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# Academic Pperfornance in Relation to Gender and Morningness Eveningness Preference

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*The academic performance of the students is influenced by many factors. The present study conducted to see the effect of gender and morningness-eveningness preference upon academic performance. The samples consisted of 66 male and 66 female of first year college student were selected. To measure the academic performance of the student's the overall marks of class 12th were used and to assess the morningnes-eveningness Preference of the subject's Hindi adaptation of Morningness-Eveningness Questionnaire (Horne & Ostberg, 1976) was used. ANOVA results indicated that gender and Morningness-Eveningess preference generated significant variance upon academic performance and no interactional effect of the two factors was found to be significant.*

**Key Word: Academic Performance, Morningness-Eveningness Preference, Gender**

## INTRODUCTION

Academic performance is the outcome of education the scope to which students, teachers or institution has achieved their educational goals. Academic performance may be defined as the performance of the students in the subjects they study in the school. Academic performance is conceptualized as "that encompasses the student's ability and performance, it is multidimensional, it is intricately related to human growth and emotional, cognitive, social and physical development it reflects the whole child; it is not related to a particular instance, but occurs across time and levels, though a student's life in community school and on to post secondary years and working life" (Steinberger, 1993). Individual differences in academic performance have been related to differences in personality, study habit, intelligence, cognitive ability, study time, sleep pattern, study habit, and enviournment.

Circadian typology that is morningness-eveningness preference has been found to be capable in explaining the variation in the expression of biological and behavioural patterns being a 'morning type' or 'evening type' and 'intermediate type' is a stable characteristic. Although a number of a biological variable such as sleep, gender, age and physical health (Railly, 1990). Humans are normally active in day time. morningness–eveningness preference that is morning active type or evening active type or intermediate type persons (circadian typology) has been found to be capable in explaining the variation in the expression of biological and behavioural patterns. Being a morning type or evening type or intermediate type is a stable characteristic. Most of the studies suggested that the school day starts too early for adolescent students. The findings demonstrate that adult student show better performance in the morning than the later in the day and evening time show bad performance than the morning and afternoon time (Hasher, Goldstein & May, 2005; Itons-Peterson, Rocchi, West, McLellan & Hackney,

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1998; May, 1999). Goldstein, Hahn, Hasher, Wiprzycha and Zelazo (2006) found that evening type adolescents show poor academic performance and high behavioural adjustment problems. Randal and Frech (2009) found that student with morning preferences performed better in school achievement. Morning type students performed better than evening type students (Besoluk, 2010). Preckel, Lipnevich, Schneider and Roberts (2011) found that eveningness was positively related to individuals' cognitive ability and negatively related to academic achievement. morningness had a negative relationship with cognitive ability and a positive correlation with academic indicators. Besoluk, Onder and Deveci (2011) found that students with a morning preference achieved higher scores than evening preference. Franzisp, Anastasiya, Sandra, Richard (2011) found that eveningness was negatively related to academic performance and morningness show positive relation with academic performance. Many studies indicate that gender also influence academic performance. Rosina Lao (1980) found that female show significantly better performance than male. Boys are more under achieving students than girls (McCall, 1994). Females show better performance than males (Mirza & Malik, 2000; Rana, 2000). Amitava, Maojit, Saawata and Braja (2010) found that sex of the student has an influence on their academic performance and assumed that girls are showing the better performance than the boys. Escribano, Iaz-Morales, Delgdo & Collado (2011) found that the girls among 15–16 years performed significantly better than boys. More evening oriented young adolescents (12–14 years) performed significantly worse in school achievement. The present study has been undertaken with a view to test the hypotheses that the academic achievement of the student would be influenced by morningness-eveningness preference and gender.

On the basis of above-mentioned discussion found that the present study was undertaken to ascertain the main and interaction effect of morningness-eveningness preference and gender upon academic performance. The hypothese were: (i) The academic performance of the morningness preference subject would be significantly higher than the academic performance of the eveningness preference subjects, (ii) The academic performance of the intermediate preference subject would be significantly higher than the academic performance of the eveningness preference subjects, (iii) The academic performance of the female subjects would be significantly higher than the academic performance of the male subjects, (iv) The academic performance of the female subjects with morningness preference would be score significantly higher than the academic performance of the male with eveningness preference and (v) The academic performance of the female subjects with intermediate preference would be score significantly higher than the academic performance of the male with eveningness preference.

## METHODS

### Sample

Initially a larger number of first year graduate students studying in different college of Raipur district of Chhattisgarh would be randomly selected out of which 132 subjects would be retained as final sample. The subjects would be so selected that half of them were male and remaining half of the female. The age range of the subjects was 18-21 years.

### Tools

#### 1. M-E Preference

To measure the M-E preference of the subjects Hindi adaptation of Morningness-Eveningness Questionnaire (Horne & Ostberg, 1976) prepared by School of Life Science Pt. Ravishankar Shukla University was used. This Questionnaire consists of 7 Questions. This test is based upon a scale score ranged from 6 to 18. The subject will be identified with either Morning type (MT) or Intermediate type (IT) or Evening type (ET), depending upon the total score they achieved between 6-9 or 10-14 or 15-18, respectively on the MEQ.

#### 2. Academic Performance

To measure the academic performance the overall marks obtained by the students in their previous Board examination i.e., class XII was used.

**Design**

The present study 2x3 Factorial design would be used to analyze the data in which gender (male and female) and morningness-eveningness preference (morning type, intermediate type and evening type) would consider as Independent Variable. The class 12th marks of the students would be comprised as dependent variable.

**RESULTS**

The purpose of the present study was to examine whether the students with morningness preference would differ in their academic performance from those with intermediate and eveningness preference. It was assumed that the student whose were morningness preference show signs of higher academic performance as compare to the student whose intermediate and eveningness preference. The average academic performance of the subject's morningness preference (61.77), intermediate preference (62.38), eveningness preference (60.58) respectively, and the obtained F ratio (3.94) of the morningness-eveningness preference has been found to be significant at P<.05 level which point out that the academic performance of the subjects with morning and intermediate preference was significantly higher than academic performance of the subjects with eveningness preference. Subject with intermediate preference show more academic performance than the subject with morningness and eveningness preference. Thus the obtained result has confirmed the hypothesis. Mean values of factors are given in the table.

| Variable | Category | N | M | SD | F Ratio | Sig |
|---|---|---|---|---|---|---|
| M-E Preference | Morning Preference | 40 | 61.77 | 5.81 | 3.94 | P>.05 |
| | Intermediate Preference | 48 | 62.38 | 5.82 | | |
| | Evening Preference | 48 | 60.58 | 5.85 | | |
| Gender | Male | 66 | 59.9 | 4.92 | 9.41 | P>.01 |
| | Female | 66 | 63.18 | 6.67 | | |
| M-E Preference *Gender | Morning Preference-Male | 20 | 60.50 | 5.17 | 1.17 | P=Ns |
| | Intermediate Preference-Male | 25 | 60.44 | 4.75 | | |
| | Evening Preference-Male | 21 | 58.71 | 4.92 | | |
| | Morning Preference-Female | 20 | 63.05 | 6.18 | | |
| | Intermediate Preference-Female | 19 | 64.94 | 7.69 | | |
| | Evening Preference-Female | 27 | 62.03 | 6.81 | | |

Gender was considered as another variable of the study, it was assumed that the female student would show higher academic performance than male. The average academic performance of the subject female (63.18) and male (59.9) respectively, and the obtained F ratio (9.41) has been found to be significant at P<.01 level which point out that the academic performance of the female subjects was significantly higher than academic performance of the male subjects. Thus the obtained result has confirmed the hypothesis.

The interaction effect of the morningness-eveningness preference and gender was not found to be significant at any acceptable level. The academic performance of the male female students does not depend on morningness-eveningness preference of students.

**DISCUSSION**

The present study investigated the effect of morningness-eveningness preference and gender on academic performance of the college student. Research findings shows that morningness-eveningness preference has significant effect on academic performance. These results corroborate with the findings from other studies on this topic such as Franzisp, Anastasiya, Sandra, Richard (2011) indicated that eveningness was negatively related to academic performance and morningness show positive relation with academic performance. Besoluk, Onder and Deveci (2011) found that students with a morning preference achieved higher scores than evening preference. Preckel, Lipnevich, Schneider and Roberts (2011) indicated that the eveningness was positively related to individuals' cognitive ability and negatively related to academic achievement. Morningness had a negative relationship with cognitive ability and a positive correlation with academic indicators. Morning type

students performed better than evening type students (Besoluk, 2010). Randal and Frech (2009) student with morning preferences performed better in school achievement. Goldstein, Hahn, Hasher, Wiprzycha and Zelazo (2006) evening type adolescents show poor academic performance and high behavioural adjustment problems. Adult student show better performance in the morning than the later in the day and evening time show bad performance than the morning and afternoon time (Hasher, Goldstein & May, 2005; Itons-Peterson, Rocchi, West, McLellan & Hackney, 1998; May, 1999). Another finding show that gender has significant effect on academic performance. Most of studies indicated that gender influence the academic performance. The findings are supported by the work of Escribano, Iaz-Morales, Delgdo and Collado (2011) who have reported that the girls performed significantly better than boys. Amitava, Maojit, Saawata and Braja (2010) indicated that sex of the student has an influence on their academic performance and assumed that girls are showing the better performance than the boys. Females perform better than the males (Mirza & Malik, 2000; Rana, 2000). McCall (1994) Boys are more under achieving students than girls.

## CONCLUSION

Circadian rhythm play important role of human life and it's also influence student performance. Its affected student learning, memory, personality, behaviour, achievement etc. Gender difference also influences student performance. On the basis of above results it may be concluded that the morningness-eveningness preference and gender identified as an important factor affecting academic performance and no interaction between these two factors.

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