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A comparative study on awareness about sericulture among Assamese and English medium secondary school students in Jorhat district of Assam, India

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Abstract

The present study was undertaken to find out the awareness about sericulture among Assamese and English medium secondary school students in Jorhat district of Assam during 2015-16. Awareness about sericulture among Assamese and English medium secondary school students was found significant at 0.01 level (the 'Z' ratio is 467.01); but, in case of awareness about sericulture between Assamese and English medium secondary school male students belong to rural settlement was found not significant (the 'Z' ratio is 0.46; not significant at 0.05 level). In the same way, significant difference was not found in case of awareness about sericulture between Assamese and English medium secondary school female students belong to rural settlement (the 'Z' ratio is 0.04; not significant at 0.05 level). Co-efficient of correlation between awareness about sericulture and socio-economic status of the students was found low and negative (-0.005). On the otherhand, co-efficient of correlation between awareness about sericulture and academic achievement of the students was found low and positive (0.003).

Keywords: Secondary school, awareness, sericulture, socio-economic status, academic achievement

1. Introduction

Sericulture is considered as one of the promising rural industries of India because of its unique characteristics of being eco-friendly, agro-based, labour intensive, short gestation period, capacity to develop into a family enterprise with low capital investment and high output [1]. Sericulture is intermingled with the life and culture of the Assamese people since time immemorial. Assam enjoys a unique distinction of being the only place of the world by producing all the four varieties of natural silk viz. muga, eri, mulberry and tasar [2]. Muga silk has been granted the geographical indication (GI) registration during 2007 [3]. However, tasar and mulberry are not produced extensively in Assam. Assam is the third leading state among all the silk producing states after Karnataka and Andhra Pradesh. Assam produced 3325 MT of raw silk during 2015-16, which accounted for 11.66% of the country's total raw silk production of 28,523 MT [4]. Out of the four commercial varieties of silk, eri occupies the first position in terms of production and generation of employment in Assam. The production of eri, muga and mulberry silk during 2015-16 was 3143 MT, 142 MT and 39 MT respectively [4]. Silk production of Assam is gradually increasing but still there exists a gap between what has been achieved and what could have been achieved. Sericulture is most suitable to those places having agriculture based economy and abundant labour force. Thus sericulture activities may play a vital role in employment of the youths of Assam and can able to contribute to the national economy and GDP. The importance of sericulture in the economy of Assam is reflected from its contribution to the rural poorer section of population, especially that of women who are mainly associated with such activities [5]. It is still confined to a limited number of traditional farmers of this region. Youths are not coming up to adopt sericulture as their livelihood; it is regarded as glamour less vocation of illiterate people. Youths of today are the citizens of the future upon whom the continuity of development depends. Therefore, they must have knowledge and information about sericulture. In India, there are large numbers of researches on awareness and attitudes of students towards agriculture; but studies regarding awareness of students about sericulture are scanty. Keeping above in view, an attempt has been made in this paper to understand the awareness about sericulture among the secondary school students. The present study was carried out during 2015-16 with the objective to

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compare the awareness about sericulture between Assamese and English medium secondary school students of Jorhat district in the state of Assam and to find out the relationship between awareness about sericulture and socio-economic status, awareness about sericulture and academic achievement of the students.

2. Materials and Method

In view of the objectives of the present study, the investigators had adopted the descriptive survey method. In the present study, 200 students were selected from 16 secondary schools in Jorhat district of Assam by adopting the simple random sampling techniques. Further, selected sample was divided into two segments of 100 students on the basis of medium, sex and settlement. Equal representation of students has been ensured for medium, sex and settlement. On the basis of the objectives of study, Sericulture Awareness Scale (SAS) was developed by the investigator. The purpose of this test is to measure the level of Sericulture Awareness among the secondary school students. This test consists of 30 multiple choice items, focusing on six different areas of sericulture such as basic idea about silkworm, rearing technique, host plants, mounting, reeling and spinning. The draft consisting of 50 items was given to subject expert who edited the contents of the draft and it was further given to the language expert to examine the language of each statement of the items. The verified draft was tried on 30 students to find out the level of item difficulty. The computed item variance showed that 30 items out of 50 ranged from 0.40 to 0.60 of variance. Therefore, 30 items were retained in the final draft of the scale. Finally, the Test-Retest method was applied to find out the reliability of the scale and computed value reached at 0.85; it indicated that the scale has reliability at satisfactory level. The investigator ensured the content validity of the scale by seeking the opinions of the content experts. To measure the socio-economic status of the students studying in Assamese and English medium secondary schools in Jorhat district of Assam, the investigators used the socio-economic status scale developed by Bhardwaj^[6]. On the other hand, academic achievement of the students was collected from the individual cumulative record card of the students. For analysis and computation of results, the investigators used 'z' test and Karl Pearson's coefficient of correlation ('r') as the statistical technique to investigate the difference and relationship of the variables.

3. Results and Discussion

The present study results revealed that there is significant difference in awareness about sericulture between Assamese and English medium secondary school students (the 'z' ratio is 467.01; significant at 0.01 level) (Table 1). It means both the groups have not equal awareness about sericulture. On the other hand, significant difference was found in case of awareness about sericulture between male and female students of Assamese and English medium secondary schools (the 'z' ratio is 140.21; significant at 0.01 level). It revealed that both the sexes have not equal awareness about sericulture. In the same way, significant difference was found in case of awareness about sericulture between rural and urban students of Assamese and English medium secondary

schools (the 'z' ratio is 287.86; significant at 0.01 level). It revealed that settlement of the students play a vital role in case of awareness about sericulture. Table 1 revealed that the awareness about sericulture between the male and female students of Assamese medium secondary school is significant (the 'z' ratio is 31.95; significant at 0.01 levels). Hence it is concluded that male and female students of Assamese medium secondary school have not equal awareness about sericulture. It was also found from the present study that awareness about sericulture between the male and female students of English medium secondary school is significant (the 'z' ratio is 76.77; significant at 0.01 level) which means both the sexes have not equal awareness about sericulture. Present study revealed that awareness about sericulture between the male students of Assamese and English medium secondary school is significant (the 'z' ratio is 159.77; significant at 0.01 level) which means male students of Assamese and English medium secondary schools have not equal awareness about sericulture. Similarly, the awareness about sericulture between the female students of Assamese and English medium secondary school is significant (the 'z' ratio is 170.84; significant at 0.01 level) which means female students Assamese and English medium secondary schools have not equal awareness about sericulture.

But, significant difference was not found in case of awareness about sericulture between Assamese and English medium secondary school male students belong to rural settlement (the 'z' ratio is 0.46; not significant at 0.05 level). In the same way, significant difference was not found in case of awareness about sericulture between Assamese and English medium secondary school female students belong to rural settlement (the 'z' ratio is 0.04; not significant at 0.05 level). On the other hand, significant difference was found in case of awareness about sericulture between Assamese and English medium secondary school male students belong to urban settlement (the 'z' ratio is 4.06; significant at 0.01 level). But, significant difference was not found in case of awareness about sericulture between Assamese and English medium secondary school female students belong to urban settlement (the 'z' ratio is 0.0096; not significant at 0.05 level).

In the present study Table 1 reveals that there is no significant difference in awareness about sericulture between Assamese medium secondary school male students of rural settlement and English medium secondary school male students of urban settlement (the 'z' ratio is 0.0007; not significant at 0.05 level). But, there is significant difference in awareness about sericulture between Assamese medium secondary school female students of rural settlement and English medium secondary school female students of urban settlement (the 'z' ratio is 6.93; significant at 0.01 level). Table 1 reveals that there was significant difference in awareness about sericulture between Assamese medium secondary school male students of rural settlement and English medium secondary school female students of urban settlement (the 'z' ratio is 3.79; significant at 0.01 level). In the same way, there is significant difference in awareness about sericulture between Assamese medium secondary school female students of rural settlement and English medium secondary school male students of urban settlement (the 'z' ratio is 8.80; significant at 0.01 level).

Table 1: Awareness differences about sericulture among the secondary school students in Jorhat District of Assam.

Statistics	Difference Between	'z' value	Significance
Sericulture Awareness	Assamese Medium Secondary School Students ↔ English Medium Secondary School Students	467.01	Significant at $P < 0.01$
-do-	Male Students (All) ↔ Female Students (All)	140.21	Significant at $P < 0.01$
-do-	Rural Students (All) ↔ Urban Students (All)	287.86	Significant at $P < 0.01$
-do-	Assamese Medium Secondary School Male Students ↔ Assamese Medium Secondary School Female Students	31.95	Significant at $P < 0.01$
-do-	English Medium Secondary School Male Students ↔ English Medium Secondary School Female Students	76.77	Significant at $P < 0.01$
-do-	Assamese Medium Secondary School Male Students ↔ English Medium Secondary School Male Students	159.77	Significant at $P < 0.01$
-do-	Assamese Medium Secondary School Female Students ↔ English Medium Secondary School Female Students	170.84	Significant at $P < 0.01$
-do-	Assamese Medium Secondary School Male Students (Rural) ↔ English Medium Secondary School Male Students (Rural)	0.46	Not significant at $P < 0.05$
-do-	Assamese Medium Secondary School Female Students (Rural) ↔ English Medium Secondary School Female Students (Rural)	0.04	Not significant at $P < 0.05$
-do-	Assamese Medium Secondary School Male Students (Urban) ↔ English Medium Secondary School Male Students (Urban)	4.06	Significant at $P < 0.01$
-do-	Assamese Medium Secondary School Female Students (Urban) ↔ English Medium Secondary School Female Students (Urban)	0.0096	Not significant at $P < 0.05$
-do-	Assamese Medium Secondary School Male Students (Rural) ↔ English Medium Secondary School Male Students (Urban)	0.0007	Not significant at $P < 0.05$
-do-	Assamese Medium Secondary School Female Students (Rural) ↔ English Medium Secondary School Female Students (Urban)	6.93	Significant at $P < 0.01$
-do-	Assamese Medium Secondary School Male Students (Rural) ↔ English Medium Secondary School Female Students (Urban)	3.79	Significant at $P < 0.01$
-do-	Assamese Medium Secondary School Female Students (Rural) ↔ English Medium Secondary School Male Students (Urban)	8.80	Significant at $P < 0.01$

Table 2 shows that the value of correlation between awareness about sericulture and socio-economic status of the students of secondary school students of Jorhat district in the state of Assam is -0.005. The value of 'r' signifies that the relation between the two variables is negative and low. Thus the present study concludes that if the socio-economic status of the students rise, it will not lead to the further in positive awareness about sericulture.

In the present study Table 2 showed that the value of 'r' between awareness about sericulture and academic achievement of the students of secondary school students of Jorhat district in the state of Assam is 0.003. The value of 'r' signifies that the relation between the two variables is positive and low. Thus the present study concludes that if the academic achievements of the students rise, that may lead to positive awareness about sericulture.

Table 2: Correlation between awareness about sericulture and Socio-economic status, awareness about sericulture and Academic Achievement of Secondary School Students in Jorhat District, Assam

Sample	Relation between	Coefficient of correlation (r)	Degrees of freedom, df	p-value	Significance
All students	Awareness about Sericulture and Socio-economic status	-0.005	-198-	$P < 0.01$	Low Negative Co-relation.
All students	Awareness about Sericulture and Academic achievement	0.003	-do-		Positive Low Co-relation.

Studies on participation of rural youth in sericulture, [7] adoption of scientific technology by sericulture farmers, [9-10] role of women in sericulture [11-13] etc. have been carried out by several workers; but no such study has been carried out on awareness about sericulture among students.

In India more than 65 percent of rural people depend on agriculture for their livelihood. The rate of dependence on agriculture has not declined even after economic liberalization initiated in 1991. All human life and indeed all animal life depend on agriculture for existence. Majority of the people in India are living in rural areas and they are depending on agriculture. Since the work in agriculture happens to be seasonal, employment is not available throughout the year [14]. In Assam, agriculture sector continues to provide employment of more than 50 percent of the total workforce and support more than 75 percent population of the state directly or indirectly [15]. In Assam 31.98% people are living below poverty line [15]. Sericulture may provide gainful employment

opportunity to the people living below poverty line and unemployed.

4. Conclusion

Based on the findings of the present study, it was concluded that awareness about sericulture between Assamese and English medium secondary school students as a whole is significant. Results from analysis showed no significant difference in awareness about sericulture between the male students of Assamese medium secondary school belong to rural area and male students of English medium secondary school belong to rural area and in between female students of Assamese medium secondary school belong to rural area and female students of English medium secondary school belong to rural area. On the other hand, awareness about sericulture between the female students of Assamese medium secondary school belong to urban area and female students of English medium secondary school belong to urban area is not

significant. It was found from the present study that awareness about sericulture between the male students of Assamese medium secondary school belong to rural area and male students of English medium secondary school belongs to urban area is not significant.

Based on the findings from the present study it may be concluded that efforts should be made by teachers, NGO's and Government to improve positive awareness towards sericulture among the school students. This will motivate the young generation to come forward to take sericulture as an employment opportunity.

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