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A comparative study of self-concept and anxiety among students

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Abstract
The aim of this study was to compare the self-concept and anxiety in school students. The study was carried out at Rohtak and its urban location. A sample of 100 students (50 boys and 50 girls) were taken. Data were collected using self-concept scale and state trait anxiety inventory. Findings revealed that boys and girls students differed significantly in regard to their self-concept and state - trait anxiety.

Keywords: self-concept, anxiety, students

Introduction
The self-concept of self is probably that most distinctive and indispensable concept in psychology. Self-concept is a multi- dimensional construct that refers to an individual's perception of 'self' in relation to other characteristics, such as academics and non-academics, gender roles and sexuality, racial identity and many others [1, 2, 3]. According to Harris (1996), Self-Concept is the totality of attitude judgment and value of an individual relating to his behavior, abilities and qualities. It composed of relatively permanent self-assessments, such as personality attributes, knowledge of one's skills and abilities, one's occupation and hobbies, and awareness of one's physical ability. Leon Festinger's (1954) social comparison theory proposes that individuals compare themselves with others in order to assess their abilities and opinions. Argyle believes there are 4 major factors that influence Self Esteem, Reactions of others, comparison with others, social roles and Identification. Students who are confident in their talents are more likely to succeed [4]. Consideration of psychological components in the curriculum is one of the most essential topics in development, education, and academic accomplishment. Self-efficacy [5] is one of these characteristics, and it is the belief, whether accurate or not, that one has the ability to affect anything. When a person has strong self-efficacy, they are more likely to engage in health-related activities, whereas a person with low self-efficacy is more likely to feel hopeless [6]. And after that, science the belief in one's own competence to accomplish science in terms of organising and executing the skills and knowledge required to manage science material and processes is known as self-efficacy. The term "self-concept" relates to one's perception of oneself. It is presupposed by [7], but is distinct from self-consciousness, which is merely self-awareness. It's also broader than self-esteem, which is the self-simply concept's evaluative component [8]. As well as science Self-concept is a word that describes one's sense of oneself in connection to scientific achievement [9] and scientific confidence [10]. Self-esteem is defined as a person's combination of attitudes and ideas about the outside world, which includes expectations of success/failure, the work required for prospective achievement, and the reaction to possible failure [11, 12]. Anxiety, according to Spielberger et al. [13], is a psychobiological process that results in an unfavourable emotional reaction. Science anxiety in students, as the name implies, is a crippling fear of learning science—but with the feeling processed on a cognitive level. Finally, science anxiety expresses itself primarily during examinations, but is distinct from apprehension about examinations in general, because students showed science anxiety often react generally in their non-science subject areas [14].

Objective
The main aim of the present study is to compare the self-concept and anxiety among students.

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Hypotheses

In accordance with the above objective, the following hypotheses were formulated.

1. self - concept of boy students and girl students would differ significantly irrespective of age and education
2. state anxiety of boy students and girl students would differ significantly irrespective of age and education
3. trait anxiety of boy students and girl students would differ significantly irrespective of age and education

Methodology

Sample: A purposive sample of 100 higher secondary students of 11th and 12th standard from HBSE schools in Haryana state would be taken on the basis of availability. The sample would be constituted of both gender.

Tools:

Self-Concept Questionnaire: It constructed by Mukta Rani Rastogi [15], consists 20 statements which include both positive and negative statements, with 5 point likert scale. Reliability of this scale by split-half method was found to be 0.87. The total scores reflected the individual's self-concept with high scores showing higher self-concept level.

State-Trait Anxiety Inventory: The STAI developed by Spielberger [16] contains self-report scales for measuring both state and trait anxiety. It is a self-report inventory comprised of two subscales of 20 items assessing state and trait anxiety. In the current study, we were interested in assessment of state anxiety. The participants were asked to report how they felt "right now", on a 4-point scale from "not at all" to "very much so." Cronbach's alpha in the current study was .90 (M = 35.5, SD = 9.07).

Procedure

For the collection of the data, all the participants were individually contacted and rapport was established with the participants by making them feel comfortable. After the establishment of rapport, the questionnaire was handed over to the participants. After the completion of the questionnaires, questionnaires were taken back and the participants were thanked for their precious time devoted and for the cooperation. Finally, in case of quantitative data descriptive statistics like measures of central tendency and dispersions were calculated and then 't'- test was applied for verification of the research hypotheses.

Results and Discussion

Findings of the background information schedule revealed that most of the boy's students 46% belongs to the 11th class while 54% were in 12th class. In case of girls students 60% belongs to 11th class while 40% were in 12th class. So far educational background is concerned. In present study result showed that there is a significant difference on self-concept between boy's students and girl's students. Mean score for boy's students on self-concept is 168.7 and S.D – 14.26 on the other side mean score for girl's students on self-concept is 162.5 and S.D – 12.83.

Result showed significant difference with 't' value 2.22 and it showed that gender differences have significant effect on self-concept of students. It is because the society where we live have different thinking and stereotypes about gender. Generally, in local culture people think boys more superior than girls and it affect their self-concept. Therefore the first hypothesis i.e., "self - concept of boy students and girl students would differ significantly irrespective of age and education "was accepted.

Table 1: Mean and S.D of self –concept score with 't' values

Sample group	Number	Mean	S.D	T value
Boys students	50	168.7	14.26	2.22*
Girls students	50	162.5	12.83	

*Significant at .05 level

Anxiety is considered as an important personality variable the current complexity of civilization, the rapidity of change and the loss of certain traditional religious and familial values are creating more conflict and anxiety in an individual's life so far as anxiety level of the subjects is concerned the findings indicated that there is significant difference on state anxiety between boys students and girls students. Mean score for boys students on state anxiety is 45.5 and S.D – 5.25 on the other side mean score for girls students on state anxiety is 49.78 and S.D – 4.15. Result showed significant difference with 't' value 3.34 and it showed that boys differed significantly with girls students in regards to their state anxiety [P< .01]. Hence it can be stated that the state anxiety of girl's students is higher than boy's students. So it is seen that girl's students are more anxious in their present situation. This could be because of the social pressure on them from the society of do the right and correct things and prove themselves. In our society a girl is taught from childhood that boys are more superior and girls are inferior and you must behave like a girl so this make them different from boys on state anxiety.

Table 2: Mean and S.D of State anxiety score with 't' values

Sample group	Number	Mean	S.D	T value
Boys students	50	45.5	5.25	3.34**
Girls students	50	49.78	4.15	

*Significant at .01 level

The findings indicated that there is significant difference on state anxiety between boy's students and girl's students. Mean score for boys students on trait anxiety is 42.3 and S.D – 6.22 on the other side mean score for girls students on state anxiety is 48.1 and S.D – 5.56. result showed significant difference with 't' value 2.48 and it showed that boys differed significantly with girls students in regards to their state anxiety [P<.05].Hence, the third hypothesis i.e., "trait anxiety of boy students and girl students would differ significantly irrespective of age and education "was accepted.

Table 3: Mean and S.D of Trait anxiety score with 't' values

Sample group	Number	Mean	S.D	T value
Boys students	50	42.3	6.22	2.48*
Girls students	50	48.1	5.56	

*Significant at .05 level

Conclusion

It can be concluded that boy's students differ significantly with the girl's students in regards to self-concept and anxiety. They possessed high self-concept as well as less anxious in comparison to girl's students. Thus findings of the study suggest significant variations in self-concept and anxiety in the target sampled in the study. It also suggest to give equality to both gender boy and girl in society. It is an important findings and the causal factors need to be identified.

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