Family environment has much influence on the development of inherent good qualities of the children in the family. The rules, regulation, discipline and management pattern vary from family to family. Children who enjoy more freedom in their family, get more scope to unfold their creative potential. A few studies have concerned with gender difference in creativity. But, in this local area, is there any difference in creativity with the gender difference? Hence, the present researcher considered gender as one of the independent variables. At the same time, relationship between verbal creativity (with its components- Fluency, Flexibility, Originality) and Freedom along with gender difference has been studied in this article.

**Key words:** Verbal creativity, Freedom of student

### Introduction

Development of creativity needs favourable environment. If the child is provided with conducive environment to the development of creative potential, his creativity may be developed to the maximum. Arieti (1976) proposed the concept of creatiovgenic society to emphasize the influence of culture and environment on the development of creativity. Development of creativity depends upon many environmental factors particularly related to home, school and society. Home is a social unit that exerts the greatest influence on the development of the child’s behaviour. At home, parents are usually the most important persons in building the psycho-social climate of the entire family. Their attitudes, values, and nature of interaction with the child are parts of home environment.

In the family parents should help the child to find his own identity and allow him for open expression of ideas and independent thought; reduce parent-child identification, but not necessarily affiliation or affection, provide support in the presence of challenges, which aids in the development of creativity and good mental health. Parents need to establish and maintain bonds with children, also allow them autonomy, independence and psychological and emotional space.

A few studies have concerned with gender difference in creativity. But the results were not equivocal. For example, Prakash (1966), Raina (1969) reported that boys were more creative than girls. However, Pareek (1966), Hussain (1974), Hargeaves (1977), Sarkar (1994) found no difference between the creativity of boys and girls. Singh (1978) on the other hand found that girls were better than boys on tests with semantic content. But, in this local area, is there any difference in creativity with the gender difference? Hence, the present researcher considered this matter and wished to categorize the whole sample into two groups – ‘Boys’ and ‘Girls’.

Studies suggest that an important family-environment factor is the degree to which the family creates an atmosphere where children are free to develop a unique identity and have their own individual thoughts and express them freely. Individuals who come from such families are more likely to be very creative, as well as highly competent, in their work. Such families foster creativity and intellectual risk taking. The circumstances within homes and families that create environments conducive to the development of independent identities and thought are many and varied. They include anything that results in a reduction in parent-child identification, an “emotional space” between parent and child, lower levels of parental monitoring of children, and less conventional socialization of children by parents. These conditions make the children more independent, autonomous, and less sex-stereotyped [Olzews-Kubilius, 2001].

Therefore, this study was undertaken to assess the verbal creativity of all the students with their gender difference in different components – fluency, flexibility and originality and to find out the difference between freedom and restriction group boys and girls separately against the dimensions of fluency, flexibility and originality of verbal creativity. The relationships between freedom and different components of verbal creativity for both boys and girls were also taken into consideration in this study.
Hypotheses of the Study
Keeping in mind the objectives of the present study and findings of the review of related studies, the researcher formulated the following hypotheses:

H₁: There would be no significant difference between boys and girls in Fluency scores of verbal creativity.
H₂: There would be no significant difference between boys and girls in Flexibility scores of verbal creativity.
H₃: There would be no significant difference between boys and girls in Originality scores of verbal creativity.
H₄: There would be significant difference between Freedom and Restriction group boys in Fluency, Flexibility and Originality scores of verbal creativity.
H₅: There would be significant difference between Freedom and Restriction group girls in Fluency, Flexibility and Originality scores of verbal creativity.
H₆: There would be significant relationship between Freedom of students and components of verbal creativity (Fluency, Flexibility, Originality) for boys.
H₇: There would be significant relationship between Freedom of students and components of verbal creativity (Fluency, Flexibility, Originality) for girls.

Materials and Methods
Sample
The sample consisted of 372 school going students of class VIII and class IX from eight different types (Boys’, Girls’, Co-ed.) of schools of district Nadia and North 24 Parganas. All the selected schools were of Bengali Medium under West Bengal Board of Secondary Education. There were 179 boys and 193 girls in the sample. Different types of schools were selected randomly from the both districts according to a particular ratio.

Variables
The variables of the study were:

a) Dependent variables
Dependent variables in the study were students’ performance scores, on only three components of creativity, obtained from verbal creativity test:

i). Fluency
ii). Flexibility
iii). Originality

b) Independent variables
There were two independent variables in the study:

i). Freedom of thought & action (Freedom and Restriction)
ii). Gender (Boys and Girls).

Tools and Techniques
Sarker’s Creativity Test:
Sarker’s Creativity test was developed by Sarker, A. K. (1994), and could be administered to individuals at all educational levels above six years of age. The test consisted of several test activities of verbal form. Administration of test and scoring procedure would be as the test manuals. The test was standardized one and its reliability and validity scores were in the test manuals. It included the followings:

- Game – 1: Unusual Uses
- Game – 2: Similarity Task
- Game – 3: Consequences Tasks
- Game – 4: Common Problem Tasks
- Game – 5: Product Improvement Tasks

Sarker’s Freedom Test
Sarker (1986) developed a Freedom Test for school going children in Bengali, and it was standardized on the students of Bengali medium schools of West Bengal. Freedom of thought and actions in the family and in the school might foster the creative potential in the children. The test items concerned with the freedom of thought and work in scientific experiments, hobby, personal views or in daily life style.

Results
The present study involved ANOVA, t-test and Correlation techniques with independent variables Freedom of Thought & Actions (Freedom & Restriction) and Gender (Boys & Girls) and three dependent variables (viz., Fluency, Flexibility, Originality) of Verbal Creativity to analyze the obtained data, to interpret the results, to test the hypotheses and thereby to get the objectives of the present study. Each group was divided into three sub-groups viz., Freedom, Middle and Restriction on the basis of 27% statistical rule.
Table 1: Descriptive Statistics of Creativity

<table>
<thead>
<tr>
<th>Gender</th>
<th>Dimensions of Creativity</th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fluency</td>
<td>179</td>
<td>43</td>
<td>9</td>
<td>52</td>
<td>30.88</td>
<td>8.885</td>
</tr>
<tr>
<td>Boys</td>
<td>Flexibility</td>
<td>179</td>
<td>29</td>
<td>2</td>
<td>31</td>
<td>14.89</td>
<td>6.601</td>
</tr>
<tr>
<td></td>
<td>Originality</td>
<td>179</td>
<td>50</td>
<td>7</td>
<td>57</td>
<td>31.44</td>
<td>11.165</td>
</tr>
<tr>
<td></td>
<td>Fluency</td>
<td>193</td>
<td>47</td>
<td>12</td>
<td>59</td>
<td>32.38</td>
<td>8.146</td>
</tr>
<tr>
<td>Girls</td>
<td>Flexibility</td>
<td>193</td>
<td>42</td>
<td>1</td>
<td>43</td>
<td>16.41</td>
<td>6.913</td>
</tr>
<tr>
<td></td>
<td>Originality</td>
<td>193</td>
<td>75</td>
<td>6</td>
<td>81</td>
<td>33.71</td>
<td>12.656</td>
</tr>
</tbody>
</table>

Table 2: Descriptive Statistics of Independent Variable

<table>
<thead>
<tr>
<th>Gender</th>
<th>Independent Variables</th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>Freedom</td>
<td>179</td>
<td>21</td>
<td>5</td>
<td>26</td>
<td>15.59</td>
<td>3.990</td>
</tr>
<tr>
<td>Girls</td>
<td>Freedom</td>
<td>193</td>
<td>18</td>
<td>7</td>
<td>25</td>
<td>15.90</td>
<td>3.853</td>
</tr>
</tbody>
</table>

Figure 1: Graphical Representations of Mean Fluency, Mean Flexibility, Mean Originality Scores in Verbal Creativity Test with Freedom for Boys and Girls on the Same Axes.
The relationships between the components and Freedom were visually represented by the Figure-1(a), Figure -1(b) and Figure-1(c) for fluency, flexibility, originality components of creativity respectively for the two groups – Boys and Girls. Here, each component of creativity increased gradually with increase of Freedom for both girls and boys. Though the boys contained the highest scores in each component, girls’ scores were greater than the boys’.

Discussion
Freedom of thought and actions enjoyed by the students in their families was considered as the independent variable in the present study. Objectives of the present study were to determine, whether there was any relationship between Freedom and Creativity with its different components – Fluency, Flexibility, Originality. The findings and discussions were stated below:

Gender difference
The results indicated that the hypotheses $H_1$ and $H_2$ were accepted but the hypothesis $H_3$ was rejected. In other words there was no significant difference between boys and girls in both Fluency and Originality components of verbal creativity. Only girls were superior to boys in verbal Flexibility.

Relationships
- For boys ‘Freedom group’ was always significantly superior to the ‘Restriction group’ in Fluency, Flexibility and Originality of verbal creativity.
- For girls ‘Freedom group’ was significantly advanced to the ‘Restriction group’ in Fluency and Originality and merely advanced in Flexibility component of verbal creativity.
- For boys, there were positive significant relationships existed between Freedom and components of verbal creativity.
- For girls, there were positive significant relationships existed between Freedom and Fluency and Originality (insignificant for Flexibility) components of Verbal creativity.

The present study revealed that Freedom was positively significantly correlated with creativity along with its three components – Fluency, Flexibility and Originality. The hypotheses $H_4$, $H_5$, $H_6$ were totally accepted and the hypothesis $H_7$ might be accepted. The findings indicated that the students who got more freedom in thinking, in playing with different items, in making models, games, in expressing ideas in their families had developed their creativity. The findings were in tune with the theoretical expectation. Also that findings got supports from the studies done by Sharma, R. (2011), Barker, E. (3rd August, 2011) and Rosso, B. (2011).

Conclusion
On the basis of the results, findings and discussions of the study, following conclusions can be drawn:
- Creativity is a special ability of human being and every man is more or less creative. This statement is supported by Murphy (1947) and Fliegler (1961).
- Gender difference is not a contributing factor to the components of verbal creativity. That is, the boys are not significantly superior to the girls in fluency and originality scores (except flexibility score) of creativity. A healthy, stimulating family environment can promote the creative potential in the children irrespective of gender.
- Students who enjoy high freedom in thinking and actions in their families are more fluent, flexible and originator of new ideas and productions. Both the boys and the girls of ‘Freedom group’ are significantly advanced to the ‘Restriction group’ in fluency, flexibility and originality scores of creativity.
- A positive significant relationship exists between Creativity and Freedom of thought and actions enjoyed by the students in their families.

A positive environment or situation that is open, democratic and free may be said to contribute positively to the release and development of creative potential. The students who enjoy freedom of thought and actions in their families and get support on the part of their parents to satisfy their internal urges in doing activities, will have potentiality to develop creativity.

References


