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A COMPARATIVE STUDY OF MORNINGNESS-EVENINGNESS BETWEEN PHYSICAL EDUCATORS AND NON-PHYSICAL EDUCATORS

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Abstract: The purpose of this study was to compare the morningness - eveningness of male physical educators and non-physical educators. Total 60 male students were selected from Shree H. V. P. Mandal, Amravati (India), for conducting the study. The total numbers of students were classified into 30 male each from physical education and engineering stream with their age ranging between 18 to 25 years of age. The morningness - eveningness of the subjects was measured by administering Morningness-Eveningness Questionnaire (MEQ) designed by James A. Horne and OlovOstberg in 1976. To determine the difference of morningness - eveningness of male students, independent t-test test was employed and the significant level was set at 0.05. The result of the data indicated that there was no significant difference between of physical education and engineering male students.

Keywords:Morningness and eveningness.

Introduction:

Individuals with a tendency to wake up early in the morning are known as 'early-morning' types and those individuals who like to stay up late at night are referred as the 'night owls' habitually show typical psychosomatic profiles. Society is conventionally morning centric with early morning activities or commitments being the norm. This on the other hand does seem to be altering with a new shift into 24 hour lifestyles. People can now work and rest at whatever time they want. Targeting job opportunities that give the best match for the sleep pattern can give a distinctive advantage in the workplace (Morales, 2008).

The timing of our sleep is governed by our internal body clock identified as the circadian rhythm. However, not everyone's circadian rhythm acts in the similar way. Scientists have shown that we have a natural tenancy to have a preference of staying up later, waking up earlier, or have what's considered a normal sleep pattern (Bassili, 2007).

It's understood that few of us are neither larks nor owls, and have a normal sleep routine. Some are night owls, with a inclination for staying up late into the night, and sleep in late as a result. Whereas some are considered morning larks, individuals who feel their best early morning, often fall asleep earlier than most. Whether we are larks or owls tends to transform as we age. Teenagers and adolescents are more probable to be night owls, and as we get older, we have a natural inclination to become morning larks. So if we study the morningness-eveningness in a few years time, one might find the result has shifted one way or another (Jordan 2009).

Knowing whether one is a night owl, morning lark or neither can be worked towards the advantage. Night owls are more productive during the night, where as morning larks are more productive during the morning. By setting up high concentration tasks at the peak times can effectively help in getting more work done. If one have flexible work commitments one may find it useful to either shift the sleep timing forwards or backwards to take best advantage of the most productive times.

Though there are some vital considerations to keep in mind. Hardcore owls or larks have a higher risk of developing a circadian rhythm disorder, as they stay up later and later or go to bed earlier and earlier, until their sleep pattern goes out of control. This can be a problem for owls who need to be up in the morning, or for larks who need to stay wakeful into the evening. If one is a hardcore lark or owl, take great care not to let the sleep pattern slip too much in any one path.

Objective of the Study-

The objective of the study was to compare the morningness - eveningness of male physical educators and non-physical educators.

Delimitations:
Study was delimited to the sixty (60) male students with the age ranging between 18-25 years were selected from Shree H. V. P. Mandal, Amravati (India).

Hypothesis:
It was hypothesized that there will be no significant difference between male physical educators and non-physical educators in the variable of morningness - eveningness.

Research Procedure
Sample of the Study:
For the purpose of the investigation, the samples for the study were 60 male students in the age group of 18-25 years, with a mean and SD of 19.57 + 1.42 classified into 30 male each from physical education and engineering stream. Subjects were selected at random from Shree H. V. P. Mandal, Amravati (India). The details of sample distribution are presented in the table1.

Table 1

S. No.	Group	No. of Participants
1	Physical Education Students	30
2	Engineering Students	30
Total Number of Participants		**60**

Procedure of Data Collection:
The variable and instrument selected for this study was morningness and eveningness and to assess it the Morningness - Eveningness Questionnaire (MEQ) designed by James A. Horne and OlovOstberg in 1976 was implemented. The questionnaire was given and was asked to fill only by taking consent of the subjects. Before filling up of the questionnaire the subjects were given instructions regarding the objectives of the study and questionnaire to be filled. The subjects were asked to fill the questionnaire by reading it carefully.

Statistical Technique:
Statistical analysis was done with SPSS (Statistical Package for the Social Sciences, 20.0, USA). Mean and standard deviation was calculated as descriptive statistics and to compare the morningness - eveningness between male students independent t-test was employed and the level of significance was set at 0.05 level of confidence.

Results and Discussion:
To determine the difference of morningness - eveningness of male students descriptive statistics and independent t-test was employed for the present data. Table 1 shows the descriptive statistics of the test conducted on the groups.

Table 2Descriptive Statistics of Morningness - Eveningness of Male Students from Physical Education & Engineering Stream

Students		N	Mean	SD
Mrng_Evng	**Phy. Edu Students**	**30**	**56.53**	**6.061**
	Engg Students	**30**	**57.60**	**6.112**

Table 2 displays the mean and the standard deviation of Morningness - Eveningness of male students from physical education & engineering stream. The mean score of engineering student was higher than that of the physical education students. However, whether this difference was significant or not was tested by using the independent t-test for unrelated groups. The mean scores are also illustrated in the figure 1.

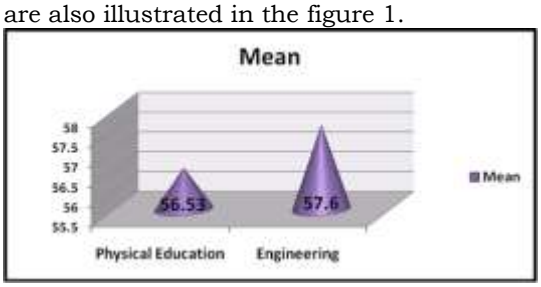

Figure 1. Mean scores of Male Students from Physical Education & Engineering Stream

Table 3Independent t- test Statistics on Morningness - Eveningness of Male Students from Physical Education & Engineering Stream

	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Mrng_Evng	**.067**	**.796**	**.679**	**58**	**.500**	**1.067**

***Significant at 0.05 level**

Table 3 shows the t-value. The F-value is 0.067 which is insignificant as the p-value is .769 which is more than 0.05. It can also be seen that the value of t-statistic is .679. This t-value is insignificant as the p-value is .500 which is more than 0.05. Therefore, it may be concluded that there was no such difference between morningness - eveningness of male students from physical education & engineering stream and that the groups are equal.

Discussion:

The findings of this research paper showed that male physical education students and the engineering students on the factor of morningness and eveningness are equal. This result indicated that the preference of time for working of the students had nothing to do with the degrees they are pursuing degrees. Previous researches have projected that night owls score higher than early morning individuals on diverse measures of cognitive ability and academic achievement. Individual morningness-eveningness differences elucidate the rhythmic variations of behavioral and biological patterns. Numerous studies have generalized that morningness inclination increases over adulthood and aging. Adolescents alter their time of day preferences from morningness to eveningness during puberty (Piffer, et.al., 2014).

However no significant difference was found between male students on morningness-eveningness of physical education and engineering stream. This may be due to their individualized habitual sleep pattern, schedule of work, assignment and class timings predisposed according to their educational degrees. Few more researches revealed that the factor of morningness-eveningness depends on several other factors as well. According to a 1997 study of identical and fraternal twins, 54% of variance in morningness–eveningness was due to genetic variability, 3% was due to age, and the rest was explained by non-shared environmental influences and errors in measurement.

A study in 2000 showed that both "morningness" and "eveningness" participants performed poorly in the morning on the Multidimensional Aptitude Battery (MAB) tests. It thus did not support the hypothesis that there is a reliable relationship between morningness–eveningness, time of day, and cognitive ability.

A study in 2008 examined the relationship between morningness and anxiety in adults aged 40–63. A negative correlation in women, but not in men was seen, suggesting that gender-related variables may be attributed to morningness and eveningness when looking at mood. A study in 2009 examined differences between evening and morning types in the timing of melatonin and core body temperature rhythms as well as objective and subjective sleepiness rhythms in a controlled laboratory protocol. The evening types had significantly later timed rhythms for all these variables, particularly that of maximum alertness, which occurred, on average, in the middle of the day for morning types but only four hours before bedtime for evening types.

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