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Status of Academic Anxiety, Stress & Body Build Among Kawar Tribal Boys & Girls of Surguja District, Chhattisgarh

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Abstract: ***The present study has been conducted among 337 boys and girls (135 & 202 respectively) of Kawar tribe of Surguja district, Chhattisgarh who were purposively selected from three blocks of the district, viz. Lakhanpur. Batauli and Lundra. Academic anxiety and state of stress were assessed by administering recommended psychological manuals and Pignet Index (Pignet, 1901) was calculated to assess the body build. It was found that boys were taller and heavier than girls and girls were found academically more anxious than boys. Both boys and girls showed non-satisfactory body build and girls exhibited high degree of stress. The findings also exhibited that boys and girls from science stream were found very low stressed whereas comparatively low state of stress was observed among boys and girls of arts stream. Some girls from science stream showed severe state of stress.***

Keywords: Academic anxiety, stress, body build, Kawar tribe, Pignet Index

1. Introduction

Health is a state of complete physical, mental, social well-being and not merely, the absence of disease or infirmity (WHO, 1986). In order to have a healthy lifestyle one needs to take proper care of one's health, so that it leads to effective and active lifestyle (Archana & Ramachandran, 2008). Modern life is full of hassles, deadlines, frustrations and demands. When negative reactions to life's situations become repetitively intense and frequent, we develop symptoms of anxiety, stress and depression (Singh et al., 2011). Anxiety, stress and depression are the most frequently used words in common man's life at present. Sarason (1988) defined anxiety as a basic human emotion consisting of fear and uncertainty that typically appears when an individual perceives an event as being a threat to the ego or self-esteem. It is well known fact that children and adolescents have anxiety in their lives, just as adults do (Sasikala & Karunanidhi, 2010). Anxiety is commonly experienced by adolescents as a usually transient response to many situations and changes experienced during adolescent development (Archana & Ramachandran, 2008). The high level of anxiety perceived by the students is mostly caused by parental expectation on scoring of high marks in the exams and also the societal expectation towards academic marks which could potentially limit their educational and vocational opportunities. A wide variety of meaning has been given to term 'stress'. One of the most common notions is that stress represents some circumstances or situations external to an individual that makes sudden or extra ordinary demand upon him (Khan & Srivastava, 2008). Selye (1979) stated stress as "non-specific response of the body to any demand made upon it". When stress is perceived negatively or becomes excessive, it can affect both health and intellect thereby affecting the academic performance (Campbell & Svenson, 1992). Stress has been considered to have grave effects on nutritional status as well (Kukreti & Bisht, 2013). Higher stress is associated with less healthy eating behavior, higher body weight and thus poor nutritional status (Moore & Cunningham, 2012).

Adolescents are the core of any population as adolescence is a transition stage in life cycle of any individual whether it belongs to any sex. Adolescents being the future of any nation need due and intensive care. Many studies such as Awasthi & Kumar (1999), Aykroyd & Krishnan (1937), Bisai et al. (2008), Busi et al. (2003), Chakma et al. (2009), Dasgupta et al. (2010), Gaur et al. (2002), Kshatriya et al. (1981), Rao et al. (2005), Vashisht et al. (2005), Tiwari et al. (2007), etc. have been conducted to study the growth and nutritional status in various aspects. A study conducted by Kukreti & Bisht (2013) focused on the stress and nutrition status. But none of the study has attempted to analyze the dynamics of anxiety, stress and body build among this group. Moreover, the representation of tribal groups has been largely neglected from such studies. Keeping these limitations in view, the present study focuses on the assessment of academic anxiety, state of stress and body build profile of the Kawar tribal adolescent boys and girls of Surguja district of Chhattisgarh. The present study has been conducted with the following objectives:

- to assess the level of academic anxiety, state of stress and profile of body build.
- to find out the association of body build and state of stress.

2. The Kawar

Kawar tribe is one of the main tribes of Chhattisgarh. They reside in Surguja, Raigarh and Korba districts of the state. Main occupation of this tribe is agriculture. Major crops include paddy, kodo, tiwra, moong, urad, lentils, arhar, etc. Landless people or people with less agricultural land do labour work. Food gathering is also one of the main sources of income (Vaishnav, 2004; 2007).

3. Methods/Approach

The present study has been conducted on purposively selected 337 Kawar boys and girls (135 & 202 respectively) from 11 schools of three blocks of Surguja district viz. Lakhanpur, Batauli and Lundra. Primarily, the schools were selected from rural areas and students of age group 14-20 were selected for study. The study includes assessment of academic anxiety level, state of stress and body build of the adolescents. Academic anxiety and stress were assessed by using recommended 35 itemed academic anxiety scale (A.A.S) designed by Pal, Misra & Pandey (1985) and 40 itemed stress scale designed by Singh (2002) respectively. The body build was assessed by using Pignet index (Pignet, 1901). Each boy and girl was measured for height, weight and chest circumference to calculate Pignet Index for the assessment of body build. Height was measured using anthropometer rod, weight with digital weighing machine and chest circumference with measuring tape.

Academic anxiety scale (AAS) was administered on 103 students (43 boys & 60 girls) of age 13 -16 years and stress scale on 234 students (92 boys & 142 girls) of age 16-20 years. The samples were selected separately for assessment of academic anxiety and stress. Prior to the administration of scales, the students were given proper instructions from the manuals. On the basis of individual age respectively, the level of anxiety is classified into three categories- low anxious is assigned to individuals who scored less than 12 points, moderately anxious for those who scored between 13 to 21 points and high anxious for those who scored above 21 points. The state of stress is classified into five different categories for both boys and girls. For boys, it was denoted as severe state for those who achieved 57 & above, high state for those who scored 47-56, moderate state for those who scored 37-46, low state for those who achieved 27-36 and very low state for those who scored 26 & less. Similarly for girls, severe state was denoted for those who scored 59 & above, high state for girls having 49-58, moderate state for those who achieved 39-48, low state for those who scored 29-38 and very low state for the girls scoring equal to or less than 28.

The academic anxiety (AAS) scale can be useful for the assessment of anxiety level of children for high school classes. The stress scale can be applied for the people of 16 to 50 years of age. For the analysis of present study, mean and standard deviation were used.

4. Results/Discussions

Table 1 represents the mean height, weight, chest circumference and Pignet index among boys and girls. Boys were found to be taller and heavier than girls whereas chest circumference among the girls was found to be higher than boys. The body build among boys was found more as compared to girls.

Table 2 shows the distribution of academic anxiety level among both sexes. The percentage value of medium level of anxiety had a very little difference whereas low level of anxiety was found more among boys than girls. Overall result shows that girls were found more anxious academically than boys.

Table 1: Mean and S.D. of variables:

Variables	Boys		Girls	
	Mean	S.D.	Mean	S.D.
Height (cm)	162.50	± 6.02	151.01	± 4.91
Weight (kg)	50.82	± 6.67	44.95	± 5.52
Chest circumference (cm)	76.71	± 4.71	77.54	± 4.88
Pignet index	34.88	± 8.60	28.52	± 9.43

Table 2: Status of Anxiety Level among Boys and Girls:

S.No.	Sex	Level of Anxiety			Total
		Low	Medium	High	
1.	Boys	24 (55.81%)	17 (39.53%)	2 (4.66%)	43
2.	Girls	27 (45%)	23 (38.33%)	10 (16.67%)	60
Total		51	40	12	103

Table 3 exhibits the association of stress with body builds among boys. In terms of body build, it was found that most of the boys were found in the category of non-satisfactory body build (85.86%) and irrespective of body build, the state of stress was found to be varying from very low to moderate (46.15% and 15.39% respectively). The highest percentage of boys who had satisfactory body build was low stressed and this percentage decreases with increasing stress. Likewise, non-satisfactory body build of boys exhibited the similar trend.

The association of stress with body build among girls is depicted in table 4. It was found that like boys, the highest percentage of girls was found in non-satisfactory condition of body build and moderate to very low state of stress. However contrary to the boys, girls showed the incidence of high state of stress in both categories of body build and severe state of stress was observed among girls with non-satisfactory body build. When the association between both the variables was considered, the highest percentage of girls in satisfactory body build was low stressed and this percentage decreased with increasing stress (as among boys). Similarly, the highest percentage of girls in non-satisfactory body build showed that they are in low state of stress (as observed among boys). This percentage also shows a decline with increasing stress.

Table 3: Association of stress with body build among boys:

S.No.	*State of Stress*	*Range*	*Status of body build*		Total
			Satisfactory (Very sturdy, sturdy, Good, Average)	*Non-Satisfactory (Weak, Very weak, Poor)*	
1.	Severe	59 & above	-	2(2.27%)	2(1.40%)
2.	High	49-58	1 (1.86%)	3(3.41%)	4(2.80%)
3.	Moderate	39-48	-	5(5.68%)	5(3.52%)
4.	Low	29-38	19(35.18%)	35(39.78%)	54(38.03%)
5.	Very low	28 & less	34(62.96%)	43(48.86%)	77(54.22%)
TOTAL			54(38.02%)	88(61.97%)	142(100%)

Table 4: Association of stress with body build among girls:

S.No.	State of Stress	Range	Status of body build		Total
			Satisfactory (Very sturdy, sturdy, Good, Average)	Non- Satisfactory (Weak, Very weak, Poor)	
1.	Severe	59 & above	-	2 (2.27%)	2(1.40%)
2.	High	49-58	1 (1.86%)	3 (3.41%)	4(2.80%)
3.	Moderate	39-48	-	5 (5.68%)	5(3.52%)
4.	Low	29-38	19 (35.18%)	35(39.78%)	54(38.03%)
5.	Very low	28 & less	34 (62.96%)	43(48.86%)	77(54.22%)
Total			54 (38.02%)	88(61.97%)	142(100%)

Table 5: Arts & science stream wise status of stress among boys and girls:

S.No.	State of Stress	Boys		Total	State of Stress	Girls		Total
		Arts	Science			Arts	Science	
1.	Severe (57 & above)	-	-	-	Severe (59 & above)	-	2(100%)	2(100%)
2.	High(47-56)	1(100%)	-	1(100%)	High(49-58)	1(25%)	3(75%)	4(100%)
3.	Moderate(37-46)	3(30%)	7(70%)	10(100%)	Moderate(39-48)	3(60%)	2(40%)	5(100%)
4.	Low(27-36)	15(51.72%)	14(48.28%)	29(100%)	Low(29-38)	30(55.56%)	24(44.44%)	54(100%)
5.	Very low(26 & less)	19(36.54%)	33(63.46%)	52(100%)	Very low (28 & less)	36(46.75%)	41(53.25%)	77(100%)
Total		38(41.30%)	54(58.70%)	92(100%)	Total	70 (49.30%)	72(50.70%)	142 (100%)

Table 5 displays the distribution of stress among boys and girls on the basis of arts & science stream. It was found that highest percentage of boys from science stream were very low stressed whereas low state of stress was found to be higher among the boys from arts stream. Moderate stress was more common among boys of science stream whereas the incidence of high stress was observed only among the individuals of arts stream. Among girls, higher percentage from very low stress belonged to science stream whereas low state of stress was higher among girls of arts stream. Moderate stress was found among girls of arts stream (alike boys) and high state of stress was prevalent among girls belonging to science stream. All girls with severe state of stress were from science stream.

5. Conclusion

It was found that the boys were taller and heavier than girls whereas chest circumference among girls was higher than boys. Both boys and girls were found in the category of non-satisfactory body build. Girls were found to be academically more anxious than boys. The higher percentage of boys having satisfactory body build was low stressed and non-satisfactory body build also followed the similar trend. The level of stress varied from very low to moderate. The highest percentage of girls in satisfactory body build was low stressed. Contrary to boys, girls showed the incidence of high state of stress. Severe state of stress was observed among girls with non-satisfactory body build. The highest percentage of boys from science stream was very low stressed whereas highest number of boys from arts stream was low stressed. Higher percentage of girls from science stream was very low stressed whereas low state of stress was found to be higher among girls of arts stream. Like boys, moderate stress was found among girls of arts stream and high state of stress was prevalent among girls of science stream. Girls from science stream also showed severe state of stress. Body build, choice of the subject and level of stress was found to be relatively independent of each other.

6. Future Scope

Negative association between body build and stress indicates that stress totally differs from the health status. Further more study on a larger population should be carried out on these dimensions so that other responsible factors for creating stress must be focused and necessary measures may be included in their stress free academic performance.

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