

Effect of Risk Taking Behaviour, Ego Strength and Frustration on Academic Achievement of Senior Secondary School Students

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ABSTRACT: *The present study was undertaken to study the effect of risk taking behaviour, ego strength and frustration on academic achievement of senior secondary school students. Sample of 650 male and female senior secondary school students were selected from Haryana state with the help of multi-stage random sampling technique. Descriptive survey method was employed to conduct the present investigation. The results found significant effect of ego strength and frustration on academic achievement of senior secondary school students whereas no significant effect of risk taking behaviour on academic achievement of senior secondary school students. No significant interaction effect of risk taking behaviour and ego strength; risk taking behaviour and frustration; ego strength and frustration was reported on academic achievement of senior secondary school students. Triple interaction effect of risk taking behaviour, ego strength and frustration on academic achievement of senior secondary school students was found to be insignificant.*

Key Words: *Academic Achievement, Ego strength, Frustration, Risk taking behaviour.*

Risk Taking Behaviour

Adolescence is a phase of life which is full of stress and storms in which teenagers tries to experiments in every aspects of life and also try to test the things as how they fit for them individually as well as together and by using this process, they try to define and shape how they fit into the world.

Risk taking is the instrument which helps an adolescent to define and develop his/her identity and healthy risk taking is a precious experience. Risk-taking or risky behaviour among youngsters is to a certain extent is usual and they do not expose themselves to main risks. There are individuals who take very risky decision in a particular situation, and others who tend to avoid risks. Risk taking is also related to the area of decision making in which one has to take risk for solution of his/her problems. Teenagers are recognized for their risk-taking, novelty seeking, reckless behaviour, and impulsivity, misuse of alcohol or drugs, engaging in unprotected sexual activity, some types of criminal activity or risky, adrenaline-producing sports.

Ego strength

Ego strength is the ability of the ego to effectively deal with the demands of the id, the superego and reality. Those with little ego strength may feel torn between these competing demands, while those with too much ego strength can become too unyielding and rigid. Ego strength helps us maintain emotional stability and cope with internal and external stress. According to Sigmund Freud, personality is composed of three elements: the id, the ego and the super-ego. The id is composed of all the primal urges and desires and is the only part of personality present at birth. The super-ego is the part of personality that is composed of the internalized standards and rules that we acquire from our parents and from society. The ego is the part of personality that mediates between the demands of reality, the urges of the id and the idealistic standards of the super-ego.

Frustration

It refers to the circumstances that blocks the way to a goal. In other words, sense of dissatisfaction, unhappiness, displeasure that is the result of being blocked. The path of life is not always smooth as in our daily goal-seeking efforts; we counteract many barriers among ourselves and our goals. We encounters more or less frustrations in our everyday's life like a person misses his/her bus or train, a late appearance for a meeting, delay in making important report/ work. Now a days each and every one having much greater frustrations in their life whether they are of any age group or of any sex. A frustration takes any form it may be a boy who aspires to be a football player loses a leg, or a boy/girl who always wanted to marry his/her childhood sweetheart is jilted for another, or may be a student faces failure in the entrance examination and is denied admission or may be a sense of psychological chaos which interrupts a brilliant or bright profession.

ACADEMIC ACHIEVEMENT

Achievement refers to educational attainment or scholastic achievement in the education. It refers to success level and expertise which attained in several definite areas related to the scholastic work. An individual's capability is to apply his/her knowledge imaginatively has become more important than the knowledge itself and transfer knowledge into skills. Knowledge is more reaching than an academic qualification must come into play.

VARIABLES: Risk taking behaviour, Ego strength, Frustration and Academic achievement.

OBJECTIVES OF THE STUDY

1. To study the effect of (a) risk taking behaviour, (b) ego strength, and (c) frustration on academic achievement of senior secondary school students.
2. To find out the interaction of (a) risk taking behaviour and ego strength; (b) risk taking behaviour and frustration; and (c) ego strength and frustration on academic achievement of senior secondary school students.
3. To find out the interaction effect of risk taking behaviour, ego strength, and frustration on academic achievement of senior secondary school students.

HYPOTHESES OF THE STUDY

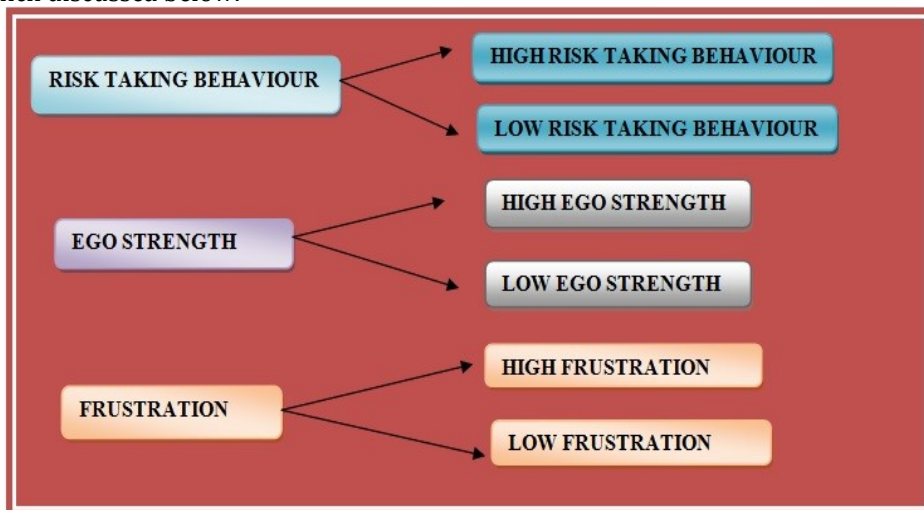
H₀₁ There exists no significant effect of (a) risk taking behaviour, (b) ego strength, and (c) frustration on academic achievement of senior secondary school students.

H₀₂ There exists no significant interaction of (a) risk taking behaviour and ego strength; (b) risk taking behaviour and frustration; and (c) ego strength and frustration on academic achievement of senior secondary school students.

H₀₃ There exists no significant interaction effect of risk taking behaviour, ego strength, and frustration on academic achievement of senior secondary school students.

METHODOLOGY

Descriptive survey method was used in the study and independent variables were divided into two categories which discussed below:



SAMPLE

A sample of 650 male and female senior secondary school students of 11th class was selected from the senior secondary schools located in Haryana state by employing multi-stage random sampling technique. Each district randomly selected from out of 4 administrative divisions of Haryana state i.e. Kurushetra from Ambala division, Gurgaon from Gurgaon division, Bhiwani from Hisar division and Rohtak from Rohtak division. Analysis was done only on high and low scored students on academic achievement. As per requirement of the 2x2x2 cells of the paradigm, distribution of cells for analysis of interaction effect of risk taking behaviour, ego strength and frustration on academic achievement of senior secondary school students has been illustrated in the Figure 1.

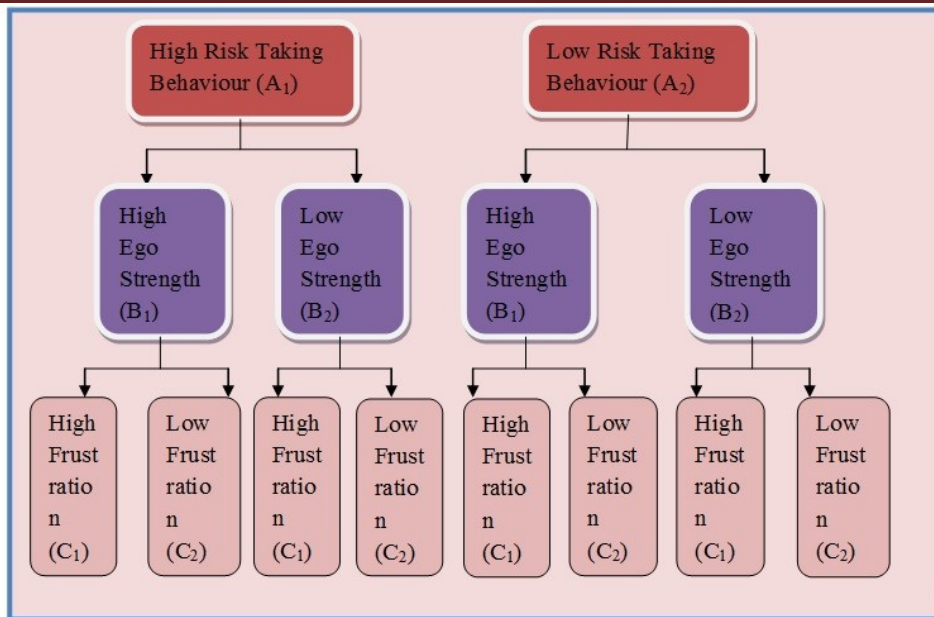


Figure 1: Distribution of cells for Analysis of Interaction Effect of Risk Taking Behaviour, Ego Strength and Frustration on Academic Achievement of senior secondary school students

TOOLS USED

1. Risk Taking Behaviour Questionnaire (2000) by Sinha and Arora
2. Hasan’s Ego Strength Scale (2010)
3. Frustration test by Dr. Dixit and Srivastava (2004)
4. Achievement test of Economics developed by researcher was used to assess the achievement of Economics of 11th class.

STATISTICAL TECHNIQUES USED

For the present study, the data were analyzed using descriptive statistics. Three Way analysis of Variance (ANOVA) with 2x2x2 factorial design was computed using SPSS version to study the main effects and interaction effects of risk taking behaviour, ego strength and frustration on academic achievement of senior secondary school students.

DATA ANALYSIS AND DISCUSSION

Main objective of the present study was to find out the main and interaction effects of risk taking behaviour, ego strength and frustration on academic achievement of senior secondary school students. The independent variables i.e. risk taking behaviour was coded as A and varied into High (A₁) and Low (A₂), ego strength was coded as B and varied into High (B₁) and Low (B₂) and frustration was coded as C and varied into High (C₁) and Low (C₂) respectively. Means and SDs of different sub-samples presented in the Table-1 and Figure 2. Summary of ANOVA (2x2x2) presented in Table-2, which is analyzed in terms of main effects and interaction effects.

Table-1

Mean’s and S.D’s of Sub Samples of 2x2x2 Design for Academic Achievement of Senior Secondary School Students with respect to Risk Taking Behaviour, Ego Strength and Frustration

Risk Taking Behaviour (A)	Ego Strength (B)	Frustration (C)	N	Mean	S.D
High Risk Taking Behaviour (A ₁)	High Ego Strength (B ₁)	High Frustration (C ₁)	81	64.25	14.04
		Low Frustration (C ₂)	56	64.69	13.56
	Low Ego Strength (B ₂)	High Frustration (C ₁)	85	65.03	12.64
		Low Frustration (C ₂)	67	68.73	15.08
Low Risk Taking	High Ego Strength (B ₁)	High Frustration (C ₁)	42	61.57	14.46
		Low Frustration (C ₂)	59	65.20	12.81
		High Frustration (C ₁)	46	66.07	13.26

Behaviour (A ₂)	Low Ego Strength (B ₂)	Low Frustration (C ₂)	68	67.27	15.24
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Table - 2

Summary of Three Way ANOVA (2×2×2) Factorial Design for Academic Achievement of Senior Secondary School Students with respect to Risk Taking Behaviour, Ego Strength and Frustration (A×B×C)

Source of Variance	df	Sum of Squares (SS)	Mean Sum of Squares (MS)	F- ratio
Main Effects				
Risk Taking Behaviour (A)	1	66.89	66.89	0.34 (NS)
Ego Strength (B)	1	1285.43	1285.43	6.64**
Frustration (C)	1	794.85	794.85	4.10 **
Double Interaction				
Interaction (A×B)	1	30.56	30.56	0.15 (NS)
Interaction (A×C)	1	4.55	4.55	0.02 (NS)
Interaction (B ×C)	1	6.68	6.68	0.03 (NS)
Triple Interaction				
Interaction (A×B×C)	1	320.58	320.58	1.65 (NS)
Between Cells	7	2309.34	329.90	
Within Cells	496	124274.93	193.57	
Total	503			

** = Significant at 0.05 level

NS = Not Significant

Main Effects of Risk Taking Behaviour, Ego Strength and Frustration on Academic Achievement of Senior Secondary School Students

Risk Taking Behaviour (A)

On perusal of Table 2 it is evident that F-ratio is 0.34 for main effect of risk taking behaviour on academic achievement is not significant at 0.05 level of significance leading to the result that high and low level of risk taking behaviour don't differ significantly with respect to their academic achievement of senior secondary school students. Therefore, the null hypothesis Ho_{1(a)}, "There exists no significant main effect of risk taking behaviour on academic achievement of senior secondary school students" stands retained. Present result is in tune with the result of Kiran (2003) who found that risk taking behaviour is negatively related to academic achievement.

Ego Strength (B)

It can be stated that F-ratio is 6.64 vide Table 2 for the main effect of ego strength on academic achievement is significant at 0.05 level which indicates that ego strength has a significant main effect on academic achievement of senior secondary school students. Therefore, null hypothesis Ho_{1(b)}, "There exists no significant main effect of ego strength on academic achievement of senior secondary school students" is rejected. t-value was applied to find out significance difference between the mean scores of academic achievement of ego strength of senior secondary school students.

Table 3

T-values for Mean Scores of Academic Achievement of Senior Secondary School Students with respect to Ego Strength (B)

Group	N	Mean	S.D	t-value
High Ego Strength (B ₁)	215	64.12	13.66	2.11*
Low Ego Strength (B ₂)	289	66.77	14.13	

* = Significant at 0.05 level

It was found that the mean scores of academic achievement of students of low ego strength (66.77) are higher than those of high ego strength (64.12). Result is in agreement with results of Dinesh (2006) who concluded that males have higher ego strength as compared to their counterparts. Singh and Anand (2015) found that no significant difference in the ego strength among adolescents.

Frustration (C)

F-ratio is 4.10 vide Table 2 for the main effect of frustration on academic achievement is significant at 0.05 level which reveals that frustration has significant main effect on academic achievement of senior secondary school students. Therefore, null hypothesis, $H_{0(c)}$, "There exists no significant main effect of frustration on academic achievement of senior secondary school students" is rejected. t-value was applied to find out the significance difference between the mean scores of frustration on academic achievement of senior secondary school students.

Table 4

T-values for Mean Scores of Academic Achievement of Senior Secondary School Students with respect to Frustration (C)

Group	N	Mean	S.D	t-value
High Frustration (C ₁)	198	64.39	13.54	1.66 (NS)
Low Frustration (C ₂)	306	66.52	14.27	

NS = Not Significant

In the context of mean scores, the mean scores reveal that the low frustrated students have high scores in academic achievement (66.52) as compared to the high frustrated students (64.39). In other words, scores of low frustrated is more than the high frustrated students. The result is in agreement with the results of **Sumedha (2006)** who revealed that low frustrated students have better scores as compared to high frustrated students. The result is in contrast with the findings of **Rana and Bhatia (2007)** who found that negative relationship between frustration and achievement level of adolescents.

Double Interaction Effects of Risk Taking Behaviour and Ego Strength on Academic Achievement of senior secondary school students

Risk Taking Behaviour (A) × Ego Strength (B)

An inspection of Table 2 shows that F-ratio between risk taking behaviour and ego strength is 0.15 which is not significant at 0.05 level which leads to the inference that risk taking behaviour and ego strength do not interact with each other. Therefore, the null hypothesis $H_{02(a)}$, "There exists no significant interaction effect of risk taking behaviour and ego strength on academic achievement of senior secondary school students" stands retained.

Risk Taking Behaviour (A) × Frustration (C)

F-ratio is 0.02 vide Table 2 indicates that there is no significant interaction effect between risk taking behaviour and frustration on academic achievement of senior secondary school students. Risk taking behaviour and frustration do not interact each other in relation to academic achievement of senior secondary school students. Therefore, the null hypothesis $H_{02(b)}$, "There exists no significant interaction effect of risk taking behaviour and frustration on academic achievement of senior secondary school students" stands retained.

Ego Strength (B) × Frustration (C)

A glance of Table 2 reveals that the F-ratio between ego strength and frustration is 0.03 which is not significant at 0.05 level which leading to the result that there is no significant interaction effect between ego strength and frustration. In other words, both are not interact with each other. Therefore, the null hypothesis $H_{02(c)}$, "There exists no significant interaction effect of ego strength and frustration on academic achievement of senior secondary school students" stands retained.

Triple Interaction Effect of Risk Taking Behaviour, Ego Strength and Frustration on Academic Achievement of senior secondary school students

Risk Taking Behaviour × Ego Strength × Frustration (A×B×C)

An inspection of Table 2 indicates that the F-ratio is 1.65 for interaction between risk taking behaviour, ego strength and frustration is not significant at 0.05 level which leads to the inference that risk taking behaviour, ego strength and frustration do not interact with each other. Therefore, the null hypothesis H_{03} , "There exists no significant interaction effect of risk taking behaviour, ego strength and frustration on academic achievement of senior secondary school students" stands retained. It may therefore be said that there is no significant interaction effect of risk taking behaviour, ego strength and frustration on academic achievement of senior secondary school students.

CONCLUSION

The present study concluded that ego strength and frustration were reported significant main effect on academic achievement of students where risk taking behaviour had no significant main effect on the

academic achievement of senior secondary school students. And of double interaction effect, it was revealed no significant interaction effect of risk taking behaviour and ego strength; risk taking behaviour and frustration; ego strength and frustration on academic achievement of senior secondary school students. However, the triple interaction effect of risk taking behaviour, ego strength and frustration was found to be insignificant. **Educational implications** for the teachers who can help in the development of proper teaching and learning environment. If a teacher is aware or have knowledge of some areas related to personality like risk taking behaviour, ego strength and frustration can play an essential role in handling or turning actual classroom situation in a fruitful way and only teacher can use or mould their energy and enthusiasm in a positive way which helps them in their life.

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