	Secretiveness	Low	<b>68.0</b>	28.0	48.0
		Moderate	12.0	<b>38.0</b>	25.0
		High	20.0	34.0	27.0
	Reflectiveness	Low	14.0	38.0	26.0
		Moderate	<b>78.0</b>	<b>48.0</b>	63.0
		High	8.0	14.0	11.0

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Impulsivity	Low	<b>75.0</b>	<b>82.0</b>	78.0
	Moderate	12.0	8.0	10.0
	High	8.2	2.0	5.1
Placidness	Low	12.0	<b>62.0</b>	37.0
	Moderate	<b>60.0</b>	28.0	44.0
	High	28.0	10.0	19.0
Acceptance	Low	24.0	26.0	25.0
	Moderate	<b>44.0</b>	34.0	39.0
	High	32.0	<b>40.0</b>	36.0
Responsibility	Low	<b>36.0</b>	<b>46.0</b>	41.0
	Moderate	32.0	36.0	34.0
	High	32.0	18.0	25.0
Vigorousness	Low	28.0	<b>72.0</b>	50.0
	Moderate	30.0	14.0	22.0
	High	<b>42.0</b>	14.0	28.0
Cooperativeness	Low	20.0	<b>70.0</b>	45.0
	Moderate	30.0	16.0	23.0
	High	<b>50.0</b>	14.0	32.0
Persistence	Low	20.0	<b>80.0</b>	50.0
	Moderate	36.0	14.0	25.0
	High	<b>44.0</b>	6.0	25.0
Warmth	Low	30.0	<b>70.0</b>	50.0
	Moderate	<b>40.0</b>	16.0	28.0
	High	30.0	14.0	22.0
Aggressiveness	Low	<b>62.0</b>	14.0	38.0
	Moderate	30.0	12.0	21.0
	High	8.0	<b>74.0</b>	41.0
Tolerance	Low	24.0	<b>56.0</b>	40.0
	Moderate	10.0	18.0	14.0
	High	<b>66.0</b>	26.0	46.0

**Note: SEF= Single Earning Families**  
**DEF= Dual Earning Families**

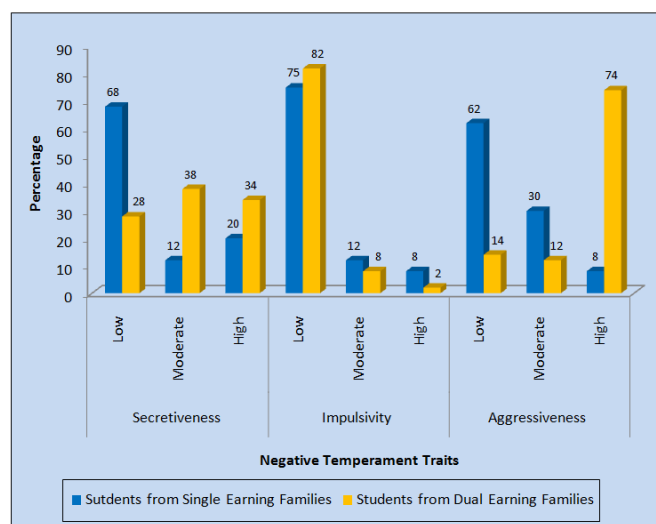
The findings in Table-1 highlight that majority of the subjects both from single and dual earning families had moderate reflectivity (78% and 48% respectively), low level of impulsivity (75% and 82%, respectively) and responsibility (36% and 46%, respectively). The difference was found between students of single and dual earning families with regard to the rest of dimensions of temperament.

In case of single earning families, majority of the subjects belonging to single earning families had low level of ascendance (44%), secretiveness (68%), responsibility (36%) and aggressiveness (62%), moderate level of placidness (60%), acceptance (44%) and warmth (40%) and high level of sociability (52%), vigorousness (42%), tolerance (66%) tough mindedness (54%) and cooperativeness (50%).

On the contrary, in case of dual earning families, majority of the subjects had low placidness (62%), vigorousness (72%), persistence (80%), warmth (70%), tolerance (56%) and tough mindedness (40%). They were moderate in traits of sociability (44%) and secretiveness (38%), and high in ascendance (42%) and acceptance (40%).

To sum up, it can be said that majority of the subjects from dual earning families as compared to those from single earning families have low level of a large number of positive temperament traits.

The diagrammatic presentation of negative temperament traits of students belonging to single and dual earning families has been given in Fig. - 1



**Figure- 1: Percentage distribution of sample with regard to negative temperament traits**

Data regarding difference for mean scores of temperament traits between students of single and dual earning families have been furnished in Table-2.

**Table-2**  
**Significance of Difference for Mean Scores of Temperament Traits between Students of Single and Dual Earning Families**

N=100

50 Students from SEF

50 Students from DEF

Variable	Components	Students from SEF		Students from DEF		t value
		Mean	SD	Mean	SD	
Temperament	Sociability	7.58	1.727	6.74	1.426	2.652**
	Ascendance	6.56	1.343	6.90	1.313	1.280
	Secretiveness	6.42	2.061	7.74	1.893	3.335**
	Reflectivness	6.74	1.614	6.46	1.764	.828
	Impulsivity	5.10	2.270	7.10	2.332	4.345**
	Placidness	7.94	1.504	6.84	1.742	3.380**
	Acceptance	3.98	1.186	4.02	1.363	.157
	Responsibility	6.66	1.437	6.12	1.710	1.709
	Vigorousness	10.06	2.683	8.66	2.379	2.761**
	Cooperativeness	11.06	2.045	9.14	2.286	4.427**
	Persistence	6.10	1.843	4.38	1.308	5.381**
	Warmth	9.78	2.493	10.16	2.216	.805
	Aggressiveness	6.44	1.897	8.66	1.757	6.072**
	Tolerance	9.24	2.181	7.74	2.732	3.292**
Tough-mindedness	5.22	1.282	4.54	1.656	2.295**	

Note: \*\*p<.01

SEF= Single Earning Families

DEF= Dual Earning Families

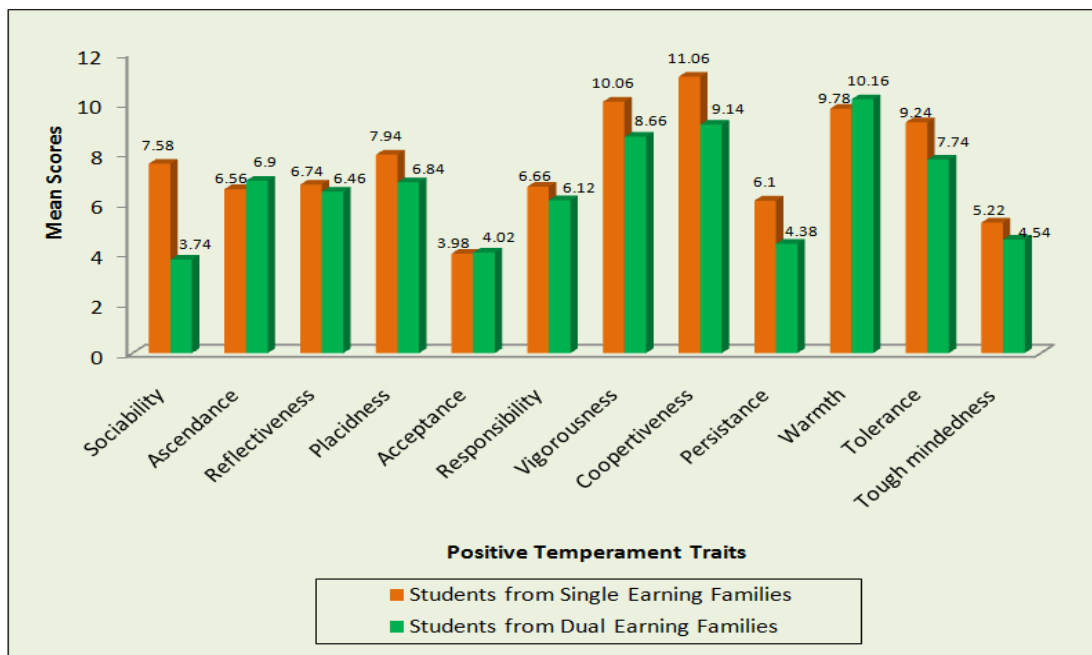
Results in Table- 2 reveal highly significant difference in the mean scores of sociability (t=2.652, p<.01), secretiveness (t=3.335, p<.01), impulsivity (t=4.345, p<.01), placidness (t=3.380, p<.01), vigorousness (t=2.761, p<.01), cooperativeness (t=4.427, p<.01), persistence (t=5.381, p<.01), aggressiveness (t=6.072, p<.01), tolerance (t= 3.292, p<.01), and tough mindedness (t= 2.295, p<.01).

As far as components of sociability, placidness, vigorousness, cooperativeness, persistence, tolerance, and tough mindedness are concerned, students belonging to single earning families were found to have higher mean scores as compared to those from dual earning families. While the students from dual earning families were found to have higher mean scores than those of their counterparts from single earning families in traits like secretiveness, impulsivity and aggressiveness.

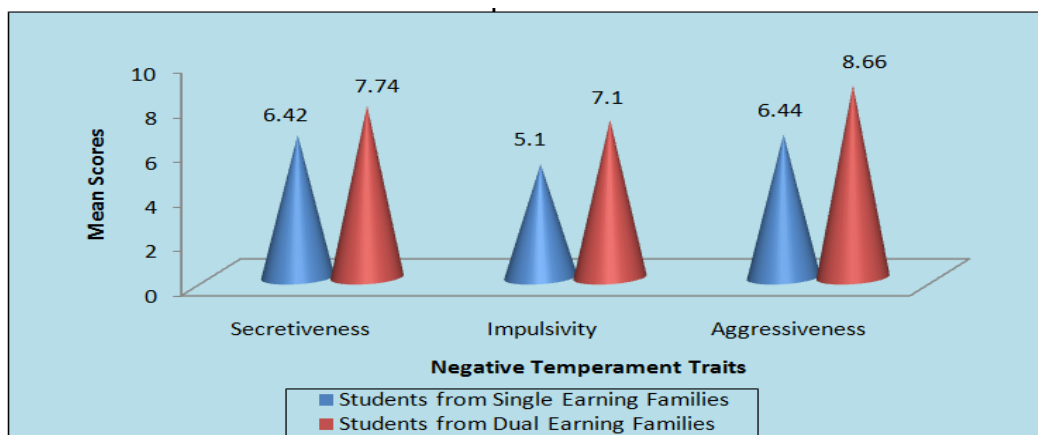
In short, it can be said that students from single earning families have more of positive and less of negative temperament traits as compared to their counterparts from dual earning families.

The present results get the support of the findings of A. Malik and S. Katyal [10] and R.H. Panda and R. Samal [11]. The possible justification for the present result could be given in the light of the fact that parents in dual earning families are not in a position to provide full time guidance, supervision and monitoring of their children. Even they find themselves unable to interact and share sufficiently with their children. This may lead to development of negative temperament traits which are further linked or connected to more of social problems and risk taking behavior in these children particularly when they reach adolescence stage. The link or relationship between negative and difficult temperament traits and social and personal problems (which even have been revealed in students belonging to dual earning families in the present study) has been endorsed by a number of research findings[12,13,14,15,16].

The diagrammatic presentation of significant positive and negative temperament traits have been shown in Fig.-2(a-b).



**Figure- 2(a): Mean scores of positive temperament traits in students of single and dual earning families**



**Figure- 2(b): Mean scores of negative temperament traits in students of single and dual earning families**

## V. Conclusion

Since the findings of the present study is giving an insight about temperament traits of students, it would enable counselors, school administrators, policymakers and educationists to chalk out and implement interventions for helping students especially belonging to dual earning families to develop more of positive temperament traits. Findings of the present study have vital implications for working parents. They set the stage for parents to dwell upon how could they spend qualitative time with their children to help them inculcate right kind of temperament traits during the limited time they have in hand.

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